In the Matter of an Arbitration

BETWEEN:

ONTARIO MEDICAL ASSOCIATION

(the "OMA")

- AND -

MINISTRY OF HEALTH

(the "MOH")

(together, "the PARTIES")

BOOK OF DOCUMENTS OF THE
ONTARIO MEDICAL ASSOCIATION
VOLUME 1 of 8

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TAB 1

OMA AND MINISTRY OF HEALTH 2021-24 PSA YEAR 3 IMPLEMENTATION AND 2024-28 PROCEDURAL AGREEMENT

Except as agreed to herein, this implementation and procedural agreement is entered into without prejudice to the position of either party with respect to the negotiation, mediation and arbitration for the 2024-28 Physician Services Agreement (PSA). It is further agreed that this agreement is subject to approval by the parties' respective principals, such approval to be sought as expeditiously as possible.

WHEREAS the OMA and the MOH (the 'parties') entered an agreement that was freely negotiated and ratified for a Physician Services Agreement (PSA) in effect until March 31, 2024 (the '2021-24 PSA').

AND WHEREAS the parties have begun negotiations for a new four-year PSA (the '2024-28 PSA'), for the period of April 1, 2024, to March 31, 2028;

AND WHEREAS the 2021-24 PSA agreement provided for a 2023-24 ('Year 3') expenditure estimation and reconciliation process, pursuant to which the parties met bilaterally in December 2023 and January 2024 to engage in interest-based discussions for the purposes of implementing the Year 3 agreement;

AND WHEREAS in the course of the Year 3 implementation discussions, the parties recognized the value of an expeditious resolution of the Year 3 expenditure estimate and implementation;

AND WHEREAS the parties also commenced discussions regarding the benefit of a more timely conclusion of year one of the 2024-28 PSA than is currently scheduled by the arbitration board;

AND WHEREAS the parties mutually recognize the value of ongoing intensive mediation/arbitration for Years 2, 3 and 4 of the 2024-28 PSA given the importance, complexity and wide range of outstanding issues between the parties;

THEREFORE, in recognition of the parties' shared interests in reaching a timely and final conclusion of Year 3 (2023-24) of the 2021-24 PSA, and of Year 1 (2024-25) of the 2024-28 PSA, the parties hereto agree as follows:

Year 3

1. The parties agree to implement Section **A. Financial Agreement - Year 3 Compensation Increases and Gain Sharing** of the 2021-24 PSA as follows:

   The 2023-24 contract year payment to physicians will be increased by 2.8% for all physician payments set out in Section 21(a) of the Binding Arbitration Framework (BAF) (save for hospital technical fees, OMA Priority Insurance Plan (OPIP), and Virtual Urgent Care Centres and Temporary Locum Program).

Year 3 Implementation Approach

2. The interim implementation of the 2021-24 PSA Year 3 payment will be as follows:

   a. For the 2023/24 contract year:

      A lump sum equivalent to a 2.8% increase as per paragraph 1a above. This lump sum payment will be paid as soon as practicable with a targeted date of October 1, 2024.

   b. For the 2024/25 contract year:

      The 2.8% percent increase to physician payments as per paragraph 1a above will be implemented prospectively as an across-the-board increase to fee-for-service payments with a target implementation date of the June 2024 Remittance Advice (RA) and will flow through to non-fee-for-service payments as soon as practicable. These payments made to physicians will apply to all services provided in 2024/25, as outlined in paragraph 1a above, and include any required payments retroactive to April 1, 2024, until the implementation of the up to 40 million dollars in HOCC payments as outlined in paragraph 4 below.

3. The 2.8% increase provided for under paragraph 1a will result in a permanent 2.8% increase to physician payments (reduced by any year 3 HOCC funding expended under paragraph 4) to be implemented effective April 1, 2025, in the manner set out below:

   This permanent increase will be calculated on a base of 2022-2023 expenditures as defined in the 2021-24 PSA and as mutually agreed by the Parties. This permanent increase will be allocated to physician payments as provided under the

2021-24 PSA through the PPC process as follows:

a. 1/4 of the global increase will be allocated to each section or physician grouping on an equal percentage basis; and

b. 3/4 of the global increase will be allocated to each section or physician grouping based on the hybrid CANDI-RAANI score, to be updated by the parties.

These increases will also flow through to non-fee for service payments as soon as is practicable.

4. The parties agree that there is no remaining or unexpended APP funding under paragraph 16 of the 2021-24 PSA Financial Agreement. However, with respect to HOCC funding, in view of the ongoing work required to continue to develop and implement a burden-based HOCC system, up to $40 million will be made available out of the Year 3 increase to be used to provide funding to new groups who have applied under paragraph 3 of Schedule B of the 2021-24 PSA, and who meet the eligibility criteria for HOCC funding under the existing HOCC rules. This interim funding will commence at the same time as the implementation of the price increase under paragraph 12(a) below. The parties further agree that the issue of additional funding required to implement the burden-based HOCC system will be negotiated and if necessary arbitrated as part of the Year 1 targeted funding under the 2024-28 PSA mediation and arbitration process.

2024-28 PSA Negotiations

5. The parties expressly acknowledge that, subject to the exception noted in paragraph 6 below, the 2.8% Year 3 increase provided for under paragraphs 1 to 3 above cannot be relied upon by either party at mediation or arbitration. The parties further agree that, in any future mediation or arbitration, the OMA will not rely on the Ministry's agreement to make the payment under paragraph 1a in support of any argument that, (a) in so doing, the Ministry has accepted there is any valid claim for additional price or compensation rate increases relating the 2021-24 period beyond those expressly contemplated by the original freely negotiated agreement between the parties (including any claim related to Bill 124); or (b) as evidence of a necessity to recruit and retain physicians; or (c) in support of a claim for a "catch-up" payment to physicians based on any factors, including those found in the Binding Arbitration Framework (BAF), inflation, burnout, administrative burden, population growth or other settlements or awards in any other sector, including the health care sector, in Ontario or Canada.

Similarly, subject to the exception noted in paragraph 6, the Ministry will not rely on the OMA's agreement to the payment under paragraph 1a to argue that (a) the OMA has accepted that such payment is sufficient or adequate to meet any claim for additional price or compensation rate increases relating to the 2021-24 period beyond those expressly contemplated by the original freely negotiated agreement between the parties (including any claim related to Bill 124); or (b) that such payment is sufficient or adequate to address the necessity to recruit and retain physicians; or (c) that such payment is sufficient or adequate to address the claim for a "catch-up" payment to physicians based on any factors, including those found in the Binding Arbitration Framework (BAF), inflation, burnout, administrative burden, population growth or other settlements or awards in any other sector, including the health care sector, in Ontario or Canada.

For greater clarity, the Year 3 adjustment will be deemed to be part of the original settlement and not referenced at mediation or arbitration by either party in any special or unique fashion.

6. Despite paragraph 5, the MOH is not precluded from relying on or pointing to the 2021-24 PSA price increases, including the Year 3 increase under paragraph 1a, at mediation or at arbitration, in response to any position or argument advanced by the OMA that the Year 1 price increase should include additional price increases in respect of the 2021-24 period as per 7(a) below, based on any of the factors described in paragraph 5 above. Nor does anything in paragraph 5 preclude the OMA from advancing the position or argument that the Year 1 price increase should include additional price increases in respect of the 2021-24 period based on any of the factors described in paragraph 5 above.

7. The parties agree that the mediation/arbitration for the 2024-28 PSA will be bifurcated into two procedural steps:

   a. Year 1, if necessary, will be referred to the Board of Arbitration on May 6, 7 and 8 (with the opportunity if either party requests for further reply argument on June 5 or 6) for binding arbitration in accordance with the terms of the BAF, amended procedurally for the purposes of this agreement on a one-time basis as set out herein; and

   b. Upon the conclusion of the hearing, the parties will continue to use the existing mediation and arbitration dates, and any additional dates that may be required,

to conclude Years 2, 3 and 4 of the 2024-28 PSA.

The Parties will continue to meet to formulate a focused agenda for the mediation process that takes place prior to the Year 1 arbitration.

8. In deciding the Year 1 price increase, the board of arbitration will determine:

   a. the quantum, if any, of the additional price increase to be awarded, including in respect of years 1, 2 and 3 of the 2021-24 PSA, in Year 1 of the 2024-28 PSA, based on the factors set out in paragraph 5 above; and

   b. separate and apart from a) above, the quantum of the normative price increase to be awarded for Year 1 of the 2024-28 PSA.

9. For the 2024-28 PSA, unless the parties agree to a different proportion, and subject to the Year 1 implementation provisions set out in paragraph 12 below, the total price increases in year 1 will be divided as follows:

   a. Seventy percent (70%) of the price increase awarded in Year 1 will be allocated to each section or physician grouping.

   b. The remaining thirty percent (30%) of the price increase will be allocated to permanent price increases in the form of targeted investments (e.g. Hospital On-Call Coverage (HOCC), pay for performance initiatives, family medicine initiatives, emergency medicine initiatives, APPs or AFPs, technical fees adjustments, gender pay gap initiatives, medical innovation and technology advances, patient complexity initiatives, fee schedule modernization, overhead expenses, locum/underserviced area/CME/skill optimization initiatives, retention initiatives, physician extenders, initiatives relating to the increased administrative burden on physicians, or benefit increases). The examples of targeted investments set out above are not an exhaustive list. For greater clarity, the inclusion of the list above is not determinative of either parties' support for such an initiative or in respect of either parties' position about the arbitrability of the initiatives.

10. Upon the conclusion of 2024-28 PSA Year 1 negotiations or award, the parties will work bilaterally to conclude an agreement on the implementation of the targeted investments. This work will be done in conjunction with the parties' Year 2-4 negotiations and mediation. This approach to Year 1 is without prejudice to the position of either party regarding the future allocation, if any, of price increases

between general fee increases and targeted price increase investments in years 2,3 and 4 of the 2024-28 PSA.

11. In the event that the parties are unable to reach a consensus on allocation or costing with respect to the targeted investments (or cannot agree whether a particular change is a targeted or non-targeted price increase), any dispute may be referred to the Board of Arbitration as part of the conclusion of the Years 2-4 arbitration, but the Board of Arbitration may not alter the 70/30 ratio applicable to Year1 as set out above. However, the parties may agree that certain targeted investments may, on agreement, be included as part of the May/June Year 1arbitration.

12. The Year 1 price increase will be implemented as follows:

    a. The entire price increase under the Year 1 2024-28 PSA will be implemented prospectively as an across-the-board increase to the fee-for-service payments identified in paragraph 1a above, with a target date of the RA in the month 90 days following the issuance of the arbitration decision, and will flow through to non-fee-for-service payments as soon as practicable.

    b. A lump sum payment equal to the entire increase awarded for Year 1 for the earlier period from April 1, 2024 through to the implementation date under paragraph 12(a), will be paid as soon as practicable following the arbitration award with a target date of October 2024.

    c. To the extent practicable, the permanent year 1 non-targeted price increases will be implemented at the same time as the April 1, 2023, price increases under Year 3 of the of the 2021-24 PSA i.e. April 1, 2025, and in any event no later than October 1, 2025. These increases will be calculated on a base of 2023-2024 expenditures as described in paragraph 1a and will be allocated to physician payments through the PPC process to each section or physician grouping. The distribution as between across the board increases and relativity increases will be determined in such manner as the parties agree or, failing agreement, as the board of arbitration awards, with the relativity portion to be based on the most current hybrid CANDI-RAANI score. These increases will also flow through to non-fee for service payments as soon as is practicable.

    d. Any unexpended portion of the targeted price increases will continue to be paid to physicians as a separate payment on the monthly Remittance Advice

(RA), until such time as each targeted increase is implemented or unless the parties agree otherwise.

13. While mediation and, if necessary, arbitration over EDAFA funding under the 2024-28 PSA continues, the parties acknowledge that in their discussions to date, the parties have agreed that the existing Emergency Department Alterative Funding Agreement (EDAFA) temporary surge funding will be maintained at the current rate of 5% for the period of April 1, 2024, to March 31, 2025. This is without prejudice to the position of either party regarding a) whether or not surge funding should be funded out of any targeted price increases, b) the sufficiency of the 5% amount, c) the duration of any surge funding, and d) the arbitrability of any of these issues. However, to the extent they are arbitrable, these issues may be determined by the board of arbitration in awarding the terms of the 2024-28 PSA, in accordance with the BAF and the terms of this agreement.

14. Unless otherwise modified for the purposes of this one-time agreement above, the Parties reserve all rights as per the terms of the BAF.

15. William Kaplan will be seized to resolve any disputes arising under this agreement, and continues to remain seized to resolve any disputes arising in respect of the matters set out in Schedule B and paragraphs 2 and 4 of Schedule C of the Financial Agreement of the 2021-24 PSA, and Sections C, D, F and G of the 2021-24 PSA.

February 22, 2024

FOR THE OMA

Dr. Nikolina Mizdrak

Dr. Atul Kapur

Dr. David Nerenberg

Dr. Winnie Wong

Dr. Patrick Conlon

FOR THE MINISTRY

Teresa Buchanan

Dr. Andy Smith

Dr Jeff Tyberg

Dr. Darren Cargill

TAB 2

Membership Data by District - Single Dashboard by OMA EPR

Membership Data, *as of April 1, 2024*

Reset

Your Current View:

Category	Network	Primary Section	Sex	Age Group	District	Branch Society
All	All	All	All	All	All	All

Counts by Career Stage

Career Starting	6,144	12.6%
Established	19,697	40.4%
Late Career	9,686	19.9%
Retired	5,329	10.9%
Resident	3,297	6.8%
Medical Student	2,699	5.5%
Other	1,943	4.0%

All Members	Practicing
48,795	35,527

Membership by District and Branch Society

Count by District

	Count	%
N.A.	238	0.5%
1	1,550	3.2%
2	3,467	7.1%
3	2,615	5.4%
4	5,636	11.6%
5	7,720	15.8%
6	2,306	4.7%
7	1,709	3.5%
8	5,828	11.9%
9	1,558	3.2%
10	757	1.6%
11	13,455	27.4%
Out of Prov.	2,006	4.1%
Grand Total	48,795	100.0%

Count by District and Branch Society

	Count	%
Central Toronto Clinical Society	1,321	2.7%
Toronto Hospital Clinical Society	1,192	2.4%
Eglinton Medical Society	1,100	2.3%
St Michael's Hospital Clinical Society	1,105	2.3%
North York General Medical Society	886	1.8%
Toronto East Medical Society	956	2.0%
Sunnybrook Medical Society	649	1.3%
Mt Sinai Medical Society	676	1.4%
Scarborough Clinical Society	814	1.7%
North York Branson Medical Society	715	1.5%
Queensway Medical Society	656	1.3%

Primary Section

	Count	%
No Primary Section	2,004	4.1%
Addiction Medicine	214	0.4%
Allergy and Clinical I...	210	0.4%
Cardiac Surgery	109	0.2%
Cardiology	848	1.7%
Chronic Pain	315	0.6%
Critical Care Medicine	410	0.8%
Dermatology	316	0.6%
Diagnostic Imaging	1,417	2.7%
Emergency Medicine	2,096	4.2%
Endocrinology and M...	342	0.7%
Eye Physicians and S...	592	1.2%

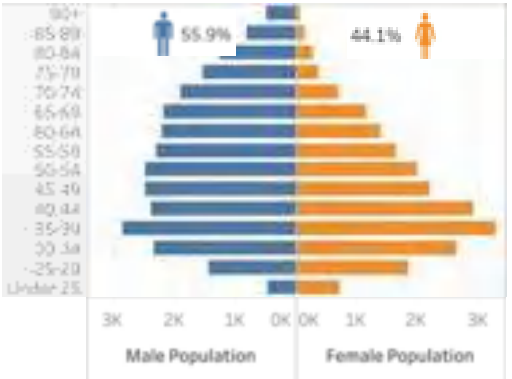
Network

	Count	%
Academic	9,354	19.2%
Diagnostic	2,289	4.7%
Medical	14,514	29.7%
Primary Care	18,149	37.2%
Regional	46,521	95.3%
Surgical	6,781	13.9%
No Network	1,326	2.7%

Forums and MIGs

		Count
Forums	Academic Medicine Forum	5,545
	Rural Medicine Forum	1,947
	Cannabinoid Medicine	375
	Clinic Endoscopists	219
	Clinical Hypnosis	149

Member Age and Sex



Notes: * suppressed due to low number of records. | Member counts in Networks, Fora and MIGs are not unique. Members can be part of multiple Networks, Fora or MIGs. | The "No Network" group captures members that are not in Dst 1-11, and are not in a primary section, and don't belog to the Academic Medicine Forum or Rural Medicine Forum. | Data extracted on April 4, 2024

OMA Economics, Policy & Research

TAB 3

cmajOPEN

Research

The impact of delayed nonurgent surgery during the COVID-19 pandemic on surgeons in Alberta: a qualitative interview study

Natalia Jaworska MD MSc, Emma Schalm MSc, Jaling Kersen BSc, Christine Smith MSc, Jennifer Dorman RN, Mary Brindle MD, Joseph Dort MD, Khara M. Sauro PhD

Abstract

Background: During the COVID-19 pandemic, nonurgent surgeries were delayed to preserve capacity for patients admitted with COVID-19; surgeons were challenged personally and professionally during this time. We aimed to describe the impact of delays to nonurgent surgeries during the COVID-19 pandemic from the surgeons' perspective in Alberta.

Methods: We conducted an interpretive description qualitative study in Alberta from January to March 2022. We recruited adult and pediatric surgeons via social media and through personal contacts from our research network. Semistructured interviews were conducted via Zoom, and we analyzed the data via inductive thematic analysis to identify relevant themes and subthemes related to the impact of delaying nonurgent surgery on surgeons and their provision of surgical care.

Results: We conducted 12 interviews with 9 adult surgeons and 3 pediatric surgeons. Six themes were identified: accelerator for a surgical care crisis, health system inequity, system-level management of disruptions in surgical services, professional and interprofessional impact, personal impact, and pragmatic adaptation to health system strain. Participants also identified strategies to mitigate the challenges experienced due to nonurgent surgical delays during the COVID-19 pandemic (i.e., additional operating time, surgical process reviews to reduce inefficiencies, and advocacy for sustained funding of hospital beds, human resources and community-based postoperative care).

Interpretation: Our study describes the impacts and challenges experienced by adult and pediatric surgeons of delayed nonurgent surgeries because of the COVID-19 pandemic response. Surgeons identified potential health system–, hospital- and physician-level strategies to minimize future impacts on patients from delays of nonurgent surgery.

The COVID-19 pandemic led to an increased demand for hospital beds to care for patients with COVID-19. In response, strategic planning to preserve scarce material and human resources were developed, and one approach was delaying nonurgent surgeries during periods of increased hospitalizations.[1–3] Nonurgent surgeries, defined as surgeries that are medically necessary but can be scheduled in advance, were radically affected by these delays, leading to increased surgical wait times and backlogs.[4,5]

Providing timely surgical care has been challenging even before the COVID-19 pandemic, with 30% of scheduled hip, knee or cataract surgeries routinely exceeding prespecified Canadian wait-time benchmarks.[6] This strain on surgical care delivery has been exacerbated by the COVID-19 pandemic, with an estimated 28 million surgeries cancelled worldwide during the first 12 weeks of the pandemic.[7] Longer wait times for surgery expose patients to higher risks of poorer health-related quality of life, progression of underlying conditions and worse surgical outcomes.[6,8–11] Furthermore, surgical delays lead to increasing backlogs of nonurgent surgeries.[12,13] There has been a focus on the impact of delaying nonurgent surgeries on surgical patients and health care systems; however, less is known about the experience of surgeons both professionally and personally, despite the acknowledgement of substantial pandemic-related burnout among health care providers.[14–17] Understanding the

Competing interests: Mary Brindle reports a grant from the Canadian Institutes of Health Research to explore how the Surgical Safety Checklist could be improved, a grant from Maternal Newborn Child & Youth to explore the effectiveness of a neonatal Enhanced Recovery After Surgery (ERAS) protocol, honoraria for speaking at Hong Kong University Department of Surgery and the University of Manitoba (both < $1000), an unpaid role on the Data and Safety Monitoring Board for a US randomized controlled trial on ERAS in pediatric patients and an unpaid position as secretary of the ERAS Society. No other competing interests were declared.

This article has been peer reviewed.

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impact of surgical delays on surgeons is an important knowledge gap to address to support surgeons in their clinical environment during periods of high patient volume. In this qualitative study, we aimed to describe the impact of delaying nonurgent surgeries during the COVID-19 pandemic on pediatric and adult surgeons in Alberta from the surgeons' perspective.

Methods

We used interpretive description, which was developed for disciplines in which pragmatic approaches to understanding and developing clinical recommendations are needed, as our methodological framework to align with a constructivist and naturalistic approach to inquiry aimed at generating clinically contextual knowledge.[18,19]

In Alberta, Canada, there were 5 waves of COVID-19 cases between March 2020 and March 2022; after March 2022, reliable tracking data have been limited. Each wave included temporary public health measures to mitigate SARS-CoV-2 infections that were subsequently eased between waves. During wave 1 in March 2020 and wave 2 in October 2020, school class cancellations, non-essential business closures and group size gathering restrictions were implemented. Delays in nonurgent surgical procedures to prepare for potential COVID-19 patients requiring hospitalization occurred during wave 1. Masking recommendations were introduced in April 2020. During wave 3 in March 2021, restrictions included limitations on capacity at businesses, restaurants and social gatherings. Wave 4 in August 2021 similarly required introduction of capacity restrictions on business, restaurants and social gatherings, with the addition of requirements for proof of vaccination. During this wave, 60%–70% of nonurgent surgeries were delayed within the province to manage high strain on ICU bed capacity (https://covid-tracker.chi-csm.ca/). Wave 5 in January 2022 saw minimization of public health precautions, with cessation of requirements for proof of vaccination (February 2022) and removal of all public health measures with some exceptions in health care settings in March 2022.[20] During the multiple waves of COVID-19, 81 600 surgeries were delayed in Alberta.[21] Pandemic interventions were uniformly implemented across all health zones within Alberta and are further outlined in Figure 1.

This study is reported according to the Consolidated Criteria for Reporting Qualitative Research checklist (Appendix 1, Supplementary Table 1, available at www.cmajopen.ca/content/11/4/E587/suppl/DC1).[22]

Participant selection

This study used a convenience sampling approach. We recruited participants through social media posts on Twitter and through email invitations to personal email addresses via the team's research networks. Participants who spoke English, who were pediatric and adult surgeons working in any health care setting in Alberta during the COVID-19 pandemic, and who were able to consent to participate were eligible for participation.

Data collection

We conducted semistructured interviews from Jan. 21, 2022, to Mar. 15, 2022. An interview guide was developed by members of the research team, and it was informed by the experiences of our clinician team members during the COVID-19 pandemic. The semistructured interview guide was reviewed by 2 senior surgeons with experience in health services research and health care delivery for feedback and refinement before administration (Appendix 1), which resulted in 2 additional questions inquiring into the personal impact of surgical delays on surgeons. Participant demographic characteristics were collected using standardized questions at the end of the interview.

Three female researchers (2 graduate students and 1 research associate) trained in qualitative methods (E.S., J.K. and C.S.) conducted all individual interviews over Zoom (Zoom Video Communications) with only the interviewer and participant present. Password-protected individual links for the interview (meeting) were used with the waiting room functions activated to allow the interviewer to admit participants to the interview securely. Zoom was used as the platform to conduct interviews to comply with public health recommendations and safety measures. Interviews were audio-recorded after participant oral consent was obtained, and subsequently transcribed verbatim, verified and deidentified. Transcripts were not returned to participants. Field notes were kept and informed interpretation of the transcripts.

Data analysis

Transcripts were imported into NVivo12 (QSR International) for data analysis. Data were analyzed using inductive thematic analysis described by Braun and Clarke.[23] Two female researchers (N.J. and E.S.), who were trained in the inductive qualitative analysis approach of Braun and Clarke, completed all analyses. Each transcript was analyzed and coded independently and in duplicate. Researchers held weekly meetings to develop a coding frame that encompassed key features of the data and to discuss discrepancies in the coding frame. Researchers applied the coding frame determined by consensus to their transcripts following each meeting. Subsequent meetings focused on merging codes into themes reflecting participant responses. Participant recruitment and coding meetings continued until no new codes or further themes were identified with subsequent interviews and data analysis. Trustworthiness (credibility, dependability and confirmability) was considered. Credibility included member checking by researchers (2 researchers administering interviews) and participants (2 participants reviewed the results and interpretation). Dependability included maintaining an audit trail of iterative coding meetings with inquiry audits provided internally by the 2 primary analysts (N.J. and E.S.). Confirmability was addressed by holding weekly meetings that included open and reflexive discussion that challenged the researchers' perspectives to minimize personal bias.

Reflexivity

Interviewers (E.S., J.K. and C.S.) did not have a relationship with participants before the interviews. They had

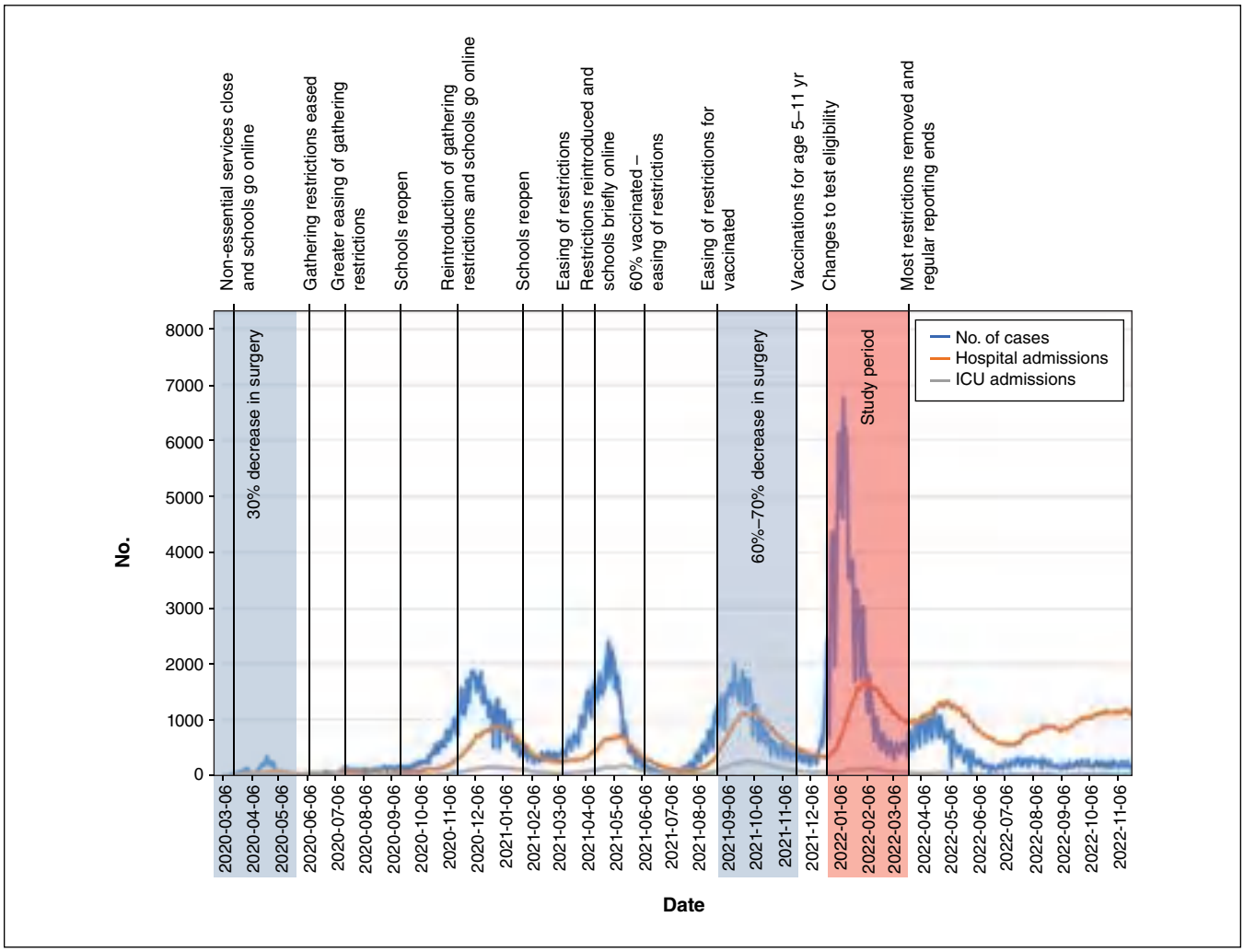

Figure 1: The study was conducted shortly after a period of high COVID-19 hospitalizations, during which 60%–70% of nonurgent surgeries were delayed (the second strategic decrease in surgical volume). Despite a return to normal surgical volume during the study period, there was still a higher than baseline number of hospitalizations and a high incidence of COVID-19. Note: ICU = intensive care unit. Data source: https://covid-tracker.chi-csm.ca/

research experience in surgical care during the COVID-19 pandemic, as they had previously conducted interviews for a study on the impact of pandemic-related surgical delays from the patient perspective.[24] All interviewers had formal graduate-level training in qualitative methods (E.S. and J.K.) or experiential training conducting semistructured interviews (C.S.). All interviewers had experience handling semistructured interviews, having completed interviews for other qualitative studies led by this research group related to surgical delays during the COVID-19 pandemic. Before interviews started, all questions from the interview guide were reviewed with the interviewers, and practice interviews were conducted among the team. None of the interviewers (E.S., J.K. and C.S.) or analysts (N.J., E.S. and K.M.S.) were surgeons or had surgery (planned or completed) during the pandemic. One of the primary analysts (N.J.) is an intensivist who cares for surgical patients admitted to intensive care units.

Ethics approval

This study was approved by the University of Calgary Conjoint Health Research Ethics Board (REB20–0753). The informed consent process occurred before interviews and included sending participants an email outlining the study objectives, and the informed consent script detailing the interview and data analysis process, providing opportunities to answer participant questions and obtaining oral informed consent.

Results

Twelve interviews were completed (9 adult surgeons and 3 pediatric surgeons). Participant characteristics are described in Table 1. Interview durations ranged from 21 minutes 54 seconds to 42 minutes 7 seconds. All participants practised within the urban setting, with all participants except for 1 working within an academic environment. Participants worked in hospital institutions with 269 to more than 1100

Table 1: Characteristics of participant surgeons

Characteristic	No. (%) of participants *n* = 12
Patient population	
Adult	9 (75)
Pediatric	3 (25)
Age category, yr	
20–29	0 (0)
30–39	2 (17)
40–49	5 (42)
50–59	3 (25)
≥ 60	2 (17)
Sex	
Female	3 (25)
Work environment*	
Academic	11 (92)
Nonacademic	2 (17)
Surgical practice	
Dentistry	1 (8)
Head and neck	3 (25)
Gynecology	2 (17)
General	2 (17)
Orthopedics	3 (25)
Thoracic	1 (8)
Work experience in role, yr	
0–5	2 (17)
6–10	2 (17)
11–15	3 (25)
≥ 16	5 (42)

*One participant reported working in both academic and nonacademic environments.

patient beds. Two participants had dual roles as surgeons and health care administrators.

Participants identified themes related to their own experiences during the COVID-19 pandemic as well as their perceptions of the impact of the pandemic on the health system and surgical services. Six major themes were identified: accelerator for a surgical care delivery crisis, health system inequity, system-level management of disruptions in surgical services, professional and interprofessional impact, personal impact, and pragmatic adaptation to health system strain. Quotations illustrating themes and all identified subthemes are provided in Table 2.

Accelerator for a surgical care delivery crisis

Surgeons believed the COVID-19 pandemic unmasked and exacerbated long-standing health system issues related to the delivery of surgical care. Surgeons described strain on the health system before the pandemic and the effect of evolving surgical demand during the pandemic (quotation 1 [Q1]).

Surgeons perceived that delays on nonurgent surgeries were responsible for additional consequences on patient outcomes, such as increased risk of adverse events, less predictable outcomes due to more complex surgeries being required, and increased chronic pain (Q2). Surgeons believed that these additional surgical delays prompted some patients to explore free-standing facilities dedicated to providing surgical care, with other patients presenting with advanced disease requiring urgent interventions owing to loss of function (e.g., joint collapse and pain crisis) (Q3 and Q4). Cancer surgeons specifically highlighted that their patients were presenting for surgical consults with more advanced cancer, which they believed was a direct, deleterious effect of surgical delays due to pandemic-related capacity constraints (Q5).

Health system inequity

Surgeons perceived inequity in 2 ways during the COVID-19 pandemic: a disproportionate impact on surgical services compared with other health services, and an inequitable impact among different surgical services. Surgeons expressed their perception of the disproportionate burden of the pandemic response on surgery patients (Q6). Surgeons with higher volumes of nonurgent surgical cases reported feeling that surgical delays were particularly inequitable for their patient caseloads (Q7). Surgeons who performed mostly cancer surgeries, which were prioritized in Alberta throughout the COVID-19 pandemic, were empathetic to their surgical colleagues who experienced greater impacts to their surgical practices; however, cancer surgeons were not impervious to impacts on surgical practices and did report receiving informal recommendations regarding triage of their surgical cases (Q8). The feelings of inequitable care delivery were amplified by a lack of transparency and a lack of available resources to support patients and their families (Q9 and Q10).

System-level management of disruptions in surgical services

Approaches to delaying nonurgent surgeries varied through different waves of the pandemic based on the number of hospitalizations during a given time. Participants expressed that early in the pandemic during the first wave, postponing nonurgent surgeries felt excessive given the flat number of COVID-19 hospitalizations (Q11). Surgeons reported that COVID-19 pandemic responses were initially viewed as inefficient and, at times, too reactive, but became more informed by emerging evidence and experience (Q12).

Participants expressed tensions between surgeons and administrative leadership (e.g., department heads and medical executive committees) on the appropriate approach to making decisions on when to enact disruptions to surgical care to build hospital capacity, and the process for deciding which surgeries should be delayed (triaging). Surgeons did not feel included in triage decision-making (Q13).

Table 2 (part 1 of 3): Exemplar quotations for themes and subthemes

Quote no.	Subtheme	Exemplar quotation
Accelerator for a surgical care delivery crisis		
1	Health care system strain	"The Canadian health care system operates at maximum capacity all the time, even when there's not a crisis, there's no room for contingencies, right? Especially something as sustained as this. So when you run the system that tightly to stay within budget and I get it, health care is an overwhelmingly expensive proposition, but when you run on the edge of capacity all the time, you can ramp it up for a little while, like if there was a plane crash or something, people can work really hard for a week or 2, for a lot of hours but if for something like this that goes on for 2 years, the limits of our capacity become really apparent." — Participant 003
2	Impact on patient-centred outcomes	"They're quality-of-life surgeries, but at some point, quality of life diminishes to the point where it becomes medically imperative to do a joint replacement, say, for severe arthritis of the hip. So we've had a few more patients, at least in my subjective understanding or subjective experience, in the last 7 years of my faculty position that we've had to bring in as an urgent pain crisis or failure to thrive for a joint replacement, which we know has less, or has inferior outcomes relative to your traditionally electively scheduled joint replacements." — Participant 008
3	Direct impact on care delivery	"… what's happened as well is the number of emergencies or situations where people really need urgent care because they can no longer function or they've had, for example, a collapse of their joint, those numbers of cases are also increasing." — Participant 004
4	Access to surgery	"Like I said before, we do have other options, since there are private surgical facilities, that we can go to. They were quite good at accommodating people." — Participant 002
5	Direct impact on care delivery	"I think we have seen late presentations delayed to get to us, because those patients have to see their family doctor first, and then go on to see another ENT, and then get referred to us. So, that's where I think a lot of the delays have happened, not so much once we see them to get them to the OR." — Participant 009
Health system inequity		
6	Disproportionate burden on surgery patients	"So I feel this pandemic has disproportionately affected surgery, and I feel surgeons and our surgical patients and our surgical leaders have really made a lot of concessions and a lot of sacrifices for the greater good." — Participant 008
7	Disproportionate burden on nonurgent surgeries	"It felt like it was not a priority and we were being told that everything was equitable. At one point I did receive some acknowledgement from leadership that our discipline was the last to catch up or the most behind on catching up in cancelled cases. And that was both validating and infuriating because all of this time they've been pretending that things are equitable." — Participant 001
8	Resource constraint	"So just a couple of things off the top of my head, although, again, we were allowed to proceed with cancer surgery; there are some of us that do what would be considered some of the ultra radical surgeries which might take an entire day of surgery on 1 patient. And we were sort of informally told that we should not be booking these patients because it would be seen as sort of an inappropriate use of time and resources during this time. So the feeling was rather than operating on a 40-year-old to do something really aggressive in an entire day surgery, you should probably not doing that surgery and rather taking that day to do 3 cases or 3 patients." — Participant 002
9	Lack of transparency	"And in terms of where we're at now, how do I feel about this? I feel a little bit like this is [provincial health system]'s fault that they could have done a better job. I saw a recent [newspaper] article where they claimed they're not cancelling surgeries that was published 12 hours after they cancelled my OR slate. I just feel, like, angry; at least be honest with the public about what's happening." — Participant 001
10	Lack of resource availability	"And I think a lot of our patients who are undergoing very life-challenging procedures have, I think, been neglected or denied having their appropriate supports with them through their voyages, at least within the hospital setting, which has been distressing." — Participant 008

Professional and interprofessional impact

Surgeons reported experiencing professional and interprofessional impacts due to surgical delays. Surgeons described having to adapt to new hospital processes, such as new policies surrounding personal protective equipment (Q14). They also expanded their administrative and professional roles by taking on new administrative tasks, such as seeing additional patients in clinic, cancelling surgical cases and talking to patients regarding postponing their surgeries (Q15). Several surgeons felt worried about the consequences of the anticipated increased workload and burnout related to surgical delays (Q16). A few surgeons experienced a decrease in their workload with lower surgical volume during waves of increased COVID-19 hospitalizations (Q17). However, surgeons described a resurgence in workload after COVID-19 waves owing to health care workers requiring time off

Table 2 (part 2 of 3): Exemplar quotations for themes and subthemes

Quote no.	Subtheme	Exemplar quotation
System-level management of disruptions in surgical services		
11	Inharmonious implementation of policies	"Well, I think earlier in the pandemic there were alternatives, we just didn't know, because we cancelled some surgeries and delayed surgeries, expecting the hospital to fill up when it was not yet full, and later in the pandemic, that shifted to letting things go until it's full, which is a slightly different paradigm, which works better because we're getting more done, because the hospital didn't actually fill up to the point where we had to cancel everything, which we did for a couple weeks about a year ago." — Participant 009
12	Response informed by experience and evidence	"I think that the surgical leadership will benefit from having to move through a pandemic and you can see it in the second and later waves, the communication and the strategies for dealing with it was more certain and more polished." — Participant 006
13	Stakeholder involvement in triage decision-making	"And then what's really silly is that now they're no longer asking the surgeons if there's certain patients on that list, according to acuity who should be removed. So then one of my colleagues last week had a very time-sensitive cancer surgery just arbitrarily removed, and somewhat ironically, had he been able to provide input he would've said, "This is the one that needs to be done. The other one or two, if you're thinking of removing one, definitely remove that one because that one's less acute." — Participant 002
Professional and interprofessional impact		
14	Personal protective equipment use	"I think the secondary impact was just managing new requirements for personal protective equipment in the hospital, the additional burden and time and confusion around that." — Participant 006
15	Additional professional tasks	"I think it's not like the ORs closed and then we weren't doing anything. A lot of people worked extra, they took the burden of cancelling cases, talking to the patients, hearing their concerns, rebooking them, and only to have them postponed again. And so that takes a toll, it's frustrating and the normal flow is disrupted and that is very taxing and it's a heavy burden." — Participant 007
16	Workload changes	"… many of us feel quite worried about the clinical demands that we will face to try to meet the backlog … I think many of us are worried about it being quite stressful." — Participant 002
17	Workload changes	"That seems to be exaggerated with the pandemic that, going into a wave, we're halfway through a wave, all of a sudden there's fewer people coming in, and then kind of a month after a wave finishes, then there's this crush of patients, often with advanced disease that have been delayed. So it's always been a challenge in this career, is that the busyness sort of comes and goes, but it's worse now." — Participant 003
18	Interprofessional tension	"I would just, I think, you know, again, that concept of the haves and the have nots, right? They've really not even across surgical disciplines, but within departments, where you've got people who may be doing more benign surgery as opposed to cancer surgery. There has created quite a divisiveness, so I think that's at a personal and on a professional level that has been kind of taxing." — Participant 002
19	Interprofessional tension	"I think that there is certainly some discord brewing between services because I hear that certain disciplines [flouted] the restrictions by bringing patients in through the emergency room and claiming that [their] scheduled surgeries [were], now, urgent surgeries." — Participant 001
Personal impact		
20	Financial consequences	"It's had a significant impact on income, which I'm sure not ... there's not a lot of sympathy for physicians being relatively high earners, their income is down, but the factor means there's staff that still need to be paid out of my professional income. And so things are tight, tight enough that I've had to take loans to keep everything afloat." — Participant 001
21	Public health measures	"I think it's obviously personal restrictions, your lifestyle is significantly altered, the schooling of my children has been significantly changed, interactions with friends and family curtails and then obviously the stressors at work." — Participant 007
22	Anticipatory burnout	"And so it's just sort of created a lot of stress in the sense that I am now left with a long list of patients that are all way out of window. And there's only so much I can do in terms of OR time because you sort of have to balance access to the OR for patients with your own, sort of, life." — Participant 001
23	Work–life balance	"You know what, it's been pretty amazing for me. It was nice. It was nice to take a break for a few months. It was nice to make some changes to the practice. We cancelled every appointment in our book and started fresh. We moved everybody who we'd cancelled and started fresh and kind of went down from there, but it was nice to make some changes to the schedule. It was lovely to have dinner with my family every night, instead of running kids to sports." — Participant 002

Table 2 (part 3 of 3): Exemplar quotations for themes and subthemes

Quote no.	Subtheme	Exemplar quotation
Pragmatic adaptation to health system strain		
24	Alternative strategies for surgical care delivery	" … our ORs were closed for a little while there too. And so we were doing a lot of the cases in minor surgery." — Participant 005
25	Communication modalities	"So, I think it's more acceptable now even by families. Families kind of think, 'Oh, I should really see the surgeon.' I think they kind of go, 'You know what? It's okay not to see them.' Because they're so used to Zooming or telephones now." — Participant 003
26	Communication modalities	"And then rejigging, how patients could access chatting with us, given that they couldn't initially come physically to the clinics. And so, a transition to much more phone or other methods of consultation." — Participant 006
27	Shared decision-making	"And so the example that I just gave you, if I know based on ... If my surgical executive team tells me that, '[Name], you and your team are going to have to cut out 5 patients from your list next week.' Well, give us the opportunity to tell you who those patients are according to acuity, don't just randomly start crossing off names because then that is not the right approach." — Participant 002
28	Alternative strategies for surgical care delivery	"So, typically, if I met a patient, I would do their surgery and follow through with them. What we had to do was decouple that because we just had much more limited OR time. And so, we wanted to prioritize within our group, the patients, not just within our individual practices." — Participants 006
29	Alternative strategies for surgical care delivery	"I think there are some higher ups that are thinking outside the box, whether it be using private surgical centres to catch up on elective cases. Funding these cases outside the hospital setting makes a whole lot of sense in my mind." — Participant 005

Note: ENT = ears, nose and throat specialist; OR = operating room.

(because of illness or work-related stress) and increased patient volume owing to patients presenting with more advanced disease, leading to previously nonurgent surgeries requiring urgent interventions.

Some surgeons described a sentiment of divisiveness and tension between colleagues within their own discipline and across surgical services, where some nonurgent surgeries were delayed and more urgent surgeries (i.e., cancer surgeries) were continued (Q18 and Q19).

Personal impact

Many surgeons described the personal impact of delaying nonurgent surgeries and of the COVID-19 pandemic more broadly, which was complex and intertwined with their professional lives. Surgeons described changes to income and their work–life balance, reporting notable financial consequences from reduced surgical cases within a fee-for-service reimbursement model in Alberta (Q20).

Like the public, surgeons were also personally affected by having to abide by public health measures (Q21). Surgeons did not describe the impact of surgical delays and the COVID-19 pandemic on caring for their school-aged children without school; however, the effect on work–life balance was noted by several surgeons. Whereas some reported a loss of work–life balance due to increased work-related demands and concern about developing burnout with the accumulation of surgical backlog (Q22), others described how the reduction in time devoted to their professional career provided an opportunity for a practice change and greater focus on work–life balance (Q23).

Pragmatic adaptation to health system strain

Surgeons were adaptive and empathetic to the health system strain they experienced, which changed the way in which they delivered care (e.g., virtual appointments) to reduce the impact of nonurgent surgical delays.

All surgeons understood the need and rationale behind delaying nonurgent surgeries and expressed acceptance and empathy toward the difficult choices required by local decision-makers. Surgeons were pragmatic in the way they adapted to delivering care during surgical delays, describing ways in which they changed the delivery of patient care to best support patients during periods of high COVID-19 hospitalizations (e.g., completing more procedures in clinic) (Q24). There were additional changes in communication modalities with patients, with surgeons leveraging telehealth strategies and virtual follow-up with patients (Q25 and Q26).

Surgeons suggested strategies to mitigate some of the challenges experienced due to surgical delays. These strategies included enabling more opportunities for shared decision-making between surgical services, with stakeholder input around patient care decisions, to better identify appropriate patients at least risk of negative consequences from experiencing a surgical delay (Q27). Other described strategies included decoupling of surgeons completing surgeries from their patients (i.e., team-based care or shared care), and surgeons reported feeling stressed having to adopt this approach under these conditions (Q28). Additional strategies included the administration of day surgeries in free-standing facilities through alternative care models, and capacity building through extended hours for nonurgent surgical scheduling (Q29).

Figure 2 provides a summary of surgeon-generated strategies to mitigate some of the challenges of surgical delays, address surgical backlog and avoid future delays.

Interpretation

This qualitative study describes how surgeons were affected by delays in nonurgent surgeries due to strained hospital capacity during the COVID-19 pandemic. Surgeons described their own experiences during the pandemic as well as their perceptions of the impact of the pandemic on the health system and surgical services. Our results suggest that both adult and pediatric surgeons across multiple specialties experienced health system, professional and personal impacts due to these delays. Surgeons described how nonurgent surgical delays exposed pre-existing issues (i.e., long surgical wait-lists and baseline high hospital occupancy) related to the ability of the health system to meet the demand for surgical care that became more apparent as a result of the pandemic.

The COVID-19 pandemic changed the way nonurgent surgeries were prioritized owing to strained clinical and infrastructural demands on health systems resulting from the influx of patients with COVID-19,[25] challenging health systems to determine how to best navigate the delivery of surgeries.[1,2,26,27] Several surgical societies developed guidelines on surgical prioritization during periods of scarce hospital resources.[1,2,27] However, there is little guidance available on how to address surgical backlogs after periods of high strain on hospital resources. Previous studies evaluating initiatives to reduce wait times for nonurgent surgery in Canada have suggested using single-entry models, which generate a single queue directing patients to the next available surgeon, as a means to increase availability of services, reduce the number of patients placed on wait-lists and optimize health system performance (i.e., wait time monitoring and set performance targets).[6,28,29] The use of team-based approaches to patient care, in which patients are matched to the next available surgeon, was suggested by our participants and has been explored in the literature as a quality improvement initiative. In a study in which a team-based surgical scheduling approach was used to schedule patients with head and neck cancers, surgical groups were better equipped to maintain high utilization of blocked operating room times while maintaining patient and surgeon satisfaction. Patients were open to and interested in being assigned to the next available surgeon to reduce their waiting period, and this may be a feasible approach to surgical care that additionally enhances equity, standardization and reliability of care among patients and surgeons.[30] When examined in the Canadian context, Ontario health system leaders felt that this model could improve quality and reduce scheduling variability when designed to address local needs.[31] Our findings additionally suggest advocacy for additional funding, service expansion (e.g., extended and weekend operating times) and considerations for outsourcing (i.e., free-standing health centres) as further short-term and long-term strategies to address this backlog, and to generate sustainability to address pre-existing structural problems in surgical care delivery in Canadian

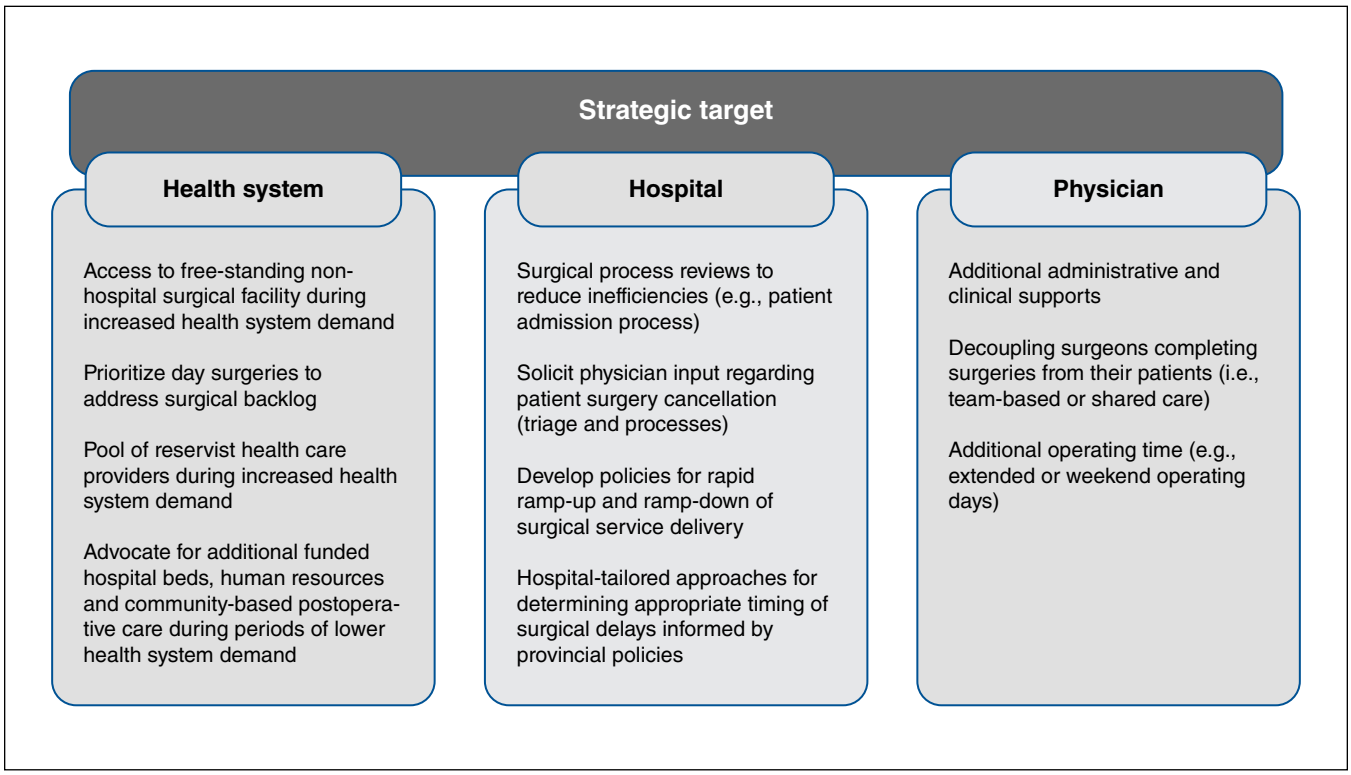

Figure 2: Participants identified 3 strategic targets to mitigate the impact of delaying nonurgent surgeries.

health care systems.[6,28,32] Long-term strategies must additionally address patient-centred health system performance to optimize operating room efficiencies, administrative efficiencies and patient care pathways to have sustained benefit on surgical wait times and backlogs in order to address the underlying pre-existing issues with surgical delays that have been exacerbated by the COVID-19 pandemic.[6,28]

Recent studies evaluating surgeons' experiences during the COVID-19 pandemic highlight both positive and negative consequences related to delays of nonurgent surgery. Similar to our study, surgeons expressed concern regarding the financial impacts of surgical delays.[33] Conversely, other studies have highlighted the benefits of the implementation of telemedicine and additional focus on wellness that happened as a result of delays of nonurgent surgeries.[34,35] Our study suggests that any interventions to reduce surgical wait times must engage surgeons and include supportive strategies to avoid ongoing professional and personal impacts from sustained high-volume demand for surgical care. Health care providers have experienced both physical and psychological risk throughout the COVID-19 pandemic, and the risk of burnout among surgeons has been well documented even before the pandemic.[14–17] Addressing modifiable risk factors for surgeon burnout (e.g., equitable workload among surgeons and financial compensation) during these periods of unpredictable workloads will be important to address surgical backlog from the COVID-19 pandemic.[15]

There are several strengths to this study. The inclusion of surgeons from multiple surgical specialties provided diverse perspectives and experiences. A multidisciplinary team of researchers and clinicians generated the interview guide, and 1-on-1 interviews were completed to foster psychological safety and depth to participant answers.

Limitations

This study also has limitations. The context within which the study was conducted needs to be considered for transferability. The study was conducted in Alberta in January to March 2022, which was just after a surge of COVID-19 cases resulting in high demand for hospital care, which further resulted in the decision to delay nonurgent surgeries. This may hamper the transferability of our findings to other provinces that had a different experience with COVID-19 surges and that did not make the decision to delay nonurgent surgeries. Similarly, this study's participants were all surgeons within academic tertiary care centres, so it is possible that themes may not be transferable to surgeons working in community hospitals. Also, by using a convenience sampling approach to recruit participants, transferability of our results may be limited, as those individuals who agreed to participate may have had different opinions and experiences from those who did not participate in our study.

We were unable to analyze our results by age or gender owing to the use of convenience sampling, as these factors were not used to guide sampling leading to sample heterogeneity. Additionally, the impact of the COVID-19 pandemic on surgeons' personal (i.e., family situation and stability, and age) and work life (i.e., training and position) and their performance (i.e., ability to physically complete surgeries) was not identified as a major theme by our participants. However, this may represent an important factor affecting surgeons' experiences of surgical delays.

Although 2 participants had additional roles as health care administrators, the perspectives represented in this study are limited to that of surgeons, which is one of many perspectives related to delayed surgeries during the COVID-19 pandemic. We have previously reported on the patient perspective of having nonurgent surgeries delayed[24] and are completing an environmental scan of policy changes across Canada, which includes the perspectives of policy-makers and administrators, but that is beyond the scope of the current study.

Conclusion

Delaying nonurgent surgeries was necessary because of increased demand for hospital resources to care for patients with COVID-19, but surgeons experienced professional and personal impacts due to surgical delays, changing the way they were able to deliver care to their patients. Personal and infrastructural supports for surgeons are needed as they work to address the backlog of nonurgent surgeries.

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Contributors: Khara Sauro, Mary Brindle and Joseph Dort participated in the design and development of the protocol. Natalia Jaworska, Emma Schalm, Christine Smith, Jaling Kersen, Jennifer Dorman and Khara Sauro participated in acquisition, analysis or interpretation of the data. Natalia Jaworska and Khara Sauro drafted the manuscript, and Emma Schalm, Christine Smith, Jaling Kersen, Jennifer Dorman, Mary Brindle and Joseph Dort critically reviewed and approved the final manuscript. All authors approved the final version to be published and agreed to be accountable for all aspects of the work.

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TAB 4

Wait Times | R

Reporting Period: *202 02*

Note: Please check travel times before starting your trip. Distances are measured in a straight line and may not reflect the best travel route.

Patients with emergency conditions (Priority 1) are seen immediately and are not included in wait times data. The wait times are displayed for the larger health organization to which the hospital belongs. Even if MR or CT are not offered at the selected hospital, data will appear for the larger health organization. Priority levels 2, 3, and 4 and target times are set by surgeons, specialists, and health care administrators, based on clinical evidence, to guide treatment decisions and improve patient access and outcomes.

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Patients who should be scanned within a target time of **2 Days**	Patients who should be scanned within a target time of **10 Days**	Patients who should be scanned within a target time of **2 Days**

Ontario Provincial Average

Overall Wait MR

34%

0% 100%

Patients scanned within target time

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Waited on average **7 Days**	Waited on average **27 Days**	Waited on average **3 Days**

1 St. Michael's Hospital

30 Bond Street
Toronto, ON M5B1W8

Distance: 0.9 km

Overall Wait MR

49%

0% 100%

Patients scanned within target time

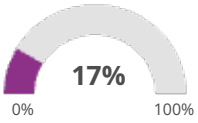
Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Waited on average **112 Days**	Waited on average **7 Days**	Waited on average **1 Days**

2 Women's ollege Hospital

6 Grenville Street
Toronto, ON M5S1B2

Distance: 1.0 km

Overall Wait MR



Patients scanned within target time

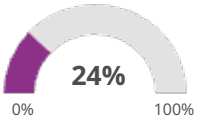
Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Waited on average **67 Days**	Waited on average **33 Days**	Number too small to report

3 University Health Network - Princess Margaret Hospital

610 University Avenue
Toronto, ON M5G2M9

Distance: 1.1 km

Overall Wait MR



Patients scanned within target time

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Waited on average **14 Days**	Waited on average **43 Days**	Waited on average **6 Days**

Learn why some data is not available.

https://www.hqontario.ca/System-Performance/Measuring-System-Performance/When-and-Why-Data-is-Not-Reported

TAB 5

Wait Times | Prostate Cancers

Time from Referral to First Clinician Appointment (Wait 1)

Reporting Period: *October 2023 to december 2023*

Results returned are based on hospitals reporting completed surgical volumes using your search criteria entered.

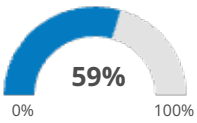
Note: Please check travel times before starting your trip. Distances are measured in a straight line and may not reflect the best travel route.

Patients with emergency conditions (Priority 1) are seen immediately and are not included in wait times data. Priority levels 2, 3, and 4 and target times are set by surgeons, specialists, and health care administrators, based on clinical evidence, to guide treatment decisions and improve patient access and outcomes.

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Patients who should be treated within a target time of **35 Days**	Patients who should be treated within a target time of **21 Days**	Patients who should be treated within a target time of **10 Days**

Ontario Provincial Average

Overall Wait 1



Patients seen within the target time

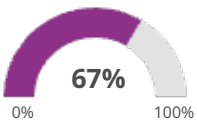
Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Waited on average **37 Days**	Waited on average **24 Days**	Number too small to report

1 St. Michael's Hospital

30 Bond Street
Toronto, ON M5B1W8

Distance: 0.9 km

Overall Wait 1



Patients seen within the target time

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Number too small to report	Number too small to report	No surgeries in reporting period

Ontario Health

2 **Sinai Health System - Mount Sinai Hospital**

600 University Avenue
Toronto, ON M5G1X5

Distance: 1.1 km

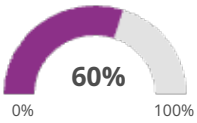
No surgeries in reporting period

3 **University Health Network - Toronto General Hospital**

200 Elizabeth Street
Toronto, ON M5G2C4

Distance: 1.4 km

Overall Wait 1



Patients seen within the target time

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Waited on average **32 Days**	Number too small to report	No surgeries in reporting period

Learn why some data is not available.

https://www.hqontario.ca/System-Performance/Measuring-System-Performance/When-and-Why-Data-is-Not-Reported

TAB 6

#KidsCant Wait

Our ask to Government

#KidsCantWait

Our ask to Government

Ontario's next government must move quickly and make significant investments and remove the system barriers that prevent kids from getting the mental health supports when and where they need it.

Make Ontario the #1 jurisdiction for child and youth mental health

Invest $300M over the next 5 years into child and youth mental health

- Evidence indicates that the social, emotional, and educational impacts of the pandemic, including prolonged isolation, repeated school closures, hours of screen time and increased stress and fears about the virus, have all had a dramatic effect on both physical and mental health in children and youth (Tombeau Cost et al., 2021; Public Health Ontario, 2020).
- This means more children who are missing school due to their mental health and more parents missing work to care for their children.
- Did you know 1/3 of Ontario parents have had a child miss school due to anxiety? 1/4 of Ontario's parent parents have missed work to care for a child with anxiety. This has costed the Ontario economy $421 million/year.
- Investing $300M over the next 5 years into children's mental health will help to reduce wait times, build an integrated system of care from schools to community agencies, and meet the growing demand for more complex care that can more effectively be delivered by community-based services.

Cut wait times to 30 days

- Did you know 28,000+ children and youth are waiting for community mental health care? Wait times could be as long as 2.5 years for specialized services, an average 92 days for intensive treatment services, and an average 67 days for counselling & therapy. These are well beyond the clinically appropriate wait times (CMHO, 2020).
- Cutting wait times to 30 days will ensure timely access to care for the 28,000+ children and youth already waiting for care and for the surge in demand expected to continue beyond the pandemic. It will help prevent needs from worsening and waitlists for more acute services from growing.

Build more capacity in the community so kids don't end up in emergency rooms

- Did you know that over the last 10 years, there has been a 71% increase in rate of child and youth mental health hospitalizations and 64% increase in rate of ED visits for children and youth? At the same time, the rate of hospitalization for every other condition fell by 26% (CIHI, 2020).
- We can ensure children and youth experiencing a crisis have an alternative to going to already-strained emergency departments by building more capacity in the community. This means investing in:
  - Intensive treatment and specialized consultation services
  - Increased access to psychotherapy and counselling (walk-in therapy, single session, and brief services as well as long-term counselling and psychotherapy)
  - Increased family therapy and supports
  - Scaling 24×7 crisis support services
  - Enabling key process and functions in the delivery of mental health treatments and services, including, coordinated access, service coordination, and prevention

Develop a highly qualified and sustainable workforce of children's mental health professionals

- Did you know that 83% of CMHO's members reported experiencing staffing shortages at their agency? This was right before the surge of Omicron impaired the health care system in Ontario.
- Our sector's front-line workers are essential to building a better system of care. That's why any investment must be supported by a commitment to addressing the health and human resources crisis so we can stabilize our workforce and build a continuum of care between the school and community.

Please note that our organization does not directly provide mental health services.

To find a Children's Mental Health Centre near you, click here.

If you are in a crisis, please call 911 or go to your nearest Emergency Department.

TAB 7

OLTCA

The Data: Long-Term Care in Ontario

The evidence behind why we need a more modern, high-quality and responsive long-term care system.

Page Navigation

The size and complex care needs of Ontario's aging population is rapidly growing.

One in 5 seniors over the age of 80+ have complex care needs that require long-term care, but our system was not built for current or future care needs.

Today, more than 43,000 people are waiting for long-term care. This waitlist has nearly doubled over the past 10 years and it is expected to grow, adding 1,000 people per year and reaching 48,000 by 2029.

Plus, long-term homes do not have enough staff because of the health human resources crisis happening across the broader health system and around the world.

We need to revitalize long-term care to meet the complex care needs of our growing seniors' population. Below is the data proving why.

POPULATION

Ontario's population is quickly getting older and caregivers are distressed.

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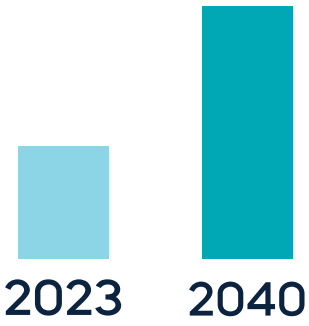
1 in 13

1 in 13 Ontarians will be over the age of 80 by 2040.[1]



Ontario's 80+ population is projected to more than double by 2040.[1]

Nearly 3 in 4 caregivers worry they cannot handle all of their caregiving duties.[3]

In 2022-2023, 42.1% of caregivers in Ontario reported having distress.[3]

39 per week

Distressed caregivers report 39 hours per week on care, more than double those who are not distressed.[4]

Most people want to age at home.

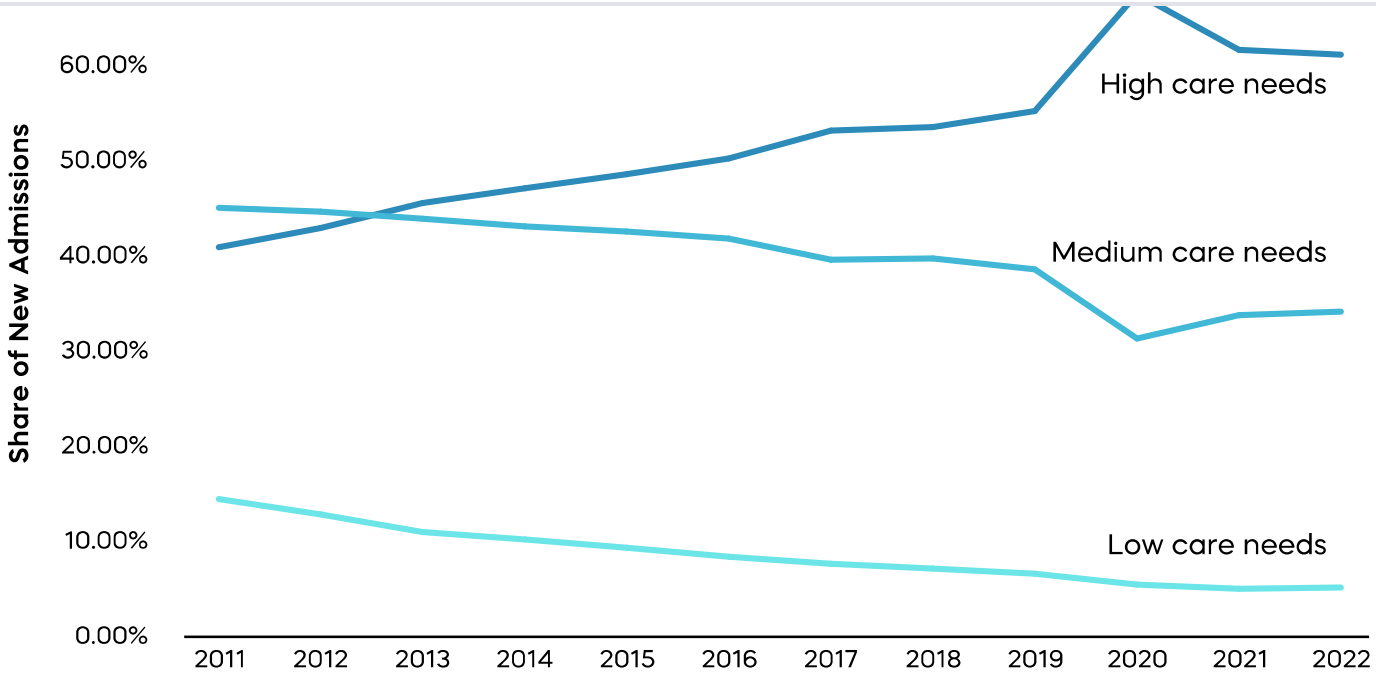
Yet **1 in 5 seniors over the age of 80 has complex care needs that can only be safely met in long-term care.**[2]

To address growing need, we must build more long-term care capacity, introduce specialized models of care, and increase the number of long-term care staff while continuing to expand across the broader seniors' care continuum.

RESIDENTS IN LONG-TERM CARE

More than 3 in 4 residents entering long-term care require a high level of care.

Nearly 50% more residents entering long-term care require higher levels of support than in 2011.[6]



In Ontario, only 5.7% of all residents in long-term care could potentially be cared for elsewhere.

This is the lowest in Canada and well below the national average of nearly 10%.[5]

These residents often are in rural communities without access to extensive home care or live alone without informal caregiver support.[5]

More new residents have cognitive impairment and physical frailty compared to ten years ago.

Of those moving into long-term care homes in 2022-2023:

Complex medical needs

3 out of every 4 people entering long-term care have 3 or more different medical conditions.[6]

Daily living support

88% of people entering long-term care need support with activities of daily living, compared to 67% in 2011.[6]

75%

Medications

Nearly 75% of people entering long-term care require eight different medications, with 30% requiring 13 or more.[6]

Cognitive impairment

76% of people entering long-term care have mild to severe cognitive issues, an

OLTCA

Top ten conditions supported in long-term care[6]

Patients often have multiple conditions.

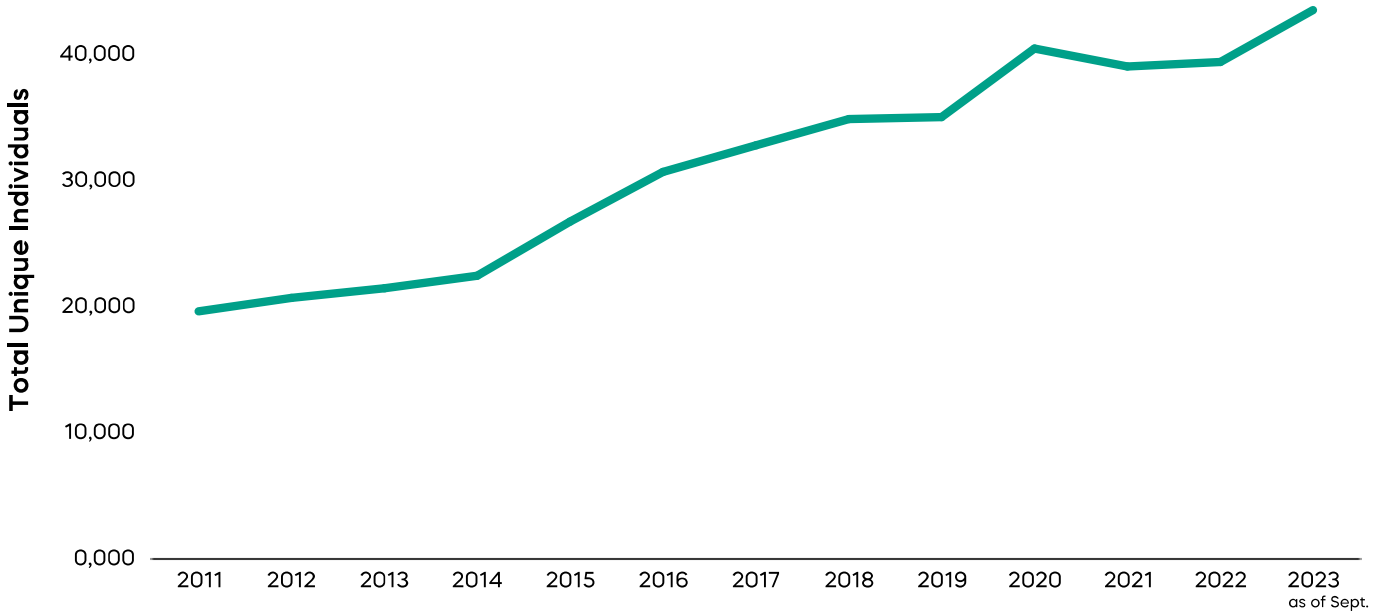
1. Hypertension
2. Alzheimer's disease
3. Dementia other than Alzheimer's disease
4. Arthritis
5. Gastrointestinal disease
6. Depression
7. Diabetes
8. Osteoporosis
9. Cardiovascular disease
10. Stroke

Innovative models of care are needed to meet the higher mix of acuity care needs of residents.

WAITLISTS

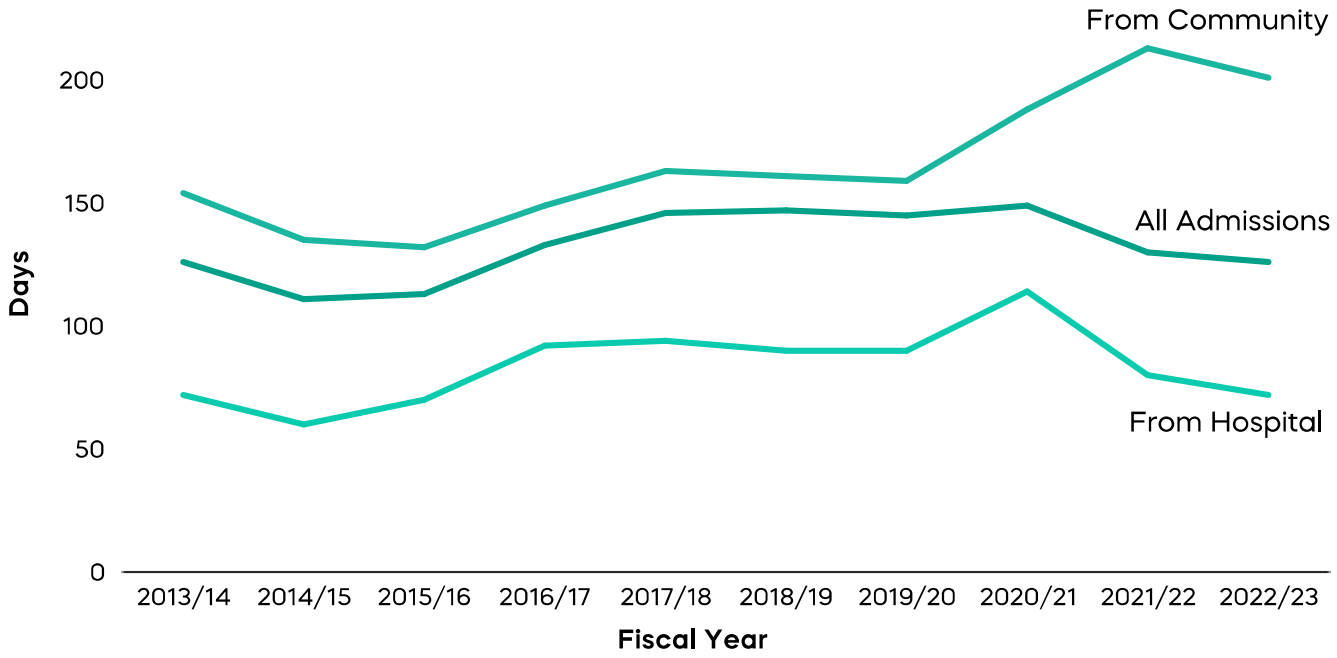
Waitlists for long-term care have nearly doubled in 10 years.

More than 43,000 people are currently waiting for long-term care. That's more than the population of a mid-sized town in Ontario such as Bradford, Orillia, Stratford, Orangeville, or Leamington.[8]



Half of Ontarians wait at home for over 6 months to move into long-term care.

The average senior will wait 126 days to access long-term care, with some waiting up to 2.5 years.[10]



Licensed long-term care homes

There are 620 licensed homes operating across Ontario providing care to residents.[7]

76K

Spaces for residents

There are just over 76,000 available long-term care spaces for residents. These spaces are at full capacity.[7]

Ontario needs over 30,000 new long-term care spaces to serve the number of people currently on the long-term care wait list. We also need an additional 48,000 spaces by 2029 to meet the growing demand.

STAFFING

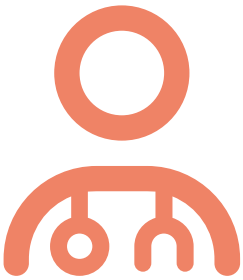
Homes are struggling to maintain staff.

Across Canada, **job vacancy rates have increased by nearly 70% in the health care and social assistance sector in four years,** from 3.1% in November 2019 to 5.2% in November 2023.[11]

Over 100,000 people work in long-term care in Ontario.[9] They include registered nurses; registered practical nurses; personal support workers; social workers; social activity staff; nutritional managers; chefs and food services workers; housekeeping, laundry and maintenance staff; and administrators.[9]

That is more than double the current nursing and personal support worker workforce.

The health human resources crisis is happening in Ontario, across Canada and around the world and affects all health sectors, including long-term care.



In 2022, nearly all Ontario homes report having difficulty filling shifts for registered nurses and registered practical nurses.

And, more than 60% report having difficulty filling shifts for personal support workers and their dietary teams.[12]

50%

Ontario homes reported a significant turnover in leadership from 2020 to 2022.

50% of homes saw a change in their director of care, and over 40% lost their administrator.[12]

health system. It will take all health sectors working together, with government, to ensure our aging population receives safe, quality care.

FUTURE DEMAND IN ONTARIO

The need for more long-term care spaces will continue to grow.

By 2029, Ontario would require over 30,000 new long-term care spaces in order to serve our growing aging population.[13]

To learn about the challenges to redevelop and build new spaces in long-term care, visit our section on building and redevelopment.

The demand for long-term care will vary by region in Ontario.

Some regions in Ontario will have a higher demand for long-term care spaces in 10 years.[13]

20% - 29%
30% - 39%
40% - 49%
50% - 59%

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Long-Term Care Planning Region

Ontario	38%
Eastern Ontario	38%
East Golden Horseshoe	40%
East Greater Toronto Area	35%
Central Toronto	25%

North Golden Horseshoe	50%
West Golden Horseshoe	39%
Northern Ontario	29%
Greater Ottawa Area	43%
Southwestern Ontario	36%

Nearly half of Ontario's long-term care homes need to be redeveloped to meet current demand.

To redevelop, long-term care homes need faster provincial and municipal approvals and stabilized operating funding so they can secure the confidence of their capital lenders. Plus, small, rural homes need capital programs tailored to their very unique needs.

OLTCA

Learn more about the challenges facing long-term care homes and what needs to be done to revitalize the sector.

LEARN MORE

Boomer Readiness

Until recently, one of the missing pieces of information in our conversations about future seniors' care planning was how well the Baby Boom generation is preparing for potential challenges as they age. As the oldest of the Boomers approaches 80, we wanted to know how they are preparing for the next stage of their life; what they think about their future care needs; and what plans they are putting in place.

Data Sources

[1] Statistics Canada for 1971-2021, and Ontario Ministry of Finance Projections

[2] Preyra Solutions Group (PSG), Ontario Long Term Care Association (OLTCA) and Ontario Ministry of Finance Projections

[3] Ontario Caregiver Organization, Spotlight Report 2023 and Canadian Institute for Health Information (CIHI), Your Health System, Caregiver Distress, 2023

[4] Ontario Caregiver Organization, Spotlight Report 2023

[5] Canadian Institute for Health Information (CIHI), Your Health System, New Long-Term Care Residents Who Potentially Could Have Been Cared for at Home

[6] Intellihealth, CCRS main and assessment package 2022/23 data. Data retrieved December 2023

[7] Ontario Ministry of Long-Term Care Inspector's Quality Solution (IQS) Database, January 2024

[8] Ontario Ministry of Long-Term Care Client Profile Database (CPRO), July 2022

[9] Ontario Long-Term Care Staffing Study, July 30, 2020

[10] Ontario Health, Wait Times for Long-Term Care

[11] Statistics Canada, Job vacancies, payroll employees, and job vacancy rate by industry sector, monthly, adjusted for seasonality, Table 14-10-0406-01, Release Date 2024-01-25

[12] Ontario Long Term Care Association (OLTCA), internal analysis, Fall 2022

[13] Preyra Solutions Group (PSG)

OLTCA

ABOUT LONG-TERM CARE

ADVOCACY

NEWSROOM

OUR COMMUNITY

ABOUT US

TAB 8

Family Medicine in Crisis

Illustration by Errata Carmona (Purple Rain Illustrators)

More than two million patients are stranded — and the situation looks set to only worsen

By Stuart Foxman

If primary care is the gateway to the health system, a large and growing number of Ontarians are on the outside looking in.

In March, INSPIRE-PHC, a health care research partnership, released a report that showed 2.2 million Ontarians (15 percent of the population) do not have a family doctor, up from 1.8 million just three years earlier.

What has contributed to the shortage of family practitioners? What sorts of actions can help alleviate the emergency in primary care? And how can that lead to a more efficient and effective system?

To answer these critical questions, *Dialogue* talked to nine doctors who've looked closely at the challenges and opportunities.

While the INSPIRE-PHC findings generated headlines, they were also predictable. "This has been coming for a while. We've just hit a crisis level," says Dr. Green.

He routinely fields the same desperate query from people in the community: can you help me find a family doctor? Five years ago, that didn't happen. Now, he says, "I get calls all the time." They can come from anyone, including those who know their way around the health care system — even other doctors.

Peeling back the data, lower-income groups, racialized populations and newcomers are particularly likely to lack a family doctor. "It's absolutely an equity issue," says Dr. Ross.

But it's also becoming clear that a lack of attachment is on the rise for all groups and across the province and has enormous consequences. "When that door is closed, it leaves patients stranded and can have impacts on other parts of the health care

system," says Dr. Kiran.

Research shows people who are unattached to a family doctor tend to have less preventative care, missed and delayed diagnoses, worse health outcomes and higher stress (especially if they have chronic conditions). They also have more emergency visits and hospitalizations, which further strains the health system.

> *"This has been coming for a while. We've just hit a crisis level"*

Family doctors are under strain too as they grapple with increasing clinical and administrative demands.

The National Physician Health Survey from the Canadian Medical Association (CMA) revealed that more than 1 in 2 physicians and residents report high levels of burnout, and that the prevalence is significantly higher among those in general practice/family medicine. That has consequences on the well-being of physicians and, by extension, their patients.

Supply of family practitioners not refreshing fast enough to bolster aging workforce

INSPIRE-PHC found that nearly 15 percent of Ontarians (1.7 million people) who currently have a comprehensive family practitioner may lose them to retirement by 2025.

Moreover, family doctors who are over 65 are seeing increasing numbers of patients who are also over 65, and who need more medical resources and make more primary care visits. The expected retirements may leave in limbo a patient group that has especially high needs.

Every year of the last decade has seen a lower percentage of medical learners choosing family medicine, says Dr. Philpott. She adds that even among graduating family doctors, only 15 percent are choosing to set up a comprehensive family care practice. "That's part of a perfect storm," she says.

> *The expected retirements may leave in limbo a patient group that has especially high needs.*

Overall, INSPIRE-PHC data showed that the proportion of family doctors who are comprehensive practitioners is declining (from 77.2 percent in 2008 to 70.7 percent in 2019). More and more doctors are shifting into more focused scopes of practice, like palliative care or sports medicine, and that is happening across all career stages.

Looking at the trends, 1 in 5 Ontarians — some 3 million — may not have a family doctor by 2025, estimates the Ontario College of Family Physicians (OCFP).

The family doctor shortage isn't just a numbers game

Dr. Grill loves being a family doctor. "I get to build lifelong relationships with my patients. It's a wonderful privilege to quarterback their care."

He knows he's also fortunate to be working in a team-based model, where he's able to delegate to an allied professional whose scope of practice may be better suited to a patient's particular needs.

Still, over his career he has seen the administrative burden rise, fewer and fewer medical students opting for family medicine and the number of Ontarians who are unattached to a family doctor skyrocket.

“There’s a major crisis going on in family medicine in Ontario,” says Dr. Grill.

Last year, Dr. Kiran surveyed 1,000 Toronto family physicians. The study results, published in *Canadian Family Physician*, suggested nearly 20 percent would be closing their practice in the next five years.

Burnout was cited as one factor. Dr. Kiran says the findings highlight the challenge of operating a solo family practice and support calls to expand team-based models that include administrative support.

“We need to rethink how we attract people to family medicine and keep them there,” says Dr. Kiran.

Even if you could wave a magic wand and increase the supply of family physicians overnight, that won’t yield the desired long-term results if the underlying environment doesn’t change.

“The numbers game is overly simplistic,” says Dr. Martin, because “a many-headed monster” of factors is giving doctors pause about entering and staying in comprehensive family care.

Complexity of care and the administrative burden

Practice demands are changing. Dr. Martin notes the complexity of work has “exploded” given the aging population, the rise of chronic diseases and the expansion of clinical practice guidelines.

These care needs are coupled with a huge increase in administration. The OCFP notes that family doctors face administrative burdens that can take up to 19 hours a week. The CMA says family physicians work an average of 52 hours per week, but only spend 36 hours caring for patients, taking away from direct patient care or eating into off-hours. “It’s not what people went into medicine to do,” says Dr. Martin.

It takes another toll. In the CMA’s latest National Physician Health Survey, nearly 60 percent of physicians said these issues contribute to a worse state of mental health. According to physicians, 38 percent of these administrative tasks are unnecessary, i.e., they could be done by someone else or eliminated.

The burden isn’t just about paperwork. Dr. Premji points to a fragmented system filled with bottlenecks. It’s increasingly difficult to get patients the diagnostic tests and other supports they need. That can create worries about the quality of care being provided. (To read about one doctor’s struggles to provide her patients with quality health care, please read the article, *“I Feel Like I am Failing”*.)

“In primary care, we’re often managing care without enough information,” says Dr. Premji. “What is most stressful about that is the stress it causes for our patients. We see the repercussions and it’s hard to witness.”

The clinical and administrative burden can weigh heavily on practitioners, leading some doctors to cut back. “Primary care providers aren’t taking on the patient load they used to,” Dr. Martin says.

These care needs are coupled with a huge increase in administration.

The challenges can be even more acute in rural and remote communities. “Access to speciality services is limited, and the expectation to manage a much wider range of patient needs is higher,” says Dr. Newbery. “The landscape of health care has become increasingly complex. When you look at what it takes to be a family physician in a small town, the complexity expands.”

Only one-quarter of Ontarians have access to primary care teams

One of the biggest opportunities to transform how primary care is delivered, in any location, is team-based practices.

Giving patients access to groups of allied care providers has proven positive impacts on everything from chronic disease management to reduced emergency use. Yet, this model, through family health teams or community health centres, is in place for only 25 percent of Ontarians.

The province's family health team model was frozen in 2012. It was only this February that government said it would invest $30 million to create 18 new primary care teams and allow 1,200 physicians to join a family care team over the next two years.

To have such different systems of primary care in the same province makes no sense, says Dr. Grill. That's even more true when you consider that the majority of residents are trained in the team setting.

"Why, if I train that way, would I want to enter practice where I don't have those resources?" he says.

Not feeling valued

When it comes to funding, the health care system is full of competing priorities. Does primary care receive an appropriate slice of the pie?

"The reality is that it has been a fairly small portion for some time [relative to what hospitals receive]" says Dr. Philpott.

Dr. Kumanan agrees. "We've seen primary care be chronically underfunded," she says.

> *"When you look at what it takes to be a family physician in a small town, the complexity expands."*

Dr. Philpott notes a Commonwealth Fund report that ranked 11 high-income countries on health care quality. Canada was 10th, ahead of only the U.S. She says the failure to address challenges within primary care is a major factor in the low ranking.

"We haven't been very creative in trying to address the issue and haven't had the political will to rebalance the focus on primary care," says Dr. Philpott. "Evidence shows that countries that get great [health] outcomes at affordable costs, in a way that's equitable and accessible, have a high level of primary care."

The business model has less appeal

"Of course, everyone wants to be better valued," says Dr. Martin. "But the next generation is also saying they don't want to be small business operators and entrepreneurs."

Running any sort of business brings its own workload, apart from the high demands of the job itself. And when the associated costs rise, a doctor's office can't increase their fees the way other businesses can.

Physicians can't control inefficiencies in the health system, says Dr. Premji, but they can choose to forsake traditional family practice for another form of medicine that doesn't have a small business model.

The built-in administrative support and opportunities to take time off and have coverage from colleagues, which are present in hospital settings, are lacking in community-based family practice.

Given how and where the impacts are being felt the most, and the barriers in the way, the challenges are clear. But there are opportunities too by creating the broader system changes that would make primary care not just more accessible, but also more equitable, efficient and effective. We discuss the opportunities for change in the article, *Primary Care: A Bold Revisioning*.

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Dr. Kathleen Ross
President-elect, Canadian Medical Association; family physician, British Columbia.

Dr. Tara Kiran
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Dr. Mekalai Kumanan

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TAB 9

Development and validation of an algorithm using health administrative data to define patient attachment to primary care providers

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Liisa Jaakkimainen, Imaan Bayoumi, Richard H. Glazier, Kamila Premji, Tara Kiran, Shahriar Khan, Eliot Frymire and Michael E. Green
(Information about the authors can be found at the end of this article.)

Abstract

Purpose – The authors developed and validated an algorithm using health administrative data to identify patients who are attached or uncertainly attached to a primary care provider (PCP) using patient responses to a survey conducted in Ontario, Canada.

Design/methodology/approach – The authors conducted a validation study using as a reference standard respondents to a community-based survey who indicated they did or did not have a PCP. The authors developed and tested health administrative algorithms against this reference standard. The authors calculated the sensitivity, specificity positive predictive value (PPV) and negative predictive value (NPV) on the final patient attachment algorithm. The authors then applied the attachment algorithm to the 2017 Ontario population.

Findings – The patient attachment algorithm had an excellent sensitivity (90.5%) and PPV (96.8%), though modest specificity (46.1%) and a low NPV (21.3%). This means that the algorithm assigned survey respondents as being attached to a PCP and when in fact they said they had a PCP, yet a significant proportion of those found to be uncertainly attached had indicated they did have a PCP. In 2017, most people in Ontario, Canada (85.4%) were attached to a PCP but 14.6% were uncertainly attached.

Research limitations/implications – Administrative data for nurse practitioner's encounters and other interprofessional care providers are not currently available. The authors also cannot separately identify primary care visits conducted in walk in clinics using our health administrative data. Finally, the definition of hospital-based healthcare use did not include outpatient specialty care.

Practical implications – Uncertain attachment to a primary health care provider is a recurrent problem that results in inequitable access in health services delivery. Providing annual reports on uncertainly attached

This study was supported by the Innovations Strengthening Primary Health Care through Research (INSPIRE PHC) program, which was funded through the Ontario Ministry of Health and Long-Term Care (MOHLTC). This study was also supported by ICES, which is funded by an annual grant from the MOHLTC. Parts of this material are based on data and information compiled and provided by the MOHLTC and CIHI. The analyses, conclusions, opinions and statements expressed herein are solely those of the authors and do not reflect those of the funding or data sources; no endorsement is intended or should be inferred. Richard Glazier reported receiving grants from CIHR, Ontario SPOR Support Unit and St Michael's Hospital Foundation during the conduct of the study; receiving personal fees from ICES, St Michael's Hospital and University of Toronto and is receiving a portion of income paid by CIHR to ICES. Tara Kiran is supported by the Fidani Chair in Improvement and Innovation at the University of Toronto and by the Canadian Institutes of Health Research and Health Quality Ontario as an embedded clinician researcher. Michael Green is supported by the Brian Hennen Chair in Family Medicine at Queen's University.

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patients can help evaluate primary care system changes developed to improve access. This algorithm can be used by health care planners and policy makers to examine the geographic variability and time trends of the uncertainly attached population to inform the development of programs to improve primary care access.

Social implications – As primary care is an essential component of a person's medical home, identifying regions or high need populations that have higher levels of uncertainly attached patients will help target programs to support their primary care access and needs. Furthermore, this approach will be useful in future research to determine the health impacts of uncertain attachment to primary care, especially in view of a growing body of the literature highlighting the importance of primary care continuity.

Originality/value – This patient attachment algorithm is the first to use existing health administrative data validated with responses from a patient survey. Using patient surveys alone to assess attachment levels is expensive and time consuming to complete. They can also be subject to poor response rates and recall bias. Utilizing existing health administrative data provides more accurate, timely estimates of patient attachment for everyone in the population.

Keywords Primary care, Health services research, Methodology, Big data

Paper type Research paper

Introduction

Access to primary care is the foundation of a high functioning health care system (Starfield *et al.*, 2005). Lack of attachment to primary care is associated with multiple patient level and health system level problems. Unattached patients experience lower quality of care, higher inpatient hospitalization and readmission rates and higher ER utilization (Olsen *et al.*, 2017; Shea *et al.*, 1992a, b; Shi *et al.*, 1999; Ramondetta *et al.*, 2015; Ohle *et al.*, 2017; Farion *et al.*, 2015; Estrada and Ownby, 2017). Having a regular primary care provider (PCP) has also been linked with better patient experiences including greater trust and confidence in care and more personalized care (von Bultzingslowen *et al.*, 2006). In Canada, many provinces have identified the critical need for attachment to a PCP and a variety of approaches to address have been implemented (Breton *et al.*, 2017). It is critical for health system planners to efficiently assess numbers, locations and profiles of unattached patients to enable data-guided health human resource and program planning.

Multiple researchers have identified valid approaches for identifying physician patient profiles in administrative data, (Lasko *et al.*, 2006; Katz *et al.*, 2004) but these methods do not necessarily identify unattached patients. Provost *et al.* (2015) developed an algorithm to identify unattached patients in administrative data, but were unable to validate their approach with patient survey data. We sought to develop and validate an algorithm using health administrative data to identify patients who are attached to consistent PCP using patient responses to the Health Care Experiences Survey (HCES) in Ontario, Canada.

Objectives

The objectives for this study were to develop and validate a patient attachment algorithm for persons over 16 years of age using health administrative data and to apply this algorithm to the entire population of Ontario, Canada.

Methods

Study method: We conducted a validation study of respondents to the HCES conducted by the Ontario Ministry of Health (n.d.). The HCES is a voluntary, telephone survey conducted quarterly. We used survey data between October 2012 to September 2018 and included Ontario residents aged 16 years of age and older. The sampling frame was weighted to geographic regions in Ontario called Local Health Integration Networks (LHINs) and over-sampled rural areas.

Reference standard: Our reference standard included the HCES respondents who indicated they did or did not have a PCP. We compared the responses from HCES

respondents to their actual health care use of PCPs by examining Ontario health administrative data. For this study, primary care use meant being enrolled with a family physicians' (FPs') practice (rostered) or visiting a FP.

Study cohort: The study cohort included respondents to the HCES who consented to have their questionnaires linked to the Ontario health administrative data held at ICES. ICES is an independent, non-profit research institute whose legal status under Ontario's health information privacy law allows it to collect and analyze health care and demographic data, without consent, for health system evaluation and improvement (ICES, n.d.). The vast majority (92%) of the HCES respondents were linked to the Ontario health administrative data (Ontario Ministry of Health, n.d.).

Health administrative data: Several sources of health administrative data were used to identify primary care use. In Ontario, and elsewhere in Canada, FPs are the physician providers of primary care for adults and most children (Jaakkimainen *et al.*, 2006). The Client Agency Program Enrollment (CAPE) database was used to identify patients who were enrolled with a FP belonging to a primary care patient enrollment model (PEM) in Ontario (McLeod *et al.*, 2016). There are several types of PEMs in Ontario which formally enroll (roster) patients to a FP, including those remunerated through blended capitation (age- and sex-adjusted monthly payments for each enrolled patient plus a small proportion of fee-for-service payments) and those primarily paid by fee-for-service. A community health centre (CHC) database identified patients visiting a CHC, where FPs are salaried and funded under a global budget. Finally, the Ontario Health Insurance Plan (OHIP) database contains fee-for-service physician claims for all physicians in Ontario. For this study, primary care core visits refer to a list of services determined to be part of a comprehensive primary care practice (Schultz and Glazier, 2017). Hospital-based healthcare use referred to any emergency department (ED) visit or hospitalizations. ED visits came from the Canadian Institute for Health Information (CIHI) National Ambulatory Record System (NACRS) database and hospital admissions came from the CIHI Discharge Abstract Database (DAD). We included all acuity (Canadian Triage and Acuity Scale (CTAS)) levels of ED visits (Fernandes *et al.*, 2013). These datasets were linked using unique encoded identifiers and analyzed at ICES.

Patient characteristics: Patient age and sex were determined from the Ontario provincial health registry called the Registered Persons Database (RPDB). Neighborhood income quintile was derived by linking postal code to census dissemination area (Statistics Canada, 2013). Rurality was determined by linking postal code with the Rurality Index of Ontario (Kralj, 2000).

Patient attachment algorithm using health administrative data: We developed hierarchical steps in attributing a HCES respondent as being attached to a PCP with the order being set by those steps that attached the largest numbers of patients. Under the Canada Health Act, all residents in each province are entitled to publicly funded healthcare services (Marchildona and Hutchison, 2016). Consequently, all provinces in Canada collect physicians' claims data. Primary care reform in Ontario started in 2002 and saw a large increase in FPs participating in formal primary care patient enrollment (roster) models (PEMs) (Marilisa Tiedemann, 2020). However, formal primary care PEMs are not available in all Canadian provinces. We developed a patient attachment algorithm which includes steps using PEMs if they are available in a jurisdiction. However, if not available, then physician claims data can be used.

First, HCES respondents found to be enrolled in a PEM were considered as having a PCP. Enrollment is the system requirement in establishing a connection to a PCP and is the health system indicator of attachment. Second, HCES respondents seen at a CHC were considered as having a PCP. Third, we defined HCES respondents as being "virtually" enrolled to a PCP with whom the plurality of their primary care core visits were made over a two-year period. All OHIP PCP claims by HCES respondents were extracted with only one claim per patient

per PCP physician per day being counted. Total primary care core visits to each individual PCP and total primary care core visits per patient were counted. However, we did not want to virtually enroll a HCES respondent to a PCP whom themselves may have low continuity of care (CoC) with their patients, such as walk-in clinic PCPs. Therefore, we calculated a PCP CoC index which is a visit-based measure of the proportion of an individual PCP visits over all physician's visits seen over a two-year time period (Jee and Cabana, 2006). The PCP CoC index was determined with a numerator of patients virtually rostered to a PCP divided by the denominator of all unique patients the same PCP had seen over two years. If the PCP CoC was less than or equal to 10%, then this PCP had a low PCP CoC and HCES respondents virtually enrolled to these PCPs were then deemed to be uncertainly attached. Therefore, patients were deemed attached to a PCP if they belonged to a PEM, were seen in a CHC or they were virtually enrolled to a PCP who had a PCP CoC index over 10%. Otherwise, patients were deemed uncertainly attached. We used the term uncertainly attached as opposed to unattached because patients could and in fact did still access PCPs (for example episodic care in walk in clinics), even when they said they did not have access to ongoing primary care.

Validation analyses: We conducted several analyses to assess the impact of assumptions made in developing the patient attachment algorithm. We split the study cohort into a development dataset and a validation dataset. The development dataset consisted of all HCES respondents linked with ICES data and surveyed between October 2012 and September 2017 ($N = 39{,}285$) and the validation dataset consisted of HCES respondents linked with ICES surveyed between October 2017 and September 2018 ($N = 6{,}621$). The HCES responses to the question of whether they had or did not have a PCP were compared to each step of the patient attachment algorithm (described above). In addition, the third step of the patient attachment algorithm whereby HCES respondents were virtually enrolled to a PCP were examined by comparing a cut-point for PCP CoC index of less than 25%. Finally, we examined whether the remaining uncertainly attached patients had any primary care core visits or any hospital-based healthcare use in the two years prior to their completing the HCES survey.

Statistical analysis: The sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) were calculated for the overall patient attachment algorithm. For the validation analyses two-sample *t*-tests were undertaken to compare proportions between groups, with $p < 0.001$ indicating statistical significance. All analyses were performed using SAS Enterprise Guide version 7.1 (Cary, NC) (SAS, n.d.).

Application of the Patient Attachment Algorithm to the Ontario population: The patient attachment algorithm was applied to the 2017 population of Ontario. The 2017 Ontario population included all residents with a valid health care number and who were alive as of December 31, 2017. As the HCES survey is conducted for resident ages 16 years and older, our patient attachment algorithm was developed for people over 16 years of age. However, for the application of our algorithm to the entire Ontario population in 2017, we added another step where we applied a health administrative data pediatric access algorithm for children under 19 years of age. This algorithm has been previously validated for pediatric health services research to examine primary care access in pediatric populations (Guttmann *et al.*, 2010). If children under 19 years of age were not attached to a PCP after applying our three patient attachment algorithm steps (which were validated against HCES respondents aged 16 years and older), we then assigned them to a PCP based on the pediatric access algorithm.

The use of data in this project was authorized under section 45 of Ontario's Personal Health Information Protection Act, which does not require review by a Research Ethics Board.

Results

Overall, 55,392 HCES respondents were linked to the Ontario health administrative data between 2012 and 2018, of which 52,504 (94.8%) indicated they had a PCP and 2,888 (5.2%)

indicated they did not. Table 1 presents the demographic characteristics of the HCES respondents. A significantly higher proportion of HCES respondents attached to PCP were older, female, lived in urban areas and in higher income neighborhoods than HCES respondents uncertainly attached to PCP.

A flowchart of the HCES respondent attachment algorithm using health administrative data is provided in Figure 1. 81.4% of HCES respondents were rostered to a PEM and 1.5% were seen in a CHC. Of the 9486 HCES respondents not rostered to a PEM or seen in a CHC, 3,180 (33.5%) were virtually rostered to a PCP with greater than or equal to 10% FP CoC index. Overall, 88.6% of HCES respondents were defined as being attached to a PCP or group using health administrative data. The remaining 6,306 (11.4%) of HCES respondents were deemed uncertainly attached.

The validation analyses found no statistically significant differences between the development dataset and the validation dataset in any step of the patient attachment algorithm. Using a PCP CoC index cut point of less than 10% had a higher proportion of HCES respondents reporting they had no PCP and being attributed to the uncertainly attached group (true negative) when compared to a less than 25% cut point. There was no difference in the proportion of HCES respondents attributed to the attached group using either PCP CoC index cut point of less than 10% or 25% and reporting they had a PCP (true positive).

Amongst the 6306 HCES patients who remained uncertainly attached using the algorithm, 4,416 (70%) had at least one core primary care visits in the two years prior to their completing the HCES survey. For the subgroup of HCES respondents uncertainly attached and saying

	Attached	Uncertainly attached	Total	Ontario population ≥ 16 years of age
Age (Mean ± SD)	52.99 ± 17.29	49.83 ± 17.54	52.63 ± 17.35	47.55 ± 18.84
Age Groups				
16–18	1,079 (2.2%)	202 (3.2%)	1,281 (2.3%)	475,431 (4.1%)
19–34	7,109 (14.5%)*	1,222 (19.4%)	8,331 (15.0%)	2,953,638 (25.4%)
35–49	12,194 (24.8%)	1,618 (25.7%)	13,812 (24.9%)	2,826,277 (24.3%)
50–64	14,842 (30.2%)	1,880 (29.8%)	16,722 (30.2%)	2,996,962 (25.8%)
65–74	8,422 (17.2%)*	851 (13.5%)	9,273 (16.7%)	1,329,508 (11.5%)
75–84	4,317 (8.8%)*	422 (6.7%)	4,739 (8.6%)	710,156 (6.1%)
85+	1,123 (2.3%)*	111 (1.8%)	1,234 (2.2%)	318,551 (2.7%)
Sex				
Female	28,469 (58.0%)*	3,143 (49.8%)	31,612 (57.1%)	5,971,110 (51.4%)
Male	20,617 (42.0%)*	3,163 (50.2%)	23,780 (42.9%)	5,639,413 (48.6%)
Rurality				
Urban	29,947 (61.0%)*	3,087 (49.0%)	33,034 (59.6%)	8,451,253 (72.8%)
Semi-urban	12,575 (25.6%)*	2,064 (32.7%)	14,639 (26.4%)	2,224,266 (19.2%)
Rural	5,859 (11.9%)*	843 (13.4%)	6,702 (12.1%)	839,468 (7.2%)
Missing	705 (1.4%)*	312 (4.9%)	1,017 (1.8%)	95,536 (0.8%)
Income Quintiles				
1 Low	8,030 (16.4%)*	1,293 (20.5%)	9,323 (16.8%)	2,112,944 (18.2%)
2	9,245 (18.8%)	1,213 (19.2%)	10,458 (18.9%)	2,237,908 (19.3%)
3	9,732 (19.8%)	1,216 (19.3%)	10,948 (19.8%)	2,320,365 (20.0%)
4	10,873 (22.2%)*	1,265 (20.1%)	12,138 (21.9%)	2,509,732 (21.6%)
5 High	11,021 (22.5%)*	1,275 (20.2%)	12,296 (22.2%)	2,380,346 (20.5%)
Missing	185 (0.4%)	44 (0.7%)	229 (0.4%)	49,228 (0.47%)

Note(s): * $p < 0.001$

Table 1. Demographic characteristics of the attached and uncertainly attached HCES respondents

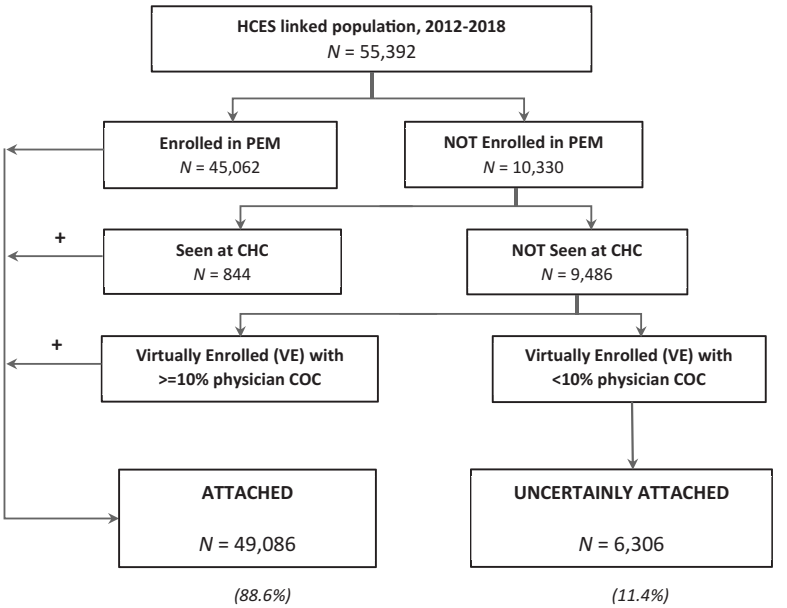

Figure 1.
Flowchart of the steps for the patient attachment algorithm validation

they did not have a PCP, we found 225/692 (32.5%) did use health care services (hospital-based healthcare use) in the two year prior to their completing the survey. For HCES respondents with a child less than 16 years of age, 94.2% indicated their child had a FP or pediatrician.

The patient attachment algorithm for adults over 16 years of age had a sensitivity of 90.5%, specificity of 46.1%, a PPV of 96.8% and a NPV of 21.3% (see Table 2). In other words, our patient attachment algorithm identified 90.5% of HCES respondents who said they had a PCP, as being attached to a PCP. However, our algorithm identified 46.1% of HCES respondents who said they did not have a PCP as being uncertainly attached to a PCP.

The patient attachment algorithms and the pediatric access algorithms were applied to the 2017 Ontario population (Figure 2), 88.4% of the Ontario population were attached, and 11.6% were uncertainly attached to a PCP.

Discussion

In 2017, most people in Ontario, Canada (88.4%) were attached to a PCP but 11.6% were uncertainly attached. The patient attachment algorithm had an excellent true positive rate

Table 2.
2 × 2 Table of the Patient Attachment Algorithm again HCES respondents (N = 55,392)

	HCES respondents indicating they did a primary care provider	HCES respondents indicating they did not have a primary care provider	
Algorithm Identified as being ATTACHED to a primary care provider	47,516	1,570	49,086
Algorithm Identified as being UNCERTAINLY ATTACHED to a primary care provider	4,963	1,343	6,306
	52,479	2,913	55,392

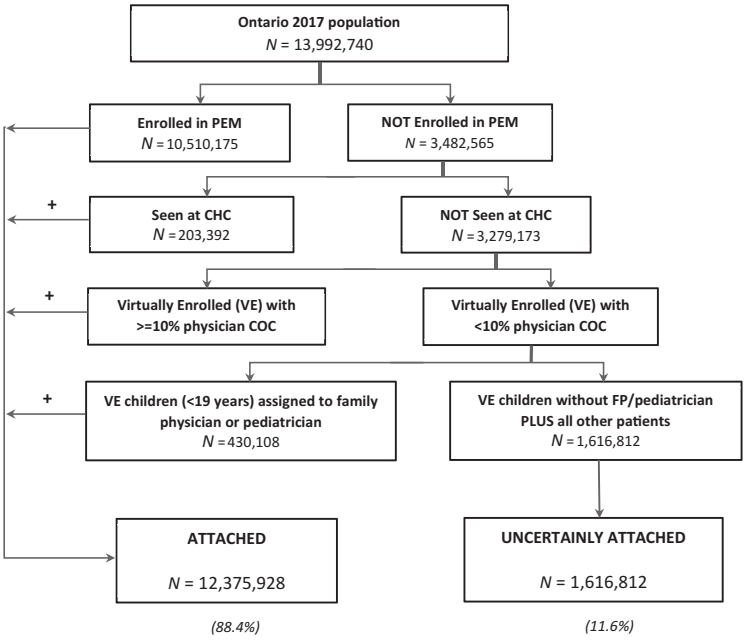

Figure 2.
Flowchart of the patient attachment algorithm applied on the ontario 2017 population

(sensitivity and PPV) meaning the algorithm identified HCES respondents as being attached to a PCP when HCES respondents themselves indicated they have a PCP. But our algorithm had a modest specificity (true negative rate) and a low NPV. This means that while the algorithm identified HCES respondents as being uncertainly attached does not necessarily indicate that they did not have access to a PCP. Some people may feel healthy and may not feel the need to seek medical care. Others may visit walk-in clinics on a needed basis and may not feel they need to see the same PCP. Indeed we found one-third of HCES respondents who were uncertainly attached to a PCP and indicated they did not have a PCP, did use health care services in the two years prior to their completing the survey.

Our study was able to link the responses from individuals about their primary care attachment with their actual use of the primary care system. Previous work conducted in Ontario in 2007 and 2008 had used a patient survey alone to estimate 92.9% (95% CI: 92.4, 93.4) of people over 16 years of age were attached to a PCP (Hay *et al.*, 2010). The HCES similarly found 94.8% of respondents saying they had a PCP. Patient surveys are expensive and time consuming to complete. They can also be subject to sampling bias including poor response rates, recall bias and not capturing those without a phone. Utilizing existing health administrative data can provide more accurate, timely estimates of patient attachment for everyone in the population.

In Canada, medically necessary physician visits are universally provided to residents and paid and managed by provincial government health plans (Government of Canada, n.d.). The Ontario primary care system includes both formal (patient rostered) and informal enrolment models of care. Our attachment algorithm incorporates both types of enrolment methods. For jurisdictions that do not have a formal enrolment system or rostering of patients to PCP, they could still use our algorithm by applying our "virtual enrollment" method of attaching patients based on their visit patterns to a PCP. Similarly, primary care systems that are mainly based on formal enrolment methods can also use our algorithm. In Ontario patients

are enrolled (rostered) to an individual PCP and not to a practice. Most PCPs that enroll patients, practice in a group primary care practice setting with other PCPs who enroll patients (Glazier *et al.*, 2012). PCPs may work in other clinical settings such as EDs or nursing homes. In our algorithm, patients seen in these settings would not be attributed to the PCP as these encounter claim codes are specific to EDs or nursing home locations. Our algorithm will attach patients to individual PCPs, though the reality is most PCPs work in a group setting.

Information about people uncertainly attached to a PCP is needed by health care planners, decisions makers and policy makers. As primary care is an essential component of a person's medical home, identifying regions or high need populations that have higher levels of uncertainly attached patients will help target programs to support their primary care access and needs. Providing annual reports on uncertainly attached patients can also help evaluate primary care system changes developed to improve access. Furthermore, this approach will be useful in future research to determine the health impacts of uncertain attachment to primary care, especially in view of a growing body of literature highlighting the importance of primary care continuity.

There are limitations to our study. We only looked at FPs as the providers of primary care and we did not include nurse practitioners. For those patients in primary care teams we also did not look at care provided by interprofessional healthcare providers (e.g. pharmacists, social work). Nurse practitioner-led clinics (NPLC) are more common in rural and underserviced communities and in other provinces and there are currently 27 NPLCs in Ontario (Nurse Practitioner Association of Ontario, n.d.; College of Nurse of Ontar, 2017). Unfortunately, administrative data for nurse practitioner's encounters and other interprofessional care providers are not currently available. Health administrative data should strive to include encounter data from all primary health care providers as this can help monitor and evaluate the full picture of primary healthcare delivery. We also cannot separately identify primary care visits conducted in walk in clinics using our health administrative data. In addition, our definition of hospital-based healthcare use did not include outpatient specialty care. And finally, the HCES respondent sample is not generalizable to the entire Ontario population. The survey did oversample people living in rural communities and people who do not have a phone or are not able to provide answers over the phone were not included.

Conclusions

We developed a patient attachment algorithm using existing health administrative data compared to responses from a population-based patient survey. This algorithm had an excellent sensitivity and PPV, though a modest specificity. It can be used by health care planners and policy makers to examine the geographic variability and time trends of the uncertainly attached population to inform the development of programs to improve primary care access.

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TAB 10

Apr 11, 2023

The Primacy of Primary Care

Brian Da Silva

“Can you help me find a family doctor?”

As Chair of the Department of Family and Community Medicine (DFCM) at the University of Toronto, I am asked this question nearly every day. All around us, people have lost access to the entranceway to our health system – and are wondering what to do about it.

If it feels like primary care in Canada is in crisis, that's because it is. Over 6.5 million Canadian residents are without a family doctor or nurse practitioner. In Ontario, more than 2.2 million people were without a regular physician as of March 2022, which is a 24 per cent increase compared with March 2020, when the COVID-19 pandemic began to impact our province. Even for those who have a relationship, access can be challenging despite the hard work of the people and teams in the system. Canada consistently ranks poorly on international rankings of timely access to primary care.

When primary care doesn't meet community needs, nothing else in the health system can work effectively. Family physicians are the first point of contact for almost all interactions with the health system. While approximately 3,000 people are admitted daily to hospitals in Ontario, over 160,000 visits occur with a general practitioner. Systems built on strong primary care produce better health outcomes, more equitably, and at lower costs. In the words of Dr. **Tedros Adhanom Ghebreyesus**, the Director General of the World Health Organization, "primary health care is where the battle for human health is won and lost."

The reasons behind the crisis are complex. Many come down to human resources. Early in the pandemic, we saw a doubling of family doctors stopping work in Ontario, and 1.7 million Ontarians are attached to a family doctor aged 65 or older. There is also a trend among family doctors of all ages and stages to work in a more focused practice: whether in hospital wards, emergency departments, palliative care, or mental health care. These are critical services for communities, but it means that many of our family physicians are not taking on – or keeping – office-based practices.

The practice of family medicine itself is also incredibly challenging in the current environment. As the population ages, care needs become more

complex, and the administrative burden associated with the job rises. Family doctors face administrative tasks that can take up to 19 hours a week , leaving less time for clinical care. When wait times for specialty care, advanced imaging, and procedures are long, more work falls on the primary care clinician or team to help patients manage their situation while they wait.

The upshot is that family doctors are working harder and feeling burned out. Yet, patients are having a terrible time finding a family doctor or getting in to see their doctor.

Our trainees see and feel this pressure. You will have heard in recent weeks about the challenge of attracting MD students to train and work in family medicine . While U of T has filled all but two postgraduate training spots in family medicine after the initial round of the CaRMS Match, many family medicine training positions still need to be filled nationwide.

So, what can we do about all this? Many of the solutions are straightforward and within reach – but that does not mean they are easy to implement! Some will cost money, while some will take time. Others will require a cultural shift in how the health system works and clinicians practice. Thought leadership on all these fronts is needed from DFCM at Temerty Medicine, the world's largest academic department of family and community medicine. Our DFCM strategic plan outlines some ways we plan to contribute using the powerful tools of research, education, and quality improvement. It takes leadership, community, and relationships.

LEADERSHIP

Listen to patients:

Dr. **Tara Kiran**, the Vice Chair of Quality and Innovation at DFCM and Fidani Chair in Quality and Innovation, has conducted the largest study yet of Canadian residents, asking them what they want and expect from primary care. The OurCare initiative includes a national research survey of nearly 10,000 people and in-depth priorities panels in five provinces in which policy issues are being considered deeply by the system's users. Dr. Kiran has been heartened to find that patients want relationship-based care, noting they expect that the family doctor "knows their patients as people and considers all the factors that affect their health, that they stand up for their patients, and that they co-ordinate their patients' care across multiple places. Almost 90 per cent also said it was important to them that their care was close to home." By conducting research that engages people in Canada directly, we can help to shape the policy agenda.

COMMUNITY

Expand family medicine education in the communities that need it most: The need to expand education in family medicine and primary care is evident. The Ontario government, which has recently increased the number of medical resident positions across the province, has designated 60 per cent of these new positions for family medicine trainees. Yet, we must reimagine how we prepare future family physicians to ensure that we train people in the communities where they are most needed. Our DFCM strategic plan commits to expanding and enhancing the community-based experience of learners through concrete actions such as:

- Increasing opportunities for medical learners to engage with community organizations and providers through clinical and non-clinical community-based opportunities; and,

- Embracing a community-serving mindset in the curriculum that pays special attention to health equity in considering population health outcomes and social & structural determinants of health, including training in patient and system advocacy.

The College of Family Physicians Canada plans to increase training for family medicine residents by one year in the coming decade. We hope this massive shift in our program will offer opportunities for our learners to be even better prepared to meet community needs.

RELATIONSHIPS

Embrace the team in all we do:

The practice of family medicine is at an inflection point. The notion of a single operator providing family medicine care alone with minimal administrative support doesn't meet the needs of patients or physicians. It is evident that interprofessional care is better for patients and can extend the capacity of physicians and nurses, improving access for everyone. We need to adjust our model of care to respond to these developments. Yet, in Ontario, less than 30 per cent of the population has access to a team that includes professionals like nurses, social workers, and pharmacists—and areas with the greatest needs have the fewest team resources. DFCM has committed to further embedding learners in high-functioning teams and enhancing opportunities for interprofessional healthcare team members to participate fully in our work. We must also support advocacy to expand teams, starting with equity-deserving communities. Finally, we can rejuvenate our discipline by fixing some pain points in daily practice.

The secret sauce of primary care is relationships. Ours is a discipline based on longitudinal interactions. Over many years, we have the privilege of coming to know our patients, understanding their underlying conditions and

social environments, and walking the path of illness and health alongside them. It is a tremendous privilege to do that work. But unfortunately, this ideal is too often frustrated for both clinicians and patients.

Temerty Medicine has the expertise, experience, and leadership to advocate for the required changes to our training and care delivery systems. This is why we have established the Office of Health System Partnership (OHSP) in DFCM so that we can capitalize on our strengths and become more engaged in health system leadership. Through OHSP, we are working with the Ontario Health-Toronto Region to support its goal of connecting and coordinating our current health system and its many complex parts. We want to empower primary care, as the 'front door' of our health care system, to scaffold and coordinate the breadth of services that primary care provides to improve the health of our patients, ensure our communities are more resilient, and strengthen the system. Through OHSP and by working in collaboration with our fellow medical schools and health professionals, we can achieve the integrated care our patients need.

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Traditional Land Acknowledgement

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TAB 11

Family Medicine and Community Health

Biopsy of Canada's family physician shortage

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ABSTRACT

Family physicians provide comprehensive care for the community and are an integral part of the healthcare system. Canada is experiencing a shortage of family physicians, driven in part by overbearing expectations of family physicians, limited support and resources, antiquated physician compensation, and high clinic operating costs. An additional factor contributing to this scarcity is the shortage of medical school and family medicine residency spots, which have not kept pace with population demand. We analysed and compared data on provincial populations and numbers of physicians, residency spots and medical school seats across Canada. Family physician shortages are the highest in the territories (>55%), Quebec (21.5%) and British Columbia (17.7%). Among the provinces, Ontario, Manitoba, Saskatchewan and British Columbia have the fewest family physicians per 100 000 persons in the population. Among the provinces that offer medical education, British Columbia and Ontario have the fewest medical school seats per population, while Quebec has the most. British Columbia has the smallest medical class size and the least number of family medicine residency spots as a function of population, and one of the highest percentages of provincial residents without family doctors. Paradoxically, Quebec has a relatively large medical class size and a high number of family medicine residency spots as a function of population, but also one of the highest percentages of provincial residents without family doctors. Possible strategies to improve the current shortage include encouraging Canadian medical students and international medical graduates to consider family medicine, and reducing administrative burdens for current physicians. Other steps include creating a national data framework, understanding physician needs to guide effective policy changes, increasing seats in medical schools and family residency programmes, providing financial incentives and facilitating entry into family medicine for international medical graduates.

BACKGROUND

Family physicians (FPs) provide high-quality, comprehensive and continuous care often as the first point of contact for members of the community. FPs improve population mortality by providing crucial preventive care, screening and monitoring. Every additional FP per 10 000 people increases life expectancy 51.5 days and reduces cardiovascular, cancer and respiratory mortality by 0.9%, 1% and 1.4%, respectively.[1] Although FPs constitute a central role in the healthcare system, there is a significant shortage of FPs in Canada: one in five Canadians does not have a regular FP, and according to the Canadian Medical Association, Canada's physician-to-population ratio ranks 29th out of 36 high-income nations. In this analysis, we evaluate the scope of the disparity across Canadian provinces and territories, using a quantitative approach with qualitative strategies and insights to stimulate discussion and spur action.

Provincial government decisions in the 1990s, when politicians reacted to the 1991 Barer-Stoddart Report, coupled with the erroneous belief that a surplus of FPs with overly generous wages was wasting taxpayer dollars, have served to shape the current Canadian healthcare crisis. These policies led to the curtailing of medical school seats, reduced family medicine (FM) residency positions and a dramatic increase in barriers to access for international medical graduates (IMGs) aiming to practice in Canada. This reduction of the workforce, compounded by the stagnation of wages, inflation and a decrease in government investment in primary care at the federal and provincial levels, have all contributed to today's shortage of FPs in Canada.

Fewer FPs to care for our growing and ageing population, coupled with increased patient care complexity and a higher prevalence of chronic health issues, will result in reduced patient access to care, worse patient outcomes and further stressors on our healthcare system.[2] Without timely access to community care, patients often resort to more costly emergency departments, straining these resources further, which leads to an overwhelmed healthcare system that exacerbates physician burn-out and encourages early exit from the workforce. Of further concern, a significant percentage of Canada's ageing workforce of FPs is nearing retirement, with up to 20% of FPs planning to retire in the next 5 years.[3] With fewer medical graduates choosing FM, this trend will only serve to further exacerbate the FP shortage. More FPs

Table 1 Distribution of FP, MS spots (per year), medical school enrolment by the province of residence (per year), FMR positions (per year) by province and territories in Canada (2019)

Province or territory	Population	Without FP (%)	No of FP	Population per FP	No of MS spots	Population per MS spot	FMR positions offered (vs unfilled)	Population per FMR position
Canada	38 929 902	14.5	44 584	873	2972	13 099	1399 (219)	27 827
AB	4 543 111	14.9	5758	789	338	13 441	139 (32)	32 684
BC	5 319 324	17.7	6366	836	288	18 470	122 (1)	43 601
MB	1 409 223	15.8	1519	928	110	12 811	42 (5)	33 553
NB	812 061	10.2	1153	704	NP	NP	NP	NP
NL	525 972	12.5	927	567	80	6575	35 (2)	15 028
NS	1 019 725	14.4	1292	789	125	8158	58 (8)	17 581
PE	170 688	14.9	174	981	NP	NP	NP	NP
ON	15,109,41	9.4	14 962	1010	988	15 293	440 (59)	34 340
QC	8 695 659	21.5	10 909	797	943	9221	511 (99)	17 017
SK	1 194 803	17.2	1395	856	100	11 948	52 (13)	22 977
YK	43 789	NA	NA	NA	NP	NP	NP	NP
NT	45 605	55*	NA	NA	NP	NP	NP	NP
NU	40 526	75*	NA	NA	NP	NP	NP	NP
Territories†	129 920	NA	129	1007	NP	NP	NP	NP

Cells coloured in red represent data that reflect the worst patient burden or FP shortage.
Cells coloured in gray represent data that are not available (NA), or provinces/territories that do not administer medical education programs (NP).
*Without access to a regular medical practitioner (either a family physician, a nurse or a medical specialist).
†Data on the Canadian territories (YK, NT, NU) are limited due to their dispersed population and the harsh and remote geographic environment situated in the northern region of Canada; some measures are only available for the three jurisdictions combined.
AB, Alberta; BC, British Columbia; FMR, family medicine residency; FP, family physician; MB, Manitoba; MS, medical student; NA, not available; NB, New Brunswick; NL, Newfoundland; NP, no programme; NS, Nova Scotia; NT, Northwest Territories; NU, Nunavut; ON, Ontario; PE, Prince Edward Island; SK, Saskatchewan; Territories, Yukon, Northwest Territories, Nunavut; YK, Yukon.

are also abandoning traditional community care—with its high overhead costs and administrative burdens—and instead tailoring their practices to focused areas, higher-income fields, or hospital work with better compensation, lower or no overhead and team infrastructure, which consequently removes them from the front lines of community-based primary care.

METHODS

The latest data for all metrics was used and tabulated by province and territory in table 1 and figure 1. Statistics Canada was used to identify populations (2022 Q3) across Canadian jurisdictions and the percentage of provincial residents without a family doctor. The Canadian Physician Demographics and Supply Archive was used to identify the number of FPs per province (2019). The Association of Faculties of Medicine of Canada—Canadian Medical Education Statistics report (2020–2021 cycle) was used to identify the number of seats for medical schools across Canada. Canadian Residency Marching Services 2022 R1 match data report was used to identify the number of FM residency spots in different provinces.

RESULTS

As the Canadian medical system is primarily administered provincially, shortages of FPs vary dramatically by jurisdiction, and these shortages are partially related to regional numbers of medical student seats and unfilled FM residency positions. The latest data on the distributions of FPs (2019), medical school seats (2020) and FM residency spots (2022) are demonstrated by province and territory in figure 1 and table 1. Together, the Prairie and Atlantic provinces trend close to the national average for the numbers of FPs and medical school seats per capita. By contrast, the rural Canadian Territories have the highest percentage of the population without access to a regular medical practitioner (defined as an FP, a nurse or a medical specialist).

British Columbia (BC), one of the most populous provinces in Canada with only one medical school, has one of the highest rates of provincial residents without FPs, and only offers 5 medical school seats per 100 000 provincial residents, with 40 new seats to be instated in 2023. However, despite adding these seats, BC will still have the least seats per capita among provinces that administer medical education. BC also has the least FM residency positions per capita, and these spots are among the highest in demand in Canada: in

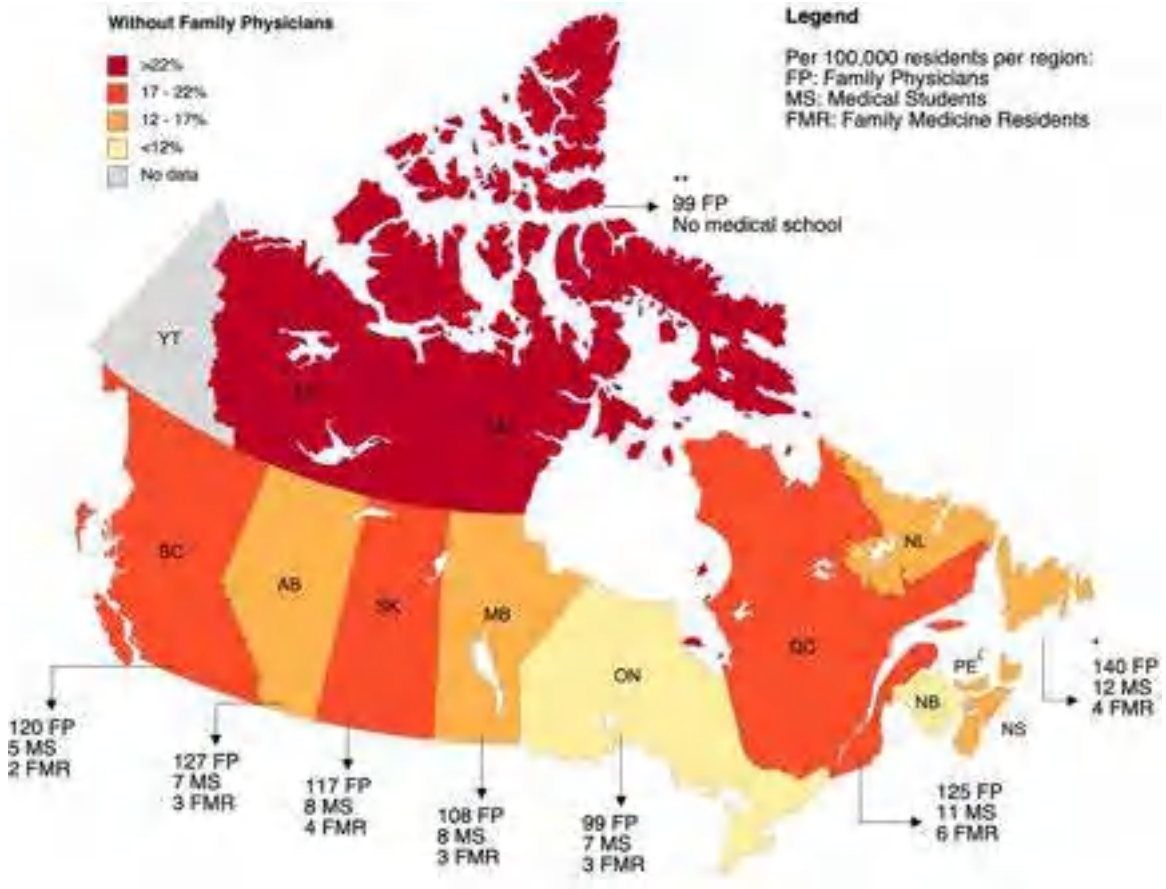

Figure 1 The percentage of the population without a family physician and the concentration of family physicians, medical students (per year), and family medicine residents (per year) across Canada. *The data are presented for the four Atlantic provinces combined: New Brunswick, Newfoundland, Nova Scotia and Prince Edward Island. **The data are presented for the three territories combined: Northwest Territories, Nunavut and Yukon, and represent the percentage of the population without access to a regular medical practitioner (either a family physician, a nurse or a medical specialist), given the unique geographical challenges that the territories face and the limited data that is available. AB, Alberta; BC, British Columbia; MB, Manitoba; NB, New Brunswick; NL, Newfoundland; NS, Nova Scotia; PE, Prince Edward Island; ON, Ontario; SK, Saskatchewan; YK, Yukon; NT, Northwest Territories; NU, Nunavut; Territories: Yukon, Northwest Territories, Nunavut; N/A, Not applicable.

2022, only 1 FM spot of 122 in BC went unfilled. In contrast, Ontario and New Brunswick have the lowest percentage of provincial residents without FPs. Ontario and Quebec offer the highest number of medical school seats, and have the highest absolute number of FM residency positions per year, although a significant percentage go unfilled each year. The lack of access to community FPs in QC is the most prominent in Canada, with more than one in five Quebecers without a regular FP. Finally, the Canadian Territories of Nunavut, Northwest Territories and Yukon, face significant challenges in accessing healthcare due to their isolated geography and dispersed population, resulting in the highest percentage of the population without access to a regular medical professional.

DISCUSSION

Short-term solutions to the FP shortage in Canada include reducing barriers to practice for IMGs to bridge critical gaps in FP coverage, applying financial incentives to attract new graduates to FM, and providing much-needed administrative support to current physicians. Encouraging IMGs to apply for FM residencies, while opening additional IMG-specific FM residency slots and new pathways for IMG entry to practice, could reduce the backlog of more than 1200 IMGs living in Canada in 2022, waiting to practice medicine and serve the Canadian populace. Mobilising IMGs to quickly enter the medical workforce via streamlining certification requirements, supervised practice agreements, physician-assistant training programmes or medical officer roles, similar to the IMG-entry system in Australia, could potentially help alleviate the shortage of available FP labour in Canada.[4] In addition, adding financial incentives may attract medical graduates to FM: BC recently implemented incentives for new FM practices—including guaranteed starting pay, signing bonuses and loan forgiveness—and announced a new payment model to better compensate case complexity, time demand, patient load and administrative burden.

In particular, billing for administrative work may financially incentivise physicians, who spend up to 2 hours on administrative work for every hour spent on direct patient care.[5]

Long-term strategies include increasing the number of medical graduates and FM residency slots, mobilising FPs to underserved regions, and establishing FM-specific entry streams. In 2022, BC and ON announced small increases in medical school seats and FM residency slots; however, recent projections suggest they may not be sufficient to compensate for the expected increases in retiring FPs.[3] Plans for a new medical school at Simon Fraser University, in BC, have stalled and are unlikely to produce graduates before 2030.[6] To increase the numbers of FM-interested medical graduates, provinces might consider FM-specific streams within pre-existing medical schools, or FM-focused medical schools, similar to Jichi Medical School in Japan, which trains FPs with a focus on underserved and rural areas, and offers competitive financial aid and student loan forgiveness programmes to encourage students to follow a career in FM.[7]

Finally, the creation of a national data collection framework is needed to quantify the need for, and facilitate the distribution and mobility of, FPs across the country. Currently, no such national data system exists to track the location and scope of FPs, making it difficult to precisely appraise the extent of the problem and create evidence-based policy changes. This may involve (1) surveying and interviewing FPs to identify barriers, administrative burdens and inefficiencies in providing patient care, (2) monitoring FP burn-out and workload to prioritise areas for support and resources and (3) evaluating the effectiveness of interventions to improve patient access to care and support for FPs. A national data collection framework would also help appropriately allocate limited resources and policy-maker attention to the most at-risk areas.

CONCLUSION

The latest data and trends clearly suggest that the FP shortage will continue to worsen accessibility to FPs and specialists, resulting in longer delays and an increased burden on our healthcare system. Rising burn-out and retirement of FPs will further exacerbate the current FM crisis until significant changes are made to the system. The FP shortage must be addressed both by provincial and federal governments as well as medical faculties and FP organisations, by increasing access to careers in FM for Canadian MDs and IMGs, and overhauling outdated administrative and physician compensation models to better support FPs. For Canadian provinces with high numbers of provincial residents without FPs, revisiting increases in medical school seats and FM residency slots to achieve parity with the Canadian average may also be necessary to alleviate long-term stresses in the healthcare sector. Most importantly, concrete action plans involving timelines, outcome measures and milestones need to be implemented to ensure these strategies are successful, which will require engagement with government, policy-makers, patients and front-line healthcare workers.

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TAB 12

BMJ Open

Characteristics of patients attached to near-retirement family physicians: a population-based serial cross-sectional study in Ontario, Canada

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ABSTRACT

Objectives Population ageing is a global phenomenon. Resultant healthcare workforce shortages are anticipated. To ensure access to comprehensive primary care, which correlates with improved health outcomes, equity and costs, data to inform workforce planning are urgently needed. We examined the medical and social characteristics of patients attached to near-retirement comprehensive primary care physicians over time and explored the early-career and mid-career workforce's capacity to absorb these patients.

Design A serial cross-sectional population-based analysis using health administrative data.

Setting Ontario, Canada, where most comprehensive primary care is delivered by family physicians (FPs) under universal insurance.

Participants All insured Ontario residents at three time points: 2008 (12 936 360), 2013 (13 447 365) and 2019 (14 388 566) and all Ontario physicians who billed primary care services (2008: 11 566; 2013: 12 693; 2019: 15 054).

Outcome measures The number, proportion and health and social characteristics of patients attached to near-retirement age comprehensive FPs over time; the number, proportion and characteristics of near-retirement age comprehensive FPs over time. Secondary outcome measures: The characteristics of patients and their early-career and mid-career comprehensive FPs.

Results Patient attachment to comprehensive FPs increased over time. The overall FP workforce grew, but the proportion practicing comprehensiveness declined (2008: 77.2%, 2019: 70.7%). Over time, an increasing proportion of the comprehensive FP workforce was near retirement age. Correspondingly, an increasing proportion of patients were attached to near-retirement physicians. By 2019, 13.9% of comprehensive FPs were 65 years or older, corresponding to 1 695 126 (14.8%) patients. Mean patient age increased, and all physicians served markedly increasing numbers of medically and socially complex patients.

Conclusions The primary care sector faces capacity challenges as both patients and physicians age and fewer physicians practice comprehensiveness. Nearly 15% (1.7 million) of Ontarians may lose their comprehensive FP to retirement between 2019 and 2025. To serve a growing, increasingly complex population, innovative solutions are needed.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Our serial cross-sectional study uses large, population-level health administrative data sets to examine temporal trends in the needs of primary care patients who may soon lose their family physician (FP) to retirement, in turn informing future workforce planning.

⇒ By distinguishing between FPs practicing comprehensive primary care and those who have narrowed their scope of practice, our methodology allows us to identify disparities between the presumed and actual primary care supply.

⇒ By linking the characteristics, including age and sex, of the comprehensive primary care workforce to both the medical and social characteristics of the population served, our methodology facilitates a rich understanding of the resources needed by patients who may soon lose their FP to retirement, and the capacity to meet those needs among those who will remain in the workforce.

⇒ Our methodology allows us to identify trends related to practice preferences among FPs that can be in turn applied to other data sources around primary care trainees and population growth.

⇒ Limitations of this work include that our analyses predate the COVID-19 pandemic, due to limited data availability for more recent years, and that the number of comprehensive FPs in rural areas may be underestimated due to rural physician practice patterns possibly involving a large proportion of hospital-based services.

INTRODUCTION

Primary care is the foundation of high-performing healthcare systems worldwide,[1] and can be defined by four core functions ('the 4 Cs') articulated by Starfield and others: first *Contact* access to the healthcare system, *Continuity* (long-term person-focused care), *Comprehensiveness* (meeting the majority of each patient's physical and mental healthcare needs, including prevention, acute care, chronic care and multimorbidity

care) and *Coordination* of care across the healthcare system, including specialty care, hospitals, home care and community services and support.[1 2] Access to primary care is associated with improved health outcomes, improved health equity and reduced health system costs.[3–9]

An essential enabler of primary care access is an adequate health human resource (HHR) supply, but many jurisdictions are grappling with current and impending shortages. For example, 14.5% (4.6 million) Canadians are without a primary care provider.[10] Virtually every country worldwide is experiencing population ageing,[11] with a high burden of medical complexity[12–15] and an HHR workforce, that is, ageing into retirement.[16–18] Concurrently, many countries, including Canada, the UK and the USA, are experiencing challenges attracting incoming physicians to primary care as a specialty,[19–22] and among those who do, a declining proportion are providing primary care reflective of Starfield's '4 Cs' (hereafter referred to as 'comprehensive primary care'); instead, primary care physicians are increasingly limiting their scope of work to subspecialised areas such as sports medicine, dermatology or palliative care, or to episodic acute care settings, such as walk-in clinics.[23–29] Moreover, the concentration of women in primary care may further reduce HHR capacity, as women primary care physicians have been found to spend more time with patients[30] and receive more patient requests outside of appointments than men.[31 32]

In the context of an ageing population and shifting workforce demographics, HHR planning requires an understanding of the needs of patients who will soon lose their primary care provider due to retirement. To anticipate future need, previous studies often use high-level supply indicators such as number of primary care physicians, and high-level demand indicators such as patient visit rates and durations.[33–36] In-depth analyses tend to be limited to subjurisdictional populations, such as the neighbourhood[36] or early career clinicians,[24] and do not directly link supply (individual clinicians) to demand (patients served by those clinicians).

We conducted an in-depth exploration linking supply and demand at a health system planning level in Ontario, Canada. We examined temporal trends in near-retirement primary care physician characteristics and the medical and social needs of patients attached to these physicians. We also examined early-career and mid-career physician characteristics over time to understand this segment of the workforce's capacity to absorb the patients of near-retirement physicians. We explored hypothesis-generating differences in gender-based workforce trends, including differences in care provision[30 31] and trends around alternative practice models, such as interprofessional team-based care. As Canadian healthcare planning and delivery are within provincial jurisdiction, we focused on the province-level (Ontario). In Ontario, most comprehensive primary care is delivered by family physicians (FPs), most physician services and all permanent residents are covered by government insurance, and health services data are stored centrally in health administrative data sets.

METHODS

The use of data in this study was authorised under section 45 of Ontario's Personal Health Information Protection Act and did not require review by a research ethics board or informed consent. This study is reported following the Strengthening the Reporting of Observational Studies in Epidemiology reporting guideline.[37]

Study design, population and data sources

We conducted a serial cross-sectional population-level analysis. De-identified physician-level and patient-level data came from nine databases which were linked using unique encoded identifiers and analysed at ICES (formerly known as the Institute for Clinical and Evaluative Sciences) (online supplemental eMethods). The study population included all registered Ontario residents covered by the Ontario Health Insurance Plan (OHIP) at three time points: 31 March 2008 (12 936 360), 31 March 2013 (13 447 365) and 31 March 2019 (14 388 566) and all Ontario physicians who billed primary care services (2008: 11 566; 2013: 12 693; 2019: 15 054).

Outcomes and covariates

The primary outcomes were the number, proportion and characteristics of patients attached to a near-retirement age comprehensive FP over three time points, and the number, proportion and characteristics of near-retirement age comprehensive FPs over three time points. Physician characteristics served as exploratory indicators of both existing supply and, for near-retirement physicians, anticipated demand based on the populations of patients they serve. Patient characteristics served as indicators of demand based on medical and socio-demographic complexity.

Based on previous literature finding the average Ontario FP retires at age 70.5 years (with women retiring on average 5 years earlier than men)[38] and accounting for the time needed to train new physicians,[39] three different 'near-retirement' physician age cut-points were examined: ≥55 years, ≥65 years and >70 years.

Comprehensive FPs were defined by applying a previously validated algorithm described below in the Analysis section.[29] Detailed data source, cohort and covariate definitions can be found in the online supplemental eMethods.

Analysis

For our patient cohort, we created cross-sections of patients attached to comprehensive FPs at three time points: 2008, 2013 and 2019.

We began by applying our previously validated algorithm for primary care physician attachment[40] to the population of OHIP-registered Ontario residents; identifying patients attached to a physician providing

longitudinal primary care services based on billing codes and physician-level continuity of care (see online supplemental eMethods—continuity of care). We removed patients seen at community health centres because they cannot be attached to a specific physician, patients that the algorithm attached to non-FPs such as paediatricians and surgeons and patients attached to an FP with missing covariates.

We next created the cohort of FPs linked to the attached patients we identified (2008, 2013 and 2019). We stratified our patient and FP cohorts by physician practice type (scope). For this, we used a previously published algorithm for determining comprehensiveness of primary care practice, where physicians are identified as providing comprehensive care if more than half of their services were for core primary care and if these services fell into at least 7 of 22 activity areas.[29] This resulted in four groups of patients with attachments to four types of FP practice scopes: comprehensive, focused (eg, sports medicine or palliative care), other and those who worked less than 44 days/year. The latter two practice categories were grouped together as 'Other'. Focusing on the 'comprehensive FP' group, we described the characteristics of these physicians and their patients.

Physician analyses were stratified by physician sex and physician age, including the three 'near-retirement' cut-points. Proportions and means with SD were reported for each time point (2008, 2013 and 2019).

Patient and public involvement

None.

RESULTS

Patient cohort

Excluding long-term care home residents, the population of OHIP-eligible Ontario residents in the patient cohort over time was 12 863 036 (2008), 13 371 946 (2013) and 14 312 309 (2019), of whom the following were attached to a comprehensive FP: 2008: n=9 537 353 (77.3%); 2013: n=10 398 003 (85.1%); 2019: n=11 480 975 (86.1%) (figure 1A).

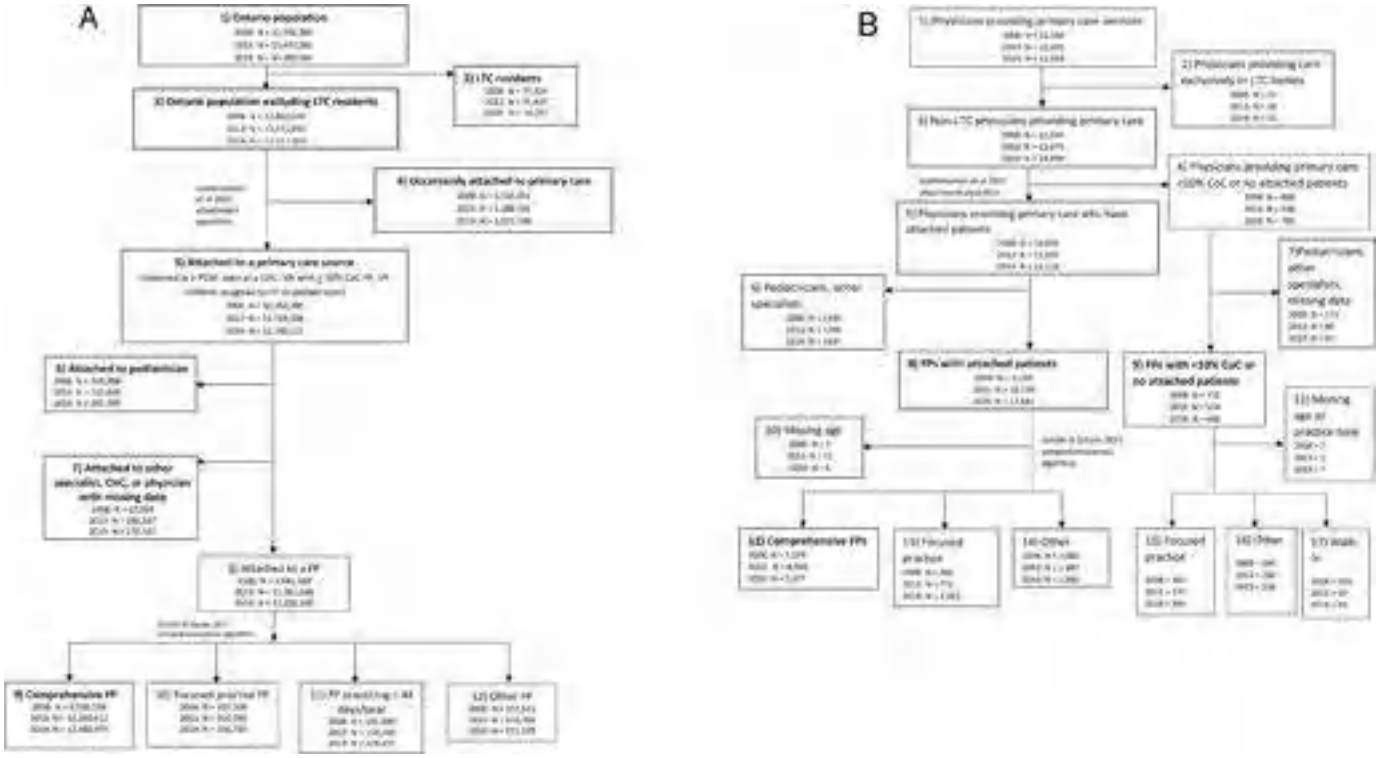

Figure 1 Cohort creation: Patients (A) and physicians (B). (A) Patient is considered VR to the physician with whom the majority of their primary care core visits were made over the preceding 2-year period (Jaakkimainen *et al* 2021). Numerator=the number of patients virtually rostered to a physician. Denominator=all unique patients the same physician had seen over 2 years. Physician CoC <10% corresponds to low CoC (Jaakkimainen *et al* 2021). Comprehensive FP: comprehensive scope of primary care practice. At least 50% of prior year's billings are four core primary care services in at least seven different primary care activity areas (Schultz and Glazier 2017). Focused FP: Narrowed scope of practice, such as sports medicine, palliative care, hospitalist. Other: Not comprehensive and not focused practice. <44 days: worked less than 44 days/year. (B) Numerator = the number of patients virtually rostered to a physician. Denominator = all unique patients the same physician had seen over 2 years. Physician CoC < 10% corresponds to low CoC (Jaakkimainen *et al* 2021). Comprehensive FP: Comprehensive scope of primary care practice. At least 50% of prior year's billings are for core primary care services in at least seven different primary care activity areas (Schultz and Glazier 2017). Focused FP: Narrowed scope of practice, such as sports medicine, palliative care, hospitalist. Other: Not comprehensive and not focused practice, or worked less than 44 days/year. CHC, community Health Centre; CoC, physician-level continuity of care; FP, family physician; LTC, long-term care; VR, virtually rostered.

Physician cohort

The overall FP workforce grew from 9944 physicians in 2008 to 13 269 in 2019 (figure 1B, sum of boxes 8 and 9).

A shift away from comprehensiveness and into other/focused scopes of practice ('non-comprehensive') was seen, with the proportion of all FPs practicing comprehensive primary care declining from 77.2% in 2008 (n=7673) to 70.7% in 2019 (n=9377) (online supplemental eFigure 1). This was driven by declining comprehensiveness among mid-career and near-retirement physician groups (age groups 45 and above). Over time, the proportion of younger physicians (those under 45) practicing comprehensiveness was stable, although in lower proportions than their mid-career counterparts. In the oldest age group, a decreasing proportion practiced comprehensiveness (online supplemental eTable 1).

Online supplemental eTable 2A,B focus specifically on the comprehensive FP workforce and stratify comprehensive FP data by age and sex. Career stage (years in practice) closely followed physician age group for both men and women, and the youngest cohort (age <35) comprised an increasing proportion of the comprehensive workforce over time, shifting from 7.7% in 2008 to 15.1% in 2019. The older cohorts were also found to comprise an increasing proportion of the comprehensive workforce over time, and the absolute numbers of older physicians increased.

Temporal trends for near-retirement comprehensive FPs and their patients

When looking at our three near-retirement cut-points (55+, 65+ and 70+) over time, an increasing proportion of the comprehensive FP workforce was near retirement age (figure 2). Correspondingly, an increasing proportion of patients were attached to near-retirement comprehensive FPs (table 1). Between 2008 and 2019, FPs in the 55+ age group represented a growing proportion of all comprehensive FPs, increasing from 35.7% to 38.2%. In 2019, this corresponded to 3586 physicians and 4 935 992 (43.0%) patients (2019). The proportion of comprehensive FPs in the 65+ group increased from 10.0% in 2008 to 13.9% in 2019 (1307 physicians, 1 695 126 (14.8%) patients). The proportion of comprehensive FPs in the 70+ age group increased from 4.6% in 2008 to 6.4% in 2019 (599 physicians, 666 000 (5.8%) patients).

Temporal characteristics of comprehensive FPs and their patients

Comprehensive FP capacity/workload

Online supplemental eTable 2B shows the mean (SD) roster size for the total population of comprehensive FPs remained consistent over time (2008: 1213 (927); 2013: 1272 (909); 2019: 1209 (837)). Male FPs had consistently larger roster sizes in each age group and at each time point. Both male and female FP roster sizes followed an inverted U pattern with FP age, with practice sizes starting and ending smaller at the extremes of FP age and peaking during mid-career. This pattern was observed at all three time points. That said, male and female older (65+) physicians and younger (<35) physicians cared for larger roster sizes over time.

Working full time equivalent (FTE) also followed an inverted U pattern according to FP age (online supplemental eTable 2B). Consistently, two-thirds of the overall comprehensive FP workforce practiced FTE, with men comprising the majority of the FTE physicians. Older

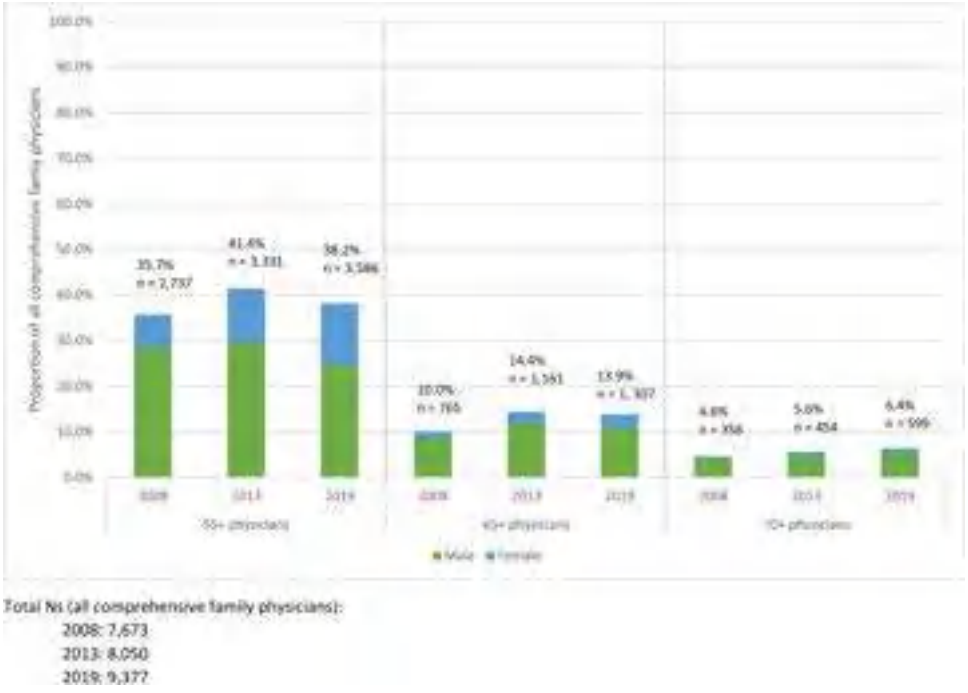

Figure 2 Comprehensive family physicians by near-retirement group, year and sex. Total Ns (all comprehensive family physicians) for 2008, 2013 and 2019 are 7673, 8050 and 9377, respectively.

Table 1 Characteristics of patients attached to near-retirement comprehensive family physicians over time, by near-retirement group

Patient characteristics		Age 55+ comprehensive FPs		Age 65+ comprehensive FPs		Age 70+ comprehensive FPs	
		N	%	N	%	N	%
Overall (N, % of patients attached to near-retirement physician group)	2008	3 571 661	37.5	690 642	7.2	214 861	2.3
	2013	4 676 625	45.0	1 399 119	13.5	419 172	4.0
	2019	4 935 992	43.0	1 695 126	14.8	666 404	5.8
Aged 65+ (N, % of patients attached to near-retirement physician group)	2008	597 707	16.7	136 394	19.8	45 414	21.1
	2013	846 974	18.1	298 545	21.3	95 833	22.8
	2019	1 003 769	20.3	402 430	23.7	176 473	26.5
Female patients (N, % of patients attached to near-retirement physician group)	2008	1 804 585	50.5	338 656	49.0	103 386	48.1
	2013	2 371 923	50.7	678 971	48.5	201 104	48.0
	2019	2 498 453	50.6	823 090	48.6	317 967	47.7
Rural patients (RIO score 40+) (N, % of patients attached to near-retirement physician group)	2008	233 045	6.5	48 860	7.1	14 323	6.7
	2013	292 357	6.3	88 311	6.3	20 294	4.8
	2019	274 099	5.6	83 691	4.9	33 545	5.0
Highest (4+) RUB (N, % of patients attached to near-retirement physician group)	2008	677 436	19.0	137 995	20.0	44 067	20.5
	2013	878 340	18.8	283 013	20.2	88 182	21.0
	2019	983 818	19.9	350 439	20.7	146 298	22.0
Highest (5+) annual core primary care visits (N, % of patients attached to near-retirement physician group)	2008	2 109 950	59.1	403 026	58.4	127 050	59.1
	2013	2 462 236	52.7	753 388	53.9	227 090	54.2
	2019	2 480 395	50.3	876 487	51.7	346 668	52.0
COPD (N, % of patients attached to near-retirement physician group)	2008	233 498	6.5	51 856	7.5	16 411	7.6
	2013	326 748	7.0	115 669	8.3	37 477	8.9
	2019	337 202	6.8	132 395	7.8	59 350	8.9
CHF (N, % of patients attached to near-retirement physician group)	2008	69 573	2.0	15 645	2.3	4952	2.3
	2013	80 026	1.7	28 187	2.0	9214	2.2
	2019	90 436	1.8	35 567	2.1	15 832	2.4
Diabetes (N, % of patients attached to near-retirement physician group)	2008	327 127	9.2	68 392	9.9	21 389	10.0
	2013	506 014	10.8	170 115	12.2	52 815	12.5
	2019	555 358	11.3	215 696	12.7	92 395	13.9
Frailty (N, % of patients attached to near-retirement physician group)	2008	66 559	1.9	14 875	2.2	4964	2.3
	2013	98 490	2.1	33 005	2.4	10 794	2.6
	2019	114 085	2.3	43 032	2.5	18 597	2.8
Any mental health illness in last 2 years (N, % of patients attached to near-retirement physician group)	2008	825 520	23.1	166 257	24.1	51 802	24.1
	2013	979 987	21.0	311 771	22.3	96 543	23.0
	2019	1 022 523	20.7	355 911	21.0	150 153	22.5
Lowest income quintile (N, % of patients attached to near-retirement physician group)	2008	706 504	19.8	150 381	21.8	48 403	22.5
	2013	876 982	18.8	282 922	20.2	91 236	21.8
	2019	944 888	19.1	348 869	20.6	142 881	21.4
Highest housing instability quintile (N, % of patients attached to near-retirement physician group)	2008	761 397	21.3	165 525	24.0	54 275	25.6
	2013	934 472	20.0	295 059	21.1	92 653	22.2
	2019	1 031 506	20.9	374 322	22.1	155 859	23.4
Highest material deprivation quintile (N, % of patients attached to near-retirement physician group)	2008	736 903	20.6	163 835	23.7	52 733	24.9
	2013	1 045 136	22.4	338 012	24.2	112 097	26.9
	2019	926 043	18.8	352 849	20.8	145 084	21.8

Continued

Table 1 Continued

Patient characteristics		Age 55+ comprehensive FPs		Age 65+ comprehensive FPs		Age 70+ comprehensive FPs	
		N	%	N	%	N	%
Highest neighbourhood ethnic concentration quintile (N, % of patients attached to near-retirement physician group)	2008	962 252	26.9	177 586	25.7	63 167	29.8
	2013	1 335 124	28.6	397 430	28.4	124 062	29.8
	2019	1 521 975	30.8	584 512	34.5	213 182	32.0
Recent immigrant (N, % of patients attached to near-retirement physician group)	2008	269 131	7.5	52 717	7.6	21 202	10.9
	2013	289 772	6.2	83 484	6.0	27 024	7.0
	2019	277 755	5.6	82 560	4.9	28 449	4.3

Interpretation of table 1 rows:
Interpretation of the 'Overall' category: For example, in 2019, 1 695 126 patients were attached to a comprehensive FP aged 65+. This represents 14.8% of all patients who are attached to a comprehensive FP.
Interpretation of each patient category: For example, in 2019, of the 666 404 patients attached to comprehensive FPs over the age of 70 years, 28 449 (4.3%) were recent immigrants.
CHF, congestive heart failure; COPD, chronic obstructive pulmonary disease; FPs, family physicians; RIO, Rurality Index of Ontario; RUB, morbidity, based on resource usage band.

physicians increasingly practiced FTE (age 65–69, 2008: 58.4%, 2013: 67.0%, 2019: 72.6%; age 70+, 2008: 32.0%, 2013: 41.6%, 2019: 54.6%), a trend that was driven by an increasing proportion of female FTE comprehensive FPs. Among younger physicians, by 2019, women comprised the majority of the FTE workforce (52.2% of FTE comprehensive FPs<35 years; 55.2% of FTE comprehensive FPs 35–44 years).

Mean (SD) annual core primary care visits provided per patient declined over time (online supplemental eTable 2B): 2008: 7.3 (3.1) visits; 2013: 6.5 (2.6) visits; 2019: 6.0 (2.3) visits. In most comprehensive FP age groups, men and women provided similar numbers of annual visits. Older physicians provided more annual visits compared with their younger counterparts.

In the patient cohort (table 1), at all near-retirement physician cut-offs (55+, 65+ and 70+), a declining proportion over time made a high number (5+) primary care visits in the preceding year, but these proportions remained consistently over 50% in all near-retirement groups and at each time point.

Comprehensive FP practice settings

A declining proportion of comprehensive FPs over time practiced in fee-for-service (FFS) models of care, with alternate payment plan models (APPs), specifically capitation and team-based models of care, becoming increasingly common (online supplemental eFigure 2). In these APP models, physician compensation is primarily a lump sum payment per attached patient, with or without additional government funding for support for interdisciplinary health professionals ('teams') such as nurses, nurse practitioners, social workers and dietitians. In 2008, most comprehensive FPs worked in FFS-based models (76.6%), but by 2019, most practiced in APPs (55.4%) (online supplemental eFigure 2 and eTable 3). Correspondingly, an increasing proportion of patients were served in APP models: 2008: 26.5% (n=2 526 116); 2013: 54.3% (n=5 643 862); 2019: 61.5% (n=7 064 109).

Over time, a stable majority of comprehensive FPs practiced in large urban and urban settings (online supplemental eTable 4A). Trends around age and sex of rural comprehensive FPs resembled trends seen in the overall comprehensive FP population (online supplemental eTable 4B,C).

Patient complexity

The mean age (SD) of comprehensive FPs' patients increased over time (online supplemental eTable 2B): 2008: 33.5 (13.2) years; 2013: 36.5 (12.1) years; 2019: 38.1 (12.0) years. When stratified by physician age and sex, each physician age group served increasingly older patients. Male physicians cared for slightly older patients than did females in each physician age group and at each time point.

The number and proportion of patients aged 65 and older increased over time in each near-retirement group (table 1). This number nearly quadrupled in the oldest (70+ years) FP group (2008: N=45 414, 2019: N=176 473).

Over time, an increasing proportion of comprehensive FPs' practices were comprised of the highest morbidity patients (resource usage band 4+): 2008: 16.5%; 2013: 18.1%; 2019: 19.8% (online supplemental eTable 5). Concordantly, as seen in table 1, the number and proportion of highest morbidity patients attached to near-retirement physicians grew over time. By 2019, 983 818 patients in the highest morbidity category were attached to a physician aged 55+, representing 19.9% of all patients attached to a 55+ physician. 350 439 were attached to a 65+ physician (20.7% of patients attached to a 65+ physician). 146 298 were attached to a 70+ physician (22.0% of patients attached to 70+ a physician), representing a tripling of the absolute number.

While proportions of patients with chronic illness (chronic obstructive pulmonary disease, congestive heart failure, diabetes, frailty, mental illness) remained relatively stable over time, the absolute numbers increased markedly in each near-retirement group (table 1).

The proportions and means of socially complex patients cared for within each comprehensive FP age and sex group increased over time for most indicators (Supplemental eTable 5) and, concordantly, the number of higher social complexity patients increased markedly over time for most near-retirement groups (table 1).

DISCUSSION

In our population-level serial cross-sectional analyses, the number and proportion of patients attached to a comprehensive FP in Ontario, Canada, grew over time. However, reflective of population-level workforce trends,[16] we found an increasing proportion of the comprehensive FP workforce is nearing retirement. Given the average FP retires at age 70.5 years,[38] we anticipate that between 2019 and 2025, nearly 1.7 million Ontarians may lose their current comprehensive FP to retirement.

This number may be an underestimate. Half of all comprehensive FPs are now women, and female FPs retire on average 5 years earlier than males.[38] Further, due to limitations in data availability for more recent years, our analyses predate the COVID-19 pandemic, and surveys from Ontario indicate the pandemic has hastened retirement plans, with almost double the usual proportion of FPs closing their offices during the pandemic (3%, compared with the usual rate of 1.6%/year),[41] and one in five indicating an intention to retire within 5 years.[42]

Although modelling the future capacity of the comprehensive FP workforce was outside the scope of this study, several findings from this study may help inform such modelling. Aligned with previous research,[29] a declining proportion of FPs are practicing comprehensive family medicine. Two-thirds of comprehensive FPs are practicing full-time. Reflective of a generally ageing population, comprehensive FPs cared for increasingly older groups of patients with increasing medical and social complexity over time. Women, who comprised an increasing proportion of the comprehensive FP workforce, served smaller roster sizes than men, which may reflect that a lower proportion of female physicians practiced FTE compared with males.

Modelling may also consider other variables not examined in this study, such as the net number of FPs added to the workforce each year (in Ontario, this has averaged 333 per year over the last 10 years (2013–2022)[43]), the ranking of family medicine as first choice discipline by medical school graduates (in Ontario and other jurisdictions, this has declined in recent years[20–22 44]) and population growth.[45]

Solutions to FP workforce shortages identified in the literature focus on addressing deterrents to the practice of comprehensive primary care, including perceived poor respect for primary care as a profession, inadequate compensation, inadequate training supports for developing and maintaining comprehensive skills and inadequate administrative and interprofessional health supports to manage increasing patient complexity.[21 24 46–50] Our finding of a shift toward APP models underscores the desire among comprehensive FPs for financial stability and the support of an interprofessional team. Further, we identified equity concerns that relate to the large numbers of patients with chronic diseases and complex social needs, all of which are highly amenable to team-based care.[51–53] Concerningly, as of 2019, we found that 47% of older (65+) physicians still practiced in the less popular FFS models of care, serving 761 648 patients; these FFS practices may be less desirable to incoming physicians looking to take over a retiring physician's practice.

In some jurisdictions, the response to primary care workforce shortages has included expanding the scope of practice for non-physician health professionals. For example, several provinces in Canada, including Ontario, now allow pharmacists to prescribe for minor common ailments. However, concerns have been raised around inadequate concurrent investments in comprehensive, team-based primary care (rather than episodic, siloed care), the disruption of continuity for those who do have primary care access, limited pharmacist training in clinical diagnosis and the lack of high-quality evidence around cost-effectiveness and health outcomes.[54 55] Both the USA and Canada have increased nurse practitioner or physician assistant-led primary care. However, a recent US study found that primary care delivered by non-physician practitioners was more costly than care delivered by physicians,[56] and accurate cost comparisons in Canada remain a challenge due to the lack of publicly available data on non-physician overhead spending.

There are some limitations to our study. The FTE indicator is based on physician billings, thereby excluding time spent on non-billable administrative work. Almost half of Canadian FPs report 10–19 hours per week of administrative tasks,[57] so the indicator may underestimate workload and thus the number of FTE FPs. Rural FPs often practice in both primary care and hospital settings[58]; since the comprehensiveness algorithm is based on primary care billings,[29] it may underestimate the number of rural comprehensive FPs. Further, the rurality index scores and methodology have not been updated since 2008 despite the significant population growth and municipal-level changes that have occurred since then. Some physician analyses could not be fully stratified by both age and sex due to small cell sizes. Community health centre patients are not included and we did not examine other clinicians who may provide primary care; however, these clinicians are the main primary care source for only a small minority (approximately 1%) of Ontarians.[59 60] Finally, our analyses do not account for the rise of virtual care and its potential impact on capacity.[61–63]

CONCLUSIONS

Primary care faces many capacity challenges as physicians age into retirement and fewer choose to enter or remain in comprehensive practice. Incentives and supports are needed to grow the comprehensive FP workforce to serve a growing and increasingly complex patient population.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval The study was approved by the Mashhad University of Medical Sciences (ethics code: IR.MUMS.FHMPM.REC.1400.009). In addition to obtaining oral permission from the participants to conduct the study and record their voices, an informed consent was signed before the interview. The participants were informed about the voluntary nature of their participation, their right to withdraw from the study at any stage and the confidentiality and anonymity of their information. All recorded files were deleted after the publication of the article to ensure the privacy and confidentiality of the participants.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data may be obtained from a third party and are not publicly available. The data sets from this study are held securely in coded form at ICES. Data-sharing agreements prohibit ICES from making the data sets publicly available, but access may be granted to those who meet prespecified criteria for confidential access, available at www.ices.on.ca/DAS. The complete data set creation plan, and underlying analytical code are available from the authors upon request, understanding that the programmes may rely upon coding templates or macros unique to ICES.

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TAB 13

Declining Comprehensiveness of Services Delivered by Canadian Family Physicians Is Not Driven by Early-Career Physicians

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ABSTRACT

We describe changes in the comprehensiveness of services delivered by family physicians in 4 Canadian provinces (British Columbia, Manitoba, Ontario, Nova Scotia) during the periods 1999-2000 and 2017-2018 and explore if changes differ by years in practice. We measured comprehensiveness using province-wide billing data across 7 settings (home, long-term care, emergency department, hospital, obstetrics, surgical assistance, anesthesiology) and 7 service areas (pre/postnatal care, Papanicolaou [Pap] testing, mental health, substance use, cancer care, minor surgery, palliative home visits). Comprehensiveness declined in all provinces, with greater changes in number of service settings than service areas. Decreases were no greater among new-to-practice physicians.

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INTRODUCTION

Declining comprehensiveness of family physician practice has been documented across multiple jurisdictions,[1-8] with accompanying speculation that this is driven by lack of interest or inadequate training among more recent cohorts of family physicians.[1,9-17] Supporting this speculation are data showing that physicians who have recently entered practice participate in a narrower range of services and/or practice settings than those in established practice.[2,8,14,18]

An accurate understanding of changes in comprehensiveness is needed to inform policy responses. If more recent cohorts are delivering less comprehensive care than more experienced physicians, targeted interventions during formative stages of training and in the early career process might be needed. We used population-based linked administrative data from 4 Canadian provinces to test the hypothesis that any decline in comprehensiveness over time is greater among physicians within their first 10 years of practice than among physicians in practice for >10 years.

METHODS

Data and Measures

Our team includes researchers and family physicians in each of 4 Canadian provinces (British Columbia [BC], Manitoba [MB], Ontario [ON], and Nova Scotia [NS]). We used administrative data for billing and shadow-billing information submitted by all practicing family physicians to describe comprehensiveness of care at 2 points in time (1999-2000 and 2017-2018, the oldest and most recent years for which data comparable across provinces were available) in BC, MB, ON, and NS. We accessed similar databases, developed comparable definitions for all variables, and conducted parallel analyses for each province. Further details on these data are published elsewhere,[19-27] and complete methods are available in Supplemental Appendix 1. We obtained ethics approval for each jurisdiction.

Comprehensiveness

We identified 7 settings (home, long-term care, emergency department, hospital, obstetrics, surgical assistance, and anesthesiology) and 7 service areas of office-based practice (pre/postnatal care, Papanicolaou [Pap] testing, mental health, substance use, cancer care, minor surgery, and palliative home visits) that could be

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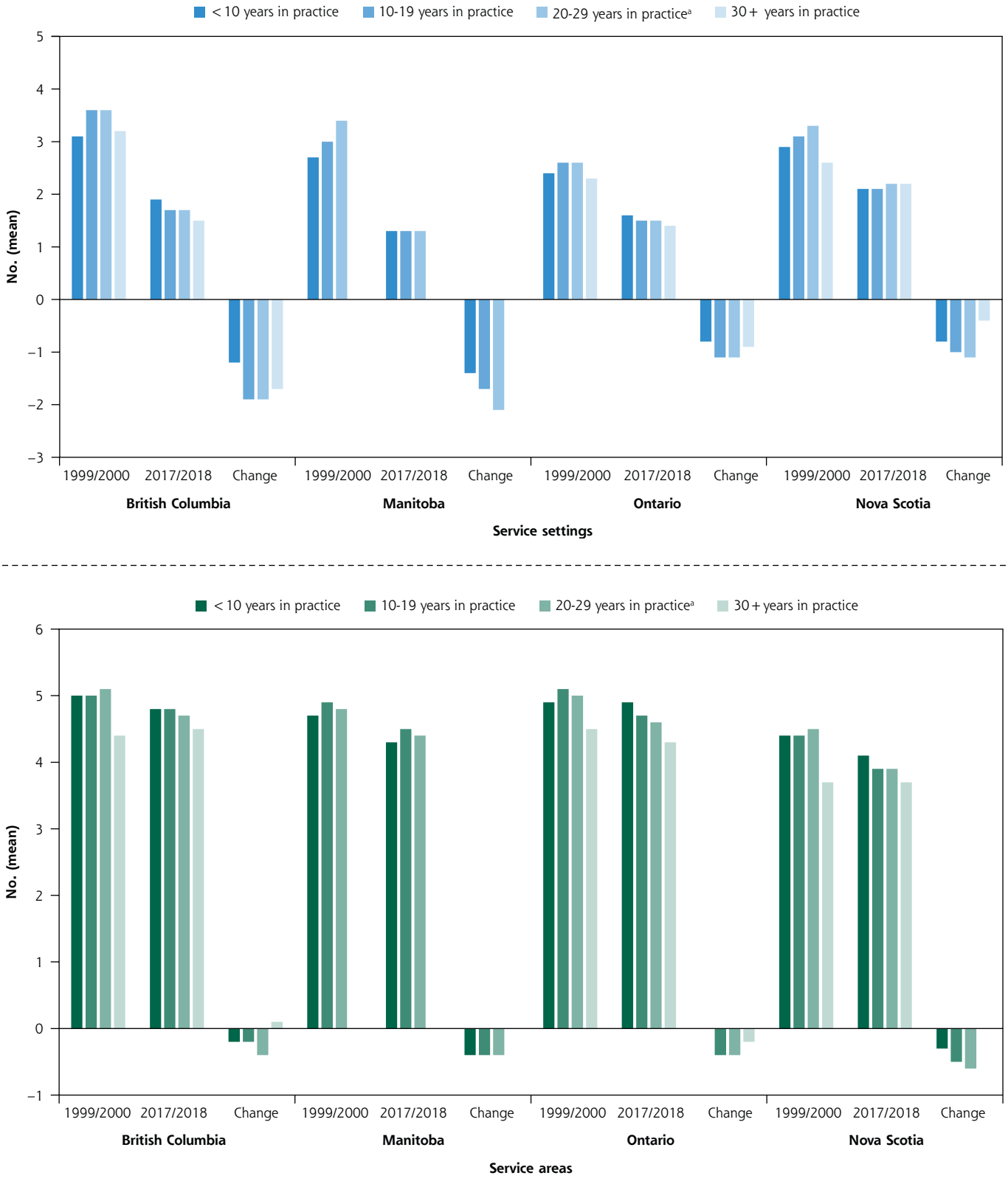
Figure 1. Mean number of service settings and service areas in 1999-2000 and 2017-2018 and changes over time, by years in practice.



[a] In Manitoba this category includes all physicians in practice ≥20 years.

Table 1. Rate Ratios (95% CI) for Comprehensiveness of Service Settings

	British Columbia		Manitoba		Ontario		Nova Scotia	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Intercept	NA	3.72 (3.54-3.91)	NA	3.26 (2.92-3.63)	NA	3.1 (2.9-3.21)	NA	2.26 (2.06-2.47)
Years since MD (reference = 10-19 years)								
<10	0.92 (0.88-0.96)	0.9 (0.86-0.94)	0.86 (0.78-0.94)	0.89 (0.81-0.97)	0.92 (0.89-0.94)	0.95 (0.92-0.99)	0.92 (0.85-0.98)	0.96 (0.88-1.04)
20-29 (MB: ≥20)	0.9 (0.86-0.93)	1.02 (0.98-1.06)	0.89 (0.79-0.99)	1.05 (0.95-1.16)	0.96 (0.93-0.98)	0.96 (0.93-1.0)	0.96 (0.89-1.03)	1.0 (0.93-1.04)
≥30	0.63 (0.6-0.67)	0.95 (0.9-1.01)	NA	NA	0.8 (0.77-0.82)	0.89 (0.85-0.93)	0.77 (0.72-0.83)	0.86 (0.77-0.95)
Year								
2017-2018 (vs 1999-2000)	0.49 (0.47-0.5)	0.52 (0.49-0.56)	0.45 (0.42-0.48)	0.48 (0.42-0.56)	0.6 (0.59-0.62)	0.65 (0.62-0.68)	0.69 (0.67-0.73)	0.76 (0.96-0.84)
Interaction								
Year, <10	NA	1.25 (1.15-1.37)	NA	1.13 (0.96-1.34)	NA	1.13 (1.06-1.2)	NA	1.07 (0.94-1.23)
Year, 20-29 (MB: ≥20)	NA	0.95 (0.86-1.03)	NA	0.92 (0.76-1.12)	NA	1.0 (0.95-1.06)	NA	0.94 (0.83-1.08)
Year, ≥30	NA	0.87 (0.78-0.96)	NA	NA	NA	0.99 (0.9-1.05)	NA	1.09 (0.94-1.26)
Covariates								
Male (vs female)	1.29 (1.24-1.34)	1.11 (1.07-1.16)	1.69 (1.54-1.84)	1.27 (1.17-1.37)	1.4 (1.37-1.43)	1.22 (1.19-1.25)	1.14 (1.08-1.2)	0.99 (0.95-1.06)
Urban (vs rural)	0.75 (0.72-0.77)	0.72 (0.7-0.75)	0.56 (0.52-0.6)	0.54 (0.5-0.57)	0.54 (0.53-0.56)	0.55 (0.53-0.56)	0.9 (0.85-0.96)	1.0 (0.95-1.06)
Number of contacts (per 100 contacts)	1.01 (1.0-1.01)	1.0 (1.0-1.0)	1.01 (1.0-1.01)	1.0 (1.0-1.01)	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.01 (1.01-1.01)	1.01 (1.0-1.01)
International MD (vs Canadian MD)	0.86 (0.83-0.9)	0.9 (0.87-0.94)	0.91 (0.84-0.98)	0.79 (0.73-0.84)	NA	NA	NA	NA
Unknown MD (vs Canadian MD)	0.76 (0.66-0.87)	0.83 (0.73-0.95)	1.22 (0.92-1.62)	1.38 (1.26-1.52)	NA	NA	NA	NA

MB = Manitoba; MD = Doctor of Medicine; NA = not applicable.

Note: There were missing data on place of graduation in Nova Scotia and incomplete data in Ontario; therefore, this variable was excluded from modeling in these provinces.

tracked consistently over time for each of the 4 study provinces [Supplemental Table 1]). These align with settings and domains of care in the College of Family Physicians of Canada's Family Medicine Profile[28] and Residency Training Profile[29] and build on an approach previously published using administrative data in Ontario.[18]

Physician characteristics

We used data from provincial regulatory colleges to classify the physician population on the basis of years in practice, sex, and location of training (Canada, international, or unknown).[20] Urban/rural practice location was assigned on the basis of the location of residence of patients seen by the family physician.[30] We counted the number of patient contacts per year as a measure of practice volume. The physician populations included in the analysis are described in Supplemental Table 2.

Analysis

We used generalized estimating equations (Poisson distribution and log link) to examine changes in count of service settings and service areas for 1999-2000 and 2017-2018. We tested the hypothesis that there was a significant interaction between year and years in practice, adjusting for physician sex, urban/rural practice location, and location of training (Canada, international, unknown) and confirmed results were consistent with and without adjustment for practice volume.

RESULTS

The mean number of service settings in which physicians had contacts decreased in all provinces by 1.0 to 1.7 settings, and the number of service areas decreased by 0.3 to 0.5 areas. In 1999-2000, physicians in their first 10 years practiced in fewer

service settings on average than physicians in practice for 10-29 years (Figure 1). In 2017-2018, patterns changed such that physicians in their first 10 years had similar or more mean service settings than physicians in practice for ≥10 years.

The average number of service areas varied less by years in practice than did service settings. For both years, physicians in their first 10 years had similar mean service areas to those in practice longer (Figure 1).

In both unadjusted and adjusted regression analyses, physicians in practice <10 years practiced in fewer service settings (rate ratios <1) compared to those in practice 10 to 19 years, and the number of settings decreased from 1999-2000 to 2017-2018 (Table 1). The interaction effects for year and <10 years in practice showed that any decrease in service setting was less among physicians in practice <10 years (BC, ON, NS) or not significantly different (MB) from those in practice 10 to 19 years.

There were no significant differences in the number of service areas between physicians in practice <10 years and those in practice 10 to 19 years (Table 2). The interaction between year and years in practice was not significant, or as in Ontario indicated that physicians in practice <10 years practiced in slightly more service areas than would be predicted by years in practice and year alone.

DISCUSSION

We found declining comprehensiveness across 4 provinces, with greater changes in service settings than areas of office-based practice, but no evidence that comprehensiveness

Table 2. Rate Ratios (95% CI) for Comprehensiveness of Service Areas

	British Columbia		Manitoba		Ontario		Nova Scotia	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Intercept	NA	4.56 (4.46-4.65)	NA	4.57 (4.36-4.78)	NA	4.99 (4.86-5.13)	NA	3.72 (3.55-3.9)
Years since MD (reference = 10-19 years)								
<10	0.99 (0.98-1.01)	1.02 (1.0-1.04)	0.96 (0.93-0.99)	1.01 (0.98-1.05)	1.0 (0.98-1.01)	0.99 (0.97-1.02)	1.02 (0.98-1.05)	1.03 (0.99-1.07)
20-29 (MB: ≥20)	0.98 (0.97-0.99)	0.99 (0.97-1.01)	0.94 (0.9-0.97)	1.02 (0.97-1.06)	0.97 (0.96-0.99)	0.97 (0.95-1.0)	0.98 (0.95-1.01)	0.98 (0.95-1.02)
≥30	0.89 (0.88-0.91)	0.92 (0.89-0.95)	NA	NA	0.89 (0.87-0.9)	0.9 (0.88-0.93)	0.87 (0.84-0.9)	0.87 (0.81-0.93)
Year								
2017-2018 (vs 1999-2000)	0.93 (0.93-0.94)	0.99 (0.97-1.01)	0.9 (0.88-0.92)	0.97 (0.93-1.02)	0.93 (0.92-0.94)	0.95 (0.93-0.98)	0.89 (0.87-0.91)	0.95 (0.9-1.0)
Interaction								
Year, <10	NA	1.0 (0.97-1.03)	NA	0.97 (0.92-1.02)	NA	1.06 (1.02-1.1)	NA	1.04 (0.97-1.11)
Year, 20-29 (MB: ≥20)	NA	0.98 (0.95-1.0)	NA	0.92 (0.86-0.99)	NA	1.0 (0.96-1.03)	NA	0.98 (0.92-1.05)
Year, ≥30	NA	1.01 (0.97-1.05)	NA	NA	NA	1.04 (1.0-1.08)	NA	1.07 (0.98-1.16)
Covariates								
Male (vs female)	1.03 (1.02-1.04)	0.97 (0.96-0.98)	1.02 (0.99-1.04)	0.92 (0.9-0.95)	1.01 (1.0-1.02)	0.96 (0.95-0.98)	0.99 (0.97-1.02)	0.91 (0.89-0.94)
Urban (vs rural)	0.96 (0.94-0.97)	0.92 (0.91-0.93)	0.93 (0.9-0.95)	0.88 (0.85-0.9)	0.89 (0.88-0.91)	0.88 (0.86-0.9)	0.91 (0.89-0.94)	0.96 (0.93-0.98)
Number of contacts (per 100 contacts)	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.0 (1.0-1.0)	1.0 (1.0-1.01)
International MD (vs Canadian MD)	1.03 (1.02-1.04)	1.01 (1.00-1.02)	1.0 (0.97-1.03)	0.94 (0.92-0.96)	NA	NA	NA	NA
Unknown MD (vs Canadian MD)	0.97 (0.93-1.01)	0.95 (0.91-0.99)	1.0 (0.85-1.16)	1.01 (0.86-1.19)	NA	NA	NA	NA

MB = Manitoba; MD = Doctor of Medicine; NA = not applicable.

Note: There were missing data on place of graduation in Nova Scotia and incomplete data in Ontario; therefore, this variable was excluded from modeling in these provinces.

declined faster among physicians in their first 10 years of practice. Our measure of comprehensiveness was limited to service settings and areas that could be consistently measured with administrative data over time and across provinces. Each province has its own system of fee codes and billing requirements, yet findings were consistent across provinces. Our analysis does not speak to whether services delivered were in line with population needs. Given that some physicians focus on specific settings (ie, providing hospitalist care or working in emergency departments or in long-term care), declining physician-level comprehensiveness might not reflect declining total service volumes among all family physicians.

The present findings reinforce the concept that whereas comprehensiveness has declined over time among physicians entering practice (as has been observed elsewhere),[11,15] this decline occurs across all career stages for the periods assessed.[1,5,18] Our findings were remarkably consistent across the 4 provinces examined, given that each has their own provincially administered health insurance systems and varying models of primary care delivery and physician payment. Any efforts to enhance or maintain comprehensiveness of care delivered by family physicians should address the service delivery contexts in which all physicians are practicing rather than on interventions in training or early practice.

Read or post commentaries in response to this article.

Key words: comprehensive health care; scope of practice; primary care; family medicine; cohort effect; Canada

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Supplemental materials

Data support:

British Columbia: Access to data provided by the Data Steward(s) is subject to approval but can be requested for research projects via the Data Steward(s) or their designated service providers. All inferences, opinions, and conclusions drawn in this publication are those of the author(s) and do not reflect the opinions or policies of the Data Steward(s).

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Ethics: This project received research ethics approval from the University of British Columbia-Simon Fraser University Harmonized Behavioral Research Ethics Board (H18-03291), Ontario Tech University Ethics Board (14867), Nova Scotia Health Authority Ethics Board (1023561), and the University of Manitoba Ethics Board (HS23897 [H2020:208]).

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TAB 14

ORIGINAL ARTICLE

CANADIAN COLLEGE OF HEALTH LEADERS
COLLÈGE CANADIEN DES LEADERS EN SANTÉ

Canada's primary care crisis: Federal government response

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Abstract

Primary healthcare in Canada is in crisis. One in six Canadians lack a regular family physician and less than half of Canadians are able to see a primary care provider on the same or next day. The consequences are significant in terms of the stress and anxiety foisted upon Canadians in need of care, including limited diagnoses and referrals for potentially life-threatening conditions. This article explores options for the federal government to take a more hands-on role responding to the present crisis that are constitutionally compliant: investments in virtual care; additional funding for primary care tied to a strengthened condition of reasonable access within the *Canada Health Act*; a federally-funded direct incentive scheme to lure back providers who have left due to burnout; and the establishment of a commission for access and quality in primary care.

Introduction

Primary healthcare in Canada is in crisis. One in six Canadians report not having a regular family physician, and less than half of Canadians are able to see a primary care provider on the same or next day.[1,2] The consequences are significant in terms of the stress and anxiety foisted upon Canadians in need of care as well as the risks flowing from limited diagnoses and referrals for potentially life-threatening conditions. In addition, there are the costs for hospitals (and stress for staff) resulting from visits to the emergency room for issues that would be better treated in primary care. Although a number of jurisdictions have seen worsened access to primary care resulting from the COVID-19 pandemic, Canada's access issues have compounded over time. A 2020 Commonwealth Fund survey found that 39% of Canadian respondents had visited the Emergency Room (ER) in the past two years, for a condition that could have been treated by a doctor, had one been available. Canada tied with the United States as the worst performer on this metric, among the 11 countries surveyed.[3] There is, further, a significant equity dimension to these access challenges, with racialized and lower income adults reporting disproportionately that they lack a family doctor.[4]

High-quality, accessible primary care is the cornerstone of a well-functioning healthcare system, and a critical requirement in achieving compliance with the right to health under international law.[5] While others in this collection focus on provincial reform to improve primary care, our aim in this article is to identify steps the federal government can and should take—within the parameters of its constitutional jurisdiction—to drive transformative change in primary care. In doing so, we attempt to move past the tired (and incorrect) discourse that the federal government has no jurisdiction in healthcare and explore options for the federal government to take a more hands-on role to respond to the present crisis that is both constitutionally compliant and tailored to respond to the policy problem. In doing so, we build on calls by various health leaders for both increased investment and an increased federal role in this area.[6] The options we develop below are a federal program for funding virtual primary care; additional funding for primary care tied to a strengthened condition of reasonable access within the *Canada Health Act* (CHA); and a federally-funded direct incentive scheme to lure back providers who have left due to burnout.

Factors limiting supply of primary healthcare

The reason for the primary care crisis is connected to the supply of physicians and other health professionals per capita, the hours worked, and patients cared for. On average, there are 140 Primary Care Providers (PCPs) per 100,000 Canadians, approximately half of whom are registered nurses or nurse practitioners.[1,7] Family physicians are the slowest growing category of new physicians in Canada.[8] The reasons for this are not yet fully understood but there appear to be a mix of factors. In part, the shortage may be explained by higher earning potential of other specialities.[7] In addition, a significant number of physicians in Canada are nearing retirement age, and a single retirement can leave nearly 1,000 patients without a family doctor. In 2021, 6,819 family physicians were over 65 years of age and nearing retirement.[9,10] Feminization of the primary care physician workforce is sometimes discussed as contributing to access problems, with female physicians working fewer hours than their male counterparts, and having fewer patient encounters but, on the other hand, spending more time with their patients and dealing with more issues within a given visit.[11] According to Canadian Medical Association surveys, pregnancy, childbirth, and child-rearing obligations are important contributing factors. Female health workers also

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report higher rates of depression and burnout.[12] PCPs may also be increasingly drawn from the public to the private sector, for example, working for private virtual care clinics or practising in cosmetic clinics, as the demand for such services has grown exponentially.[13,14]

The COVID-19 pandemic has certainly exacerbated these challenges as is true in other jurisdictions.[15,16,17] Some PCPs saw their incomes drop at the start of the pandemic, causing stress in terms of sustaining the overhead needed for their offices and staff. The number of Ontario family physicians leaving the profession in the first half of 2020 was three times the normal number—some retiring and others shifting to potentially less stressful fields, as discussed above.[18]

Solutions to the problem of access to primary care

One widely endorsed strategy to improve primary care access is a shift to a team-based care model, as opposed to models where family physicians work in isolation, or with only a small support staff. Team-based care is likely much more appealing to PCPs, as it allows them to share the workload and leverage one another's expertise. For example, a nurse can perform preventive care services like immunizations and routine screenings, giving more time to a doctor to focus on diagnosing and treating complex issues. Further efficiencies can be made by re-assigning administrative tasks; a 2022 study of Nova Scotia physicians found they spent 10.6 hours per week on administrative tasks—equivalent to 1.73 million patient visits annually and that 38% of this work could be reassigned to a non-physician or eliminated altogether.[19]

The efficacy of team-based care is largely dependent on the funding model. In Ontario, the Ministry of Health and Long-Term Care began implementing Family Health Teams in 2005, employing alternate funding arrangements rather than compensating physicians through a typical fee-for-service model.[20] However, an assessment by Ontario's Auditor General raised questions as to efficacy, finding that physicians participating were being paid, via capitation payments, at least 25% more than their fee-for-service counterparts. The Auditor General also cautioned that, as remuneration was not tied to patient health status, providers were incentivized to enroll healthier patients.[19] With respect to this, a study of primary care across three provinces showed that members of primary care teams collaborate best—which is in turn beneficial for their patients—when funding is tied to the actions of the whole team, rather than solely dependent on the doctor's actions. When the physician on a care team is responsible for making payments to the other providers on the team, the efficacy of a team-based model is weakened.[21] Focusing on the physician in the payment structure incentivizes physicians to be present in as many patient interactions as possible, even when the visit could be handled effectively by another provider.[20]

It seems clear that family care teams do provide a better work environment for family doctors (thus making it a more attractive field for medical trainees), and better match the training of PCPs to the heterogeneity of needs presenting in primary care. Further investments in family care teams, appropriately funded, are needed and there are some encouraging signs in this direction. For example, as part of the federal government's recent healthcare deal, Ontario has committed to its first real advancement in team-based care in over a decade.[22]

Other possibilities for expanding access include changing scope of practice. Indeed, there is mounting evidence that nurse practitioners and other health professionals can provide a quality of care that matches or even surpasses that offered by doctors.[23] In 2007, Alberta passed new regulations under its *Health Professions Act,* expanding pharmacists' scope of practice to include prescribing Schedule 1 drugs, ordering laboratory tests, and administering injections. Similar expansions in scope of practice for pharmacists are finally underway in Ontario—as of January 1, 2023, Ontario pharmacists are authorized to prescribe medications for 13 minor ailments, such as conjunctivitis, dermatitis, cold sores, and urinary tract infections.[24] The COVID-19 pandemic has also prompted the Ontario government to explore further expanding the professional scope of registered nurses, to include prescribing powers, and the ability to order and apply defibrillation and apply electrocardiograms—reforms the Registered Nurses' Association of Ontario has been demanding for more than a decade.[25]

Another means to address access issues is to recruit foreign-trained PCPs, and there have been calls to more quickly recognize the qualifications of those trained in other jurisdictions.[26] In its 2022 budget, the federal government committed $115 million over five years, and $30 million ongoing, to expand its Foreign Credential Recognition Program for health sector workers. That certainly makes sense for fast-tracking the credentialling of foreign-trained PCPs residing here already, but larger ethical issues are raised when syphoning skilled workers from resource-strapped jurisdictions. And this is particularly so given that many other jurisdictions, in the wake of COVID-19, are also experiencing a crisis in health human resources and looking to recruit more foreign skilled workers.[27]

Perhaps a more obvious way to address supply issues is for provinces to reduce the gap in remuneration between speciality care and primary care. Another important option is to evaluate the length of training required by colleges for PCPs and compare this to other leading jurisdictions. Length and cost of training obviously has a significant impact on the supply of PCPs and the prices/income they seek once in practice.[28] For example, between 1994 and 2000, a decline in family doctors was partly attributable to the introduction of a two-year residency as a prerequisite for primary care practice.[27]

What role for the federal government?

Having identified some approaches to improving PCP supply, we turn here to evaluate policy options for the federal

government to help respond to the primary care crisis. We acknowledge of course that the division of powers under Canadian federalism constrains the pathways available to the federal government. However, too often this limitation is boiled down by pundits to "provinces have jurisdiction over healthcare." In truth, jurisdiction is shared and, for example, the federal government can and has used its spending power to incentivize provincial initiatives in targeted areas of healthcare.[29] In what follows, we discuss some of the levers available to the federal government, whether through the existing *Canada Health Act,* or modelled on past, stand-alone initiatives like the Primary Health Care Transition Fund of the early 2000s. We also highlight some more novel pathways by which the federal government can use its spending power directly to drive transformative improvements in primary care.

Drive change through enforcement of the Canada Health Act?

The federal government, under the *Canada Health Act*, flexes its spending power by offering block grants (the Canada Health Transfer) to induce provincial participation in the country's universal healthcare system (Medicare).[28] Under this arrangement, provincial and territorial governments must meet certain criteria in their health insurance coverage but retain jurisdiction over the day-to-day administration of healthcare, including most decisions about how primary care is organized and remunerated.[28]

The CHA provides that if a province actively or passively allows extra-billing and/or user fees, the federal government must withhold funding on a dollar-for-dollar basis.[30] Alongside this mandatory withholding of dollars, the Act gives the federal government discretionary power to withhold its cash contribution to provinces that fail to comply with general CHA principles (public administration, comprehensiveness, universality, portability, and accessibility).[29] It is the enforcement of that last criterion—accessibility—that is relevant for present purposes. This criterion requires, among other things, that insured persons have "reasonable access" to medically necessary care. With Canadians by the millions in search of a regular family doctor, it seems inarguable that most if not all provinces are in breach of the CHA's accessibility criterion.

The reality, however, is that in the CHA's nearly 40 years of enactment, the federal government has never exercised its discretionary power to penalize provinces for failures viz-a-viz accessibility—and this is not for wont of access issues, over the years. Given that the country's healthcare system still reverberates with the shock of the pandemic, it seems extremely unlikely the federal government would achieve much (apart from political turmoil) were it to withhold dollars from provinces because of lack of access to primary care at this time.

The federal government has, on occasion, enforced CHA prohibitions on extra-billing and user charges.[31] More recently, the Federal Minister of Health threatened enforcement of the *Canada Health Act*, in response to the proliferation of privately financed virtual care.[32] Web sites like Maple allow patients, for a fee, to consult with doctors on-line (either by chat message or video consultation), receive a diagnosis, and even have a prescription sent directly to their local pharmacist.[33] These services exploit loopholes in the CHA, for example, by connecting patients with providers in other provinces and therefore not subject to the provincial laws of the patient's province limiting two-tier care. Nonetheless, the Federal Minister of Health has promised that a CHA interpretation letter is forthcoming, signalling a clampdown on this form of private-pay care.

The federal government is right to view the proliferation of private-pay virtual care as a breach of the spirit, if not the letter, of the CHA. But to withhold federal transfers would be to treat the symptoms and not the disease—and the disease is inaccessible primary healthcare. Moreover, the modality of virtual care has much to recommend it for diagnosing and treating routine ailments, particularly after-hours or in remote settings. Through its VirtualCareNS program, Nova Scotia has taken the approach of partnering with the private sector, publicly funding consultations on Maple's platform for patients on the province's "Need a Family Practice Registry."[34] Rollout of the program prioritized communities with the largest number of people on the registry. Via virtual appointments, PCPs can prescribe medications, order tests, refer patients to specialists, and provide options for in-person care where necessary. The province limits the hours and overall capacity of the system to around 250-300 virtual consultations a day, with hundreds more queued.[35]

As part of the effort to address access issues around primary care, the federal government could explore scaling up Nova Scotia's pilot project and providing insurance directly for virtual care services to Canadians who do not have a primary care home. This would be a bold step on the part of the federal government, aligning with its recent initiative to provide dental care insurance, thus bypassing complex federal/provincial/territorial negotiations. Indeed, by taking a leadership role in providing insurance for virtual care, the federal government could directly ensure that the system complies with CHA principles.

A foreseeable objection here is that access to a national virtual care system is no substitute for true primary healthcare, with its promise of personalized, comprehensive, continuous, and coordinated care. However, as a supplemental to in-person care, virtual care surely has a vital role to play given Canada's geography. Any discussion of the relative merits of virtual care should begin with an honest assessment of whether our in-person primary healthcare system is truly well-coordinated and continuous. For example, a Commonwealth Fund study in 2019 reports only 22% of Canadian primary care practices are able to electronically exchange patient clinical summaries with doctors outside their practice, and only 1% of practices are capable of four basic functions (on-line appointment booking, prescription refills, test results, and patient summaries).

Conditional and targeted investments in primary care

The federal government has attempted in the past to drive change by targeting new funding to the provinces in specific areas in need of attention, for example, wait times. With respect to primary care, in the early 2000s it established the Primary Health Care Transition Fund (PHCTF), an $800 million fund to support the provinces and territories over six years.[36] Most recently, the federal government in its 2023 budget has $5.5 billion earmarked for primary care and public health on reserve, and increased investments in student loan forgiveness for physicians and nurses who work in remote communities (discussed below).[37]

Historically, targeting funding to drive specific improvements has been less than successful as either the conditions themselves were too vague and/or there was no real enforcement thereof.[38] In our view, the federal government should take the opportunity of new investments in primary care to provide content to the criteria of "reasonable access" in the CHA. For example, the federal government could issue guidelines for the provinces requiring at minimum each province have a transparent timeline for ensuring each resident is assigned to a primary care home. Each province, in exchange for a federal contribution, would be required to account for the numbers of residents without primary care and ensure back-up coverage (e.g. virtual care) until a match is made between a patient and a primary care practice.

Direct funding for primary care

Although we recommend tying and enforcing conditions to the *Canada Health Act*, experience of federal/provincial dynamics suggests the use of strong conditionality is not likely. But another path forward is for the federal government to directly fund improvements in primary care. As an example, in 2013, the federal government launched a student loan forgiveness program for family physicians and nurses who practice in underserved communities. In the 2022 budget, the dollar amount of forgiveness was increased by 50%, up to $30,000 for nurse and $60,000 for doctors, amortized over five years of service. In its most recent budget, the federal government commits $45.9 million over the next four years, and $11.7 million per year ongoing, to expand the scope of this program to all communities with populations under 30,000.[36] In 2019-2020, approximately 5,500 doctors and nurses participated in the program[39]; to get a sense scale, Canada has a supply of approximately 500,000 family physicians and nurses in 2020, meaning that the student loan program impacted around 1% of this labour force.[40]

An even bolder approach is possible, for example, the federal government could create a five-year fund for any PCP that returns to a full practice (and pre-determined bonuses paid every six months to encourage continuation). Another possibility, as we discussed above, is for the federal government to directly insure Canadians for virtual primary care. These kind of direct approaches are in line with the federal government's recent announcement of dental care insurance coverage that it will implement directly as supplemental to provincial and territorial coverage. Although there will be the inevitable claim that "healthcare is provincial jurisdiction," provided the federal government does not, in the exercise of its spending power, take on the colour of regulating healthcare this should withstand constitutional scrutiny.[41]

Conclusion

In this article, we have put forward possible policy options for the federal government to flex its constitutional powers to address the present crisis in primary care. As explained, the federal government can offer targeted investments for primary care teams and achieve greater accountability by specifying that reasonable access in the CHA must include access to primary care. We acknowledge the political challenges surrounding this approach of conditional transfer agreements. Rightly or wrongly, the federal government is often accused of failing to live up to its end of the CHA. The sheer complexity of funding arrangements tends to blur the lines of accountability as between federal and provincial governments.

We acknowledge as well that Canadian health leaders have actively lobbied the federal government for targeted investments in primary care: for example, during the 2019 election cycle, the CMA and other PCP associations called on all federal parties to commit $1.2 billion to a renewed Primary Health Care Transition Fund.[7] In our view, such calls for increased investments should incorporate demands for greater accountability—ideally a commitment from federal leaders to clarify and enforce the CHA criterion of reasonable access.

There are also initiatives that the federal government could fund and administer on its own, such as a national virtual care program for patients on waiting lists for a family physician; a program to incentivize the return of PCPs who have retired from the profession; and establishing a commission for access and quality in primary care to develop guidance on best practices and eventually to provide accreditation to primary care teams or practitioners. It is surely clear that to truly realize a high-functioning healthcare system, the federal government must step up in new and creative ways to move past tired federal-provincial wrangling. While the federal government is in no position to single-handedly fix Canada's major challenges in primary care, it can flex its constitutional powers strategically, in ways that complement provincial efforts.

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TAB 15

End-of-career practice patterns of primary care physicians in Ontario

Sarah Simkin MD CCFP(FPA) MSc Simone Dahrouge PhD Ivy Lynn Bourgeault PhD

Abstract

Objective To characterize the process of end-of-career attrition among primary care physicians.

Design Longitudinal, open cohort, population-based study of primary care physicians using health administrative data from ICES.

Setting Ontario.

Participants All family physicians providing comprehensive care between 1992 and 2013.

Main outcome measures Changes in workload and scopes of practice over time.

Results The cohort included 15 552 family physicians who provided comprehensive care at some point during the study period. Physicians reduced workloads and narrowed scopes of practice in advance of full retirement at an average age of 70.5 (95% CI 70.1 to 70.8) years. Female physicians provided fewer clinical services than male physicians did and retired 5 years earlier. Canadian medical graduates provided fewer clinical services and retired 2 years earlier than international medical graduates did. Up to 60% of physicians stopped providing comprehensive primary care before retirement, continuing with other clinical activities, at reduced workloads, for an average of 3 years before retiring fully.

Conclusion End-of-career practice patterns are characterized by gradual, modest changes in the provision of services rather than abrupt declines, and the retirement process unfolds differently for different physicians. This study highlights the importance of considering physician workload, scope of practice, and demographic factors for more accurate prediction of physician retirement trends and effective work force planning.

Editor's key points

- Using 22 years of longitudinal health administrative data, this study examined the end-of-career practice patterns of primary care physicians. The authors found that physicians' practice and retirement behaviour patterns were influenced by their sex and location of training. Aging resulted in gradual, modest changes in the provision of services, rather than abrupt declines, and physicians reduced their workloads and narrowed their scopes of practice in the years leading up to retirement. Up to 60% of primary care physicians who retired stopped providing comprehensive care but remained in the work force, providing other services with reduced workloads in advance of full retirement from clinical practice.
- Given the considerable number of primary care physicians who choose a phased approach to retirement, failure to consider the scope of practice of physicians at the ends of their careers might result in overestimation of the supply of physicians available to provide primary care services. Ideally, demographic factors, workload, and scope of practice should be considered in tandem when estimating the supply of physician services. In order to foster a flexible work force, policy makers might need to provide incentives for physicians of all ages to maintain broad scopes of practice and to continue to practise in settings where future demand is anticipated.

Points de repère du rédacteur

- Cette étude a utilisé des données sanitaires administratives portant sur 22 années pour déterminer comment les médecins responsables de soins primaires géraient leur fin de carrière. Les auteurs ont observé que le sexe et le lieu de formation du sujet avaient une incidence. Le vieillissement donnait lieu à des changements graduels et modestes, plutôt qu'à une brusque diminution, et les médecins réduisaient leur charge de travail et le champ de leurs activités au cours des années précédant la retraite. Jusqu'à 60 % des médecins de famille qui prenaient leur retraite cessaient de dispenser des soins complets, mais continuaient de travailler, offrant des services moins exigeants avant d'abandonner complètement leur pratique.
- Étant donné l'important nombre de médecins de soins primaires qui choisissent de prendre une retraite progressive, le fait de ne pas tenir compte du champ de pratique de ces médecins pourrait entraîner une surestimation des médecins susceptibles de fournir des soins primaires. Dans l'idéal, il faudrait tenir compte à la fois des facteurs démographiques, de la charge de travail et du champ de pratique lorsqu'on évalue la quantité de travail que doivent fournir les médecins. Pour favoriser une main-d'œuvre flexible, les responsables des politiques devront peut-être offrir aux médecins de tous les âges des mesures les incitant à maintenir de vastes champs de pratique et à continuer de pratiquer dans des contextes où on s'attend à de plus grands besoins.

Modèles de gestion de fin de carrière chez les médecins ontariens responsables de soins primaires

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Résumé

Objectif Déterminer le processus de départ à la retraite chez les médecins des soins primaires.

Type d'étude Une étude démographique longitudinale de cohorte ouverte, effectuée à l'aide des données sanitaires administratives de l'*ICES* et portant sur des médecins de soins primaires.

Contexte L'Ontario.

Participants Tous les médecins de famille qui ont prodigué des soins complets entre 1992 et 2013.

Principaux paramètres à l'étude Les changements de la charge de travail et du champ de pratique au fil du temps.

Résultats La cohorte comprenait 15 552 médecins de famille qui prodiguaient des soins complets à certains stades de l'étude. Ces médecins réduisaient leur charge de travail et diminuaient leur champ de pratique en prévision d'une retraite complète prise en moyenne à 70,5 ans (IC à 95 % 70,1 à 70,8). Les femmes offraient moins de services cliniques que les hommes et prenaient leur retraite cinq ans plus tôt. Ceux qui avaient obtenu leur diplôme en médecine au Canada offraient moins de services cliniques et prenaient leur retraite 2 ans plus tôt que ceux qui l'avaient obtenu à l'étranger. Jusqu'à 60 % des médecins cessaient d'offrir des soins complets avant leur retraite, poursuivant d'autres activités cliniques, avec une charge de travail allégée, durant une période moyenne de 3 ans précédant leur retraite complète.

Conclusion Les modèles de gestion de fin de carrière se caractérisent par des changements modestes et graduels dans la dispensation des soins plutôt que par une diminution brusque; de plus, le processus conduisant à la retraite s'effectue différemment selon les médecins. Cette étude souligne l'importance de tenir compte de la charge de travail des médecins, de leur champ de pratique et des facteurs démographiques afin de mieux prédire les tendances qui caractérisent la prise de retraite chez les médecins et pour s'assurer de disposer d'une force de travail suffisante pour répondre aux besoins futurs.

Understanding attrition through retirement is becoming imperative. Although inputs to the physician work force are well understood, egress from the work force has been less well studied. Estimating attrition from the physician work force has proven to be difficult for a variety of reasons, including unreliability of physicians' self-reported retirement intentions,[1] lack of systematic collection of end-of-career physician information,[2] and a multiplicity of definitions of retirement.[3] While retirement has typically been considered a categorical end point, evidence is mounting that it is a process that workers go through at the ends of their careers[4-6] and that physicians are no exception.[7] Although most physician work force planning models incorporate estimates of outflow from the work force, the degree of sophistication in modeling retirement patterns varies,[8] and most developed countries struggle to accurately predict physician retirement trends. As a result, the supply of physician services rarely aligns with the population demand for these services, and most health systems experience alternating surpluses and shortages of physicians.

Because primary care physicians have broad scopes of practice and deliver care in a variety of settings, they might have more work options available to them at the ends of their careers and might demonstrate distinct retirement patterns. The objective of this study was to characterize the process of physician attrition from the primary care work force by answering the following questions: How do physicians change their practice patterns as they age? What factors influence changing physician practice patterns?

Methods

This longitudinal, population-based, open cohort study used health administrative data from ICES in Ontario. Demographic characteristics and practice-related data for family physicians were extracted from 6 linked databases for the period between 1992 and 2013: the ICES Physician Database, the Corporate Provider Database, the Ontario Health Insurance Plan (OHIP) Claims Database, the Client Agency Program Enrolment database, the AVGPRICE database, and the CONTACT database. These data sets were linked using unique encoded identifiers and analyzed at ICES. Analyses were conducted using SAS Enterprise Guide 6.1. This study was approved by the institutional review board at Sunnybrook Health Sciences Centre in Toronto, Ont, and by the University of Ottawa Research Ethics Board.

Cohort creation

We included all physicians from the ICES primary care pool (physicians with self-reported or functional specialties of family or general practice) who provided comprehensive primary care services covered by OHIP at any time between 1992 and 2013 in the cohort. Once included, physicians remained in the cohort until the end of the study period. The only physicians excluded from the analyses were those who did not provide comprehensive primary care at any time during the study period.

An algorithm developed at ICES was used to assess physicians' provision of comprehensive care.[9] In order to be considered to have provided comprehensive care in a given year, physicians must have worked at least 44 days that year and billed at least once in at least 7 of 22 activity areas associated with primary care provision (ie, mini or minor assessments, general assessments or reassessments, intermediate assessments, periodic health examinations, geriatric care, mental health or addiction services, hospital care, home visits, chronic care or long-term care, emergency department or equivalent services, vision care, palliative care, flu shots, other immunizations, office laboratory procedures, allergy shots, other injections, Papanicolaou tests, anticoagulant therapy, preoperative assessments, diabetes management, and smoking cessation).

For each physician, we captured information on demographic characteristics, including year of birth, sex, and location of training (the country in which the physician's medical school was located). In each year, we characterized the rurality of the location of the physician's practice using the 2008 Rurality Index of Ontario, and the physician's remuneration model (ie, traditional fee-for-service [FFS], reformed-FFS, capitation, capitation and family health team, community health centre, or other). **Table 1** provides descriptions of these models.

Table 1. Physician remuneration models

REMUNERATION MODEL	DESCRIPTION
FFS	Physicians are compensated by the government for each service rendered
Reformed-FFS	Physicians receive a base payment that covers certain services and they bill FFS for other services
Capitation	Physicians receive a set fee for each patient on their roster. The fee might be adjusted by age, sex, or morbidity
Capitation and family health team	Physicians receive a set fee for each patient, as well as funding to work together with other professionals to provide primary health care for a community
Community health centre	Physicians are compensated by salary, often based on units of time
Other	This category includes 10 separate and relatively uncommon remuneration models

FFS—fee for service.

Definition of retirement

We considered physicians to be retired in the year after they were last active, when no billings were generated in that year or in any future years.

Trends for analysis

Trends for analysis included physician workload, retirement age, and practice patterns.

Workload. Physicians' annual workload was determined with the following 5 outcome measures: annual OHIP payments, full-time equivalents (FTEs),[10] service volume (ie, number of visits), number of days worked, and panel size. (For further description of the workload outcome measures, contact the corresponding author [S.S.]). Stratified analyses of workload by sex, location of training, location of practice, and remuneration model were conducted.

Retirement age. Our initial analyses showed that attrition from practice occurs across the age spectrum, and that the frequency distribution of attrition is bimodal, with a peak in the early years of practice, the nadir around age 55, and another peak in later years. An aging physician work force lends urgency to the effort to understand attrition patterns of older physicians, and so we chose to focus on physicians in the older age group (aged ≥55). We calculated the average age at which these physicians reached retirement. Average retirement ages were compared for statistically significant differences related to sex and location of training using Student *t* tests, and related to location of practice using ANOVA (analysis of variance).

Practice patterns. First, we examined physicians' workloads in each of the 10 years before they retired. Next, we examined relative changes in physicians' scopes of practice—the clinical activities that physicians engage in—in the years before retirement. In addition to office-based comprehensive care, we examined physicians' participation in anesthesia, emergency department care, inpatient care, home visits, mental health services, nursing home care, obstetrics, on-call anesthesia or surgical assisting, palliative care, and surgical assisting. **Table 2** presents service thresholds necessary for characterizing participation in a clinical activity.

Finally, we examined the temporal relationship between stopping comprehensive care and retirement, identifying one group of physicians who stopped providing comprehensive care because they retired, and another group of physicians who continued to practise after they stopped providing comprehensive care. We compared the workloads of these 2 groups of physicians, and we looked forward in time to see which clinical activities the latter group of physicians engaged in instead of providing comprehensive care.

Table 2. Annual service thresholds (billings or service counts) necessary for being characterized as participating in a given clinical activity

CLINICAL ACTIVITY	SERVICE THRESHOLDS
Billing activity, $	
• Anesthesia	> 1000
Service counts activity	
• Emergency department	> 50
• Inpatient	> 50
• Home visits	> 10
• Mental health services	> 50
• Nursing home	> 50
• Obstetrics	> 2
• On-call anesthesia or assisting	≥ 1
• Palliative care	> 10
• Surgical assisting	> 12

Results

We identified 21 240 family physicians, 5688 of whom did not provide comprehensive primary care at any time during the study period and were excluded from the analyses. The study work force cohort included the remaining 15 552 physicians.

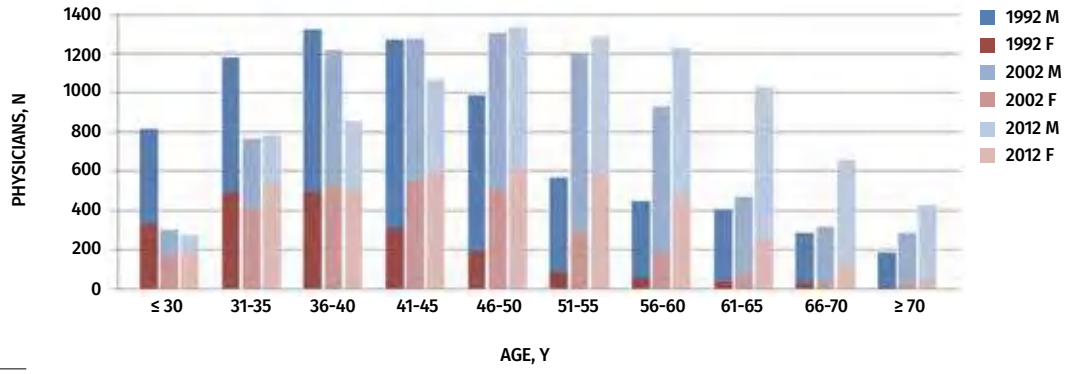
The primary care work force in 1992 was relatively young and male dominated. Over the study period, the primary care work force grew older and included more women (**Figure 1**).

Results of the trends analysis of physician workload, retirement age, and practice patterns were as follows.

Workload. Physicians' workloads generally increase throughout their careers, sharply at first and then more gently, before declining (**Figure 2**). Physicians begin to reduce their workloads (the slopes of the age-activity curves shift from positive to negative) between the ages of 55 and 61. These patterns are consistent across the 5 workload outcome measures that we examined.

Stratified analyses, shown in **Figure 3**, revealed differences in workload (as measured by average annual FTE) related to sex, location of training, location of practice, and model of remuneration. On average, workloads of female physicians are smaller than those of male physicians throughout their careers. International medical graduates have larger workloads than Canadian medical graduates for most of their careers. Physicians with practices in non-major urban locations have larger workloads than their colleagues with practices in major urban and rural locations until they are in their late 60s, at which point the workload differences become less pronounced. Physicians working in practices with non–fee-for-service (FFS) remuneration (reformed-FFS,

Figure 1. Age and sex distribution of the primary care work force in 1992, 2002, and 2012



F—female, M—male.

capitation and family health team settings) have larger workloads than their FFS colleagues do. These patterns are also consistent across the 5 measures of workload.

Retirement age. As noted above, we limited this analysis to physicians aged 55 years and older (**Figure 4**). The average retirement age is 70.5 (95% CI 70.1 to 70.8). On average, female physicians retire approximately 5 years earlier than male physicians do ($P<.05$), and Canadian-trained physicians retire 2 years earlier than international medical graduates do ($P<.05$). The location of practice—major urban, non-major urban, or rural—did not significantly influence retirement age ($P<.05$). Average retirement ages were stable over time, with no trend toward retirement at older or younger ages between 1992 and 2013.

Practice patterns. We examined the practice patterns of 2142 physicians (aged ≥55) who retired during the study period. In the 10 years before retirement, these physicians gradually reduced their workloads and narrowed their scopes of practice (**Figure 5**). The rate of change in workload is quite uniform until the year immediately preceding retirement. The sudden drop in workload is likely seen because the final year of work for most physicians is a partial one.

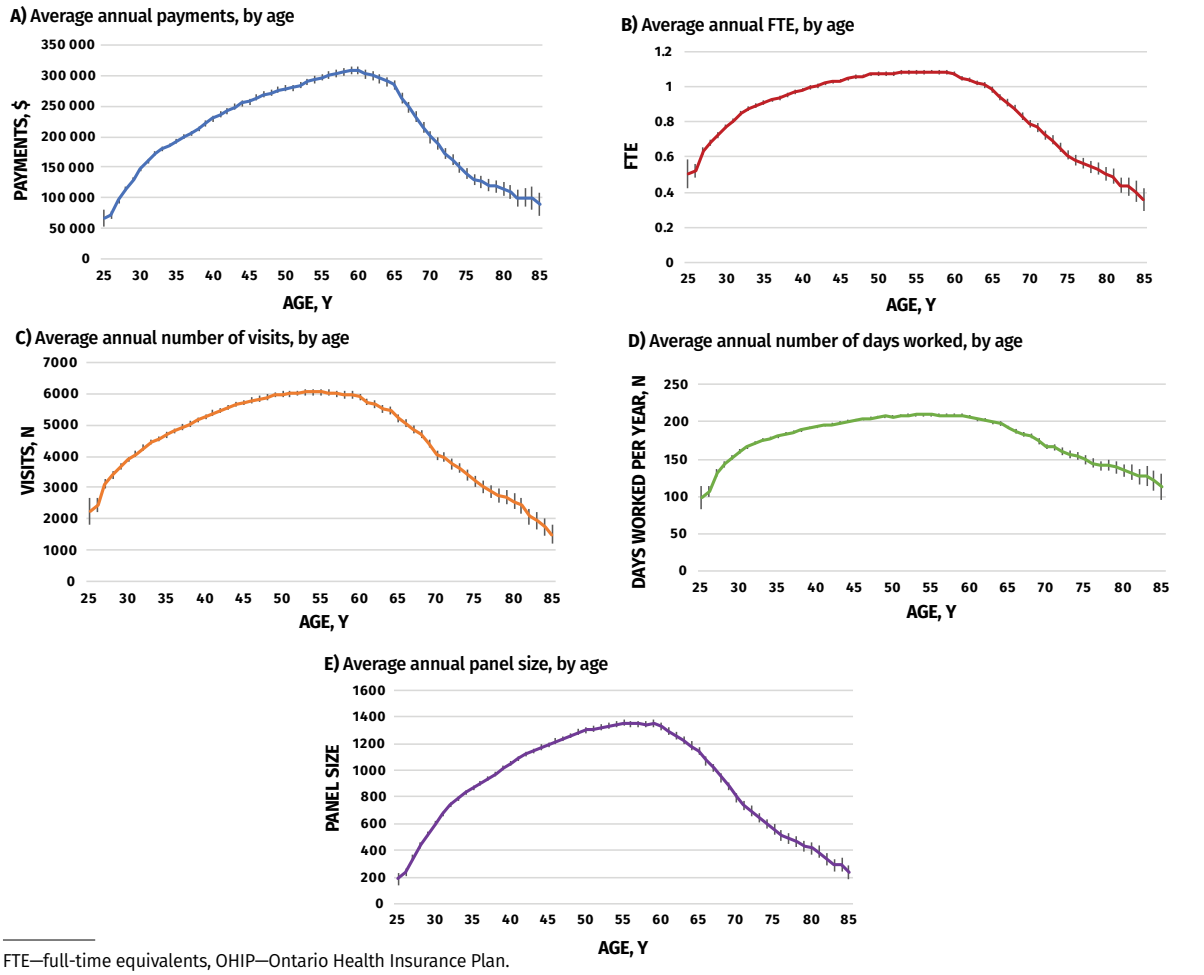
To explore the relationship between workload and scope of practice in advance of retirement, we examined the workloads of retired physicians before and after they stopped providing comprehensive primary care (**Figure 6**). Approximately 40% of physicians (seen in black) stop providing comprehensive care at the time of retirement. These physicians have higher average FTEs in the years before retirement than the physicians who continue to provide clinical services do. Most physicians continue to practice after they stop providing comprehensive care, working with reduced workloads for an average of 3 years before full retirement. Factors such as sex, location of training, and location of practice did not influence how long physicians continue to work after they stop providing comprehensive care and before they retire; physicians in each group retired, on average, within 6 months of one another. In general, physicians who adopt a phased approach to retirement continue to provide some of the services they did previously (such as inpatient care or surgical assisting), rather than undertaking entirely new practice activities.

Discussion

Using 22 years of longitudinal health administrative data, we characterized changes in the end-of-career practice patterns of primary care physicians. We found that practice and retirement behaviour patterns were influenced by physician sex and location of training. Aging resulted in gradual, modest changes in the provision of services, rather than abrupt declines, and physicians reduced their workloads and narrowed their scopes of practice in the years leading up to retirement. Up to 60% of primary care physicians who retired stopped providing comprehensive care but remained in the work force, providing other services with reduced workloads in advance of full retirement from clinical practice.

Our observations are consistent with the findings of other studies that have reported a reduction in physician workload[11] and scope of practice with age[2] and differences in work force participation related to sex and generation.[12,13] A recent study of retirement age of primary care providers in the United States found the median retirement age of family physicians to be 65.1 years, with female physicians retiring about 1 year earlier than their male colleagues.[14] That study examined a broader spectrum of physicians' activities, including administration, teaching, and research.

Figure 2. Average annual workload, by age: *Error bars indicate 95% CIs. Workload outcome measures included A) OHIP payments, B) FTEs, C) service volume (ie, number of visits), D) number of days worked, and E) panel size.*



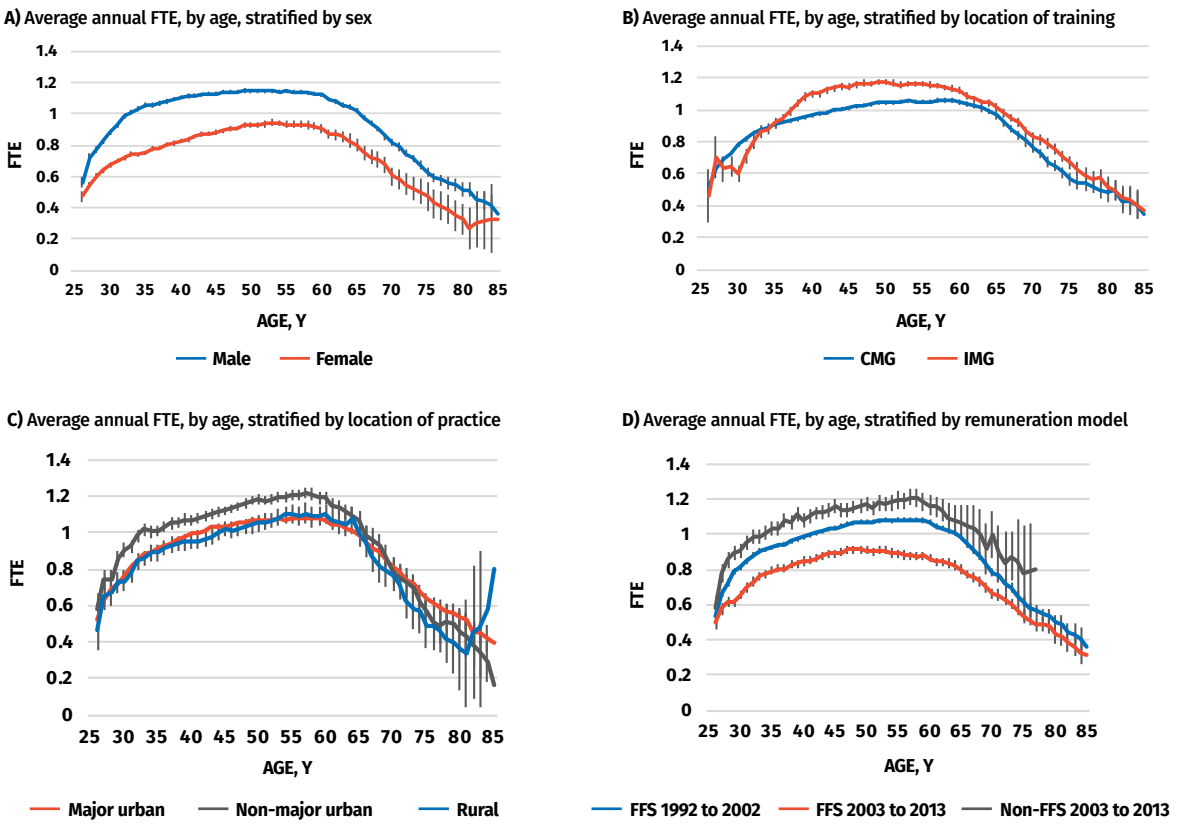
FTE—full-time equivalents, OHIP—Ontario Health Insurance Plan.

Our findings support the hypothesis that retirement is a transition rather than a sudden all-or-nothing phenomenon. Physicians reduce their workloads and narrow their scopes of practice as they approach the ends of their careers; these changes occur gradually in advance of retirement and are independent of the age at which physicians retire. The zenith of the inverted U-shaped age-activity curve occurs between ages 55 and 61; reductions in average workload seen thereafter likely represent the cumulative effects of physicians' retirement transitions. In the context of an aging physician work force, consideration must be given to changing workloads so as not to overestimate the capacity of the work force to provide primary care services.

In the face of considerable heterogeneity in the practice patterns of family physicians, we chose to focus on the primary care work force. More than 25% of the physicians in our initial cohort did not provide comprehensive care at any time during the study period and were excluded from the analysis. We argue that these physicians did not substantially contribute to the primary care work force, having been engaged in focused practices or having consistently worked less than 44 days per year. We also used the provision of comprehensive care to track flows into and out of the primary care work force, identifying a substantial number of physicians who transition to retirement through focused practices. In so doing, we have documented important changes in how family medicine is practised over the life course, a pattern that might be seen more commonly as the work force ages.

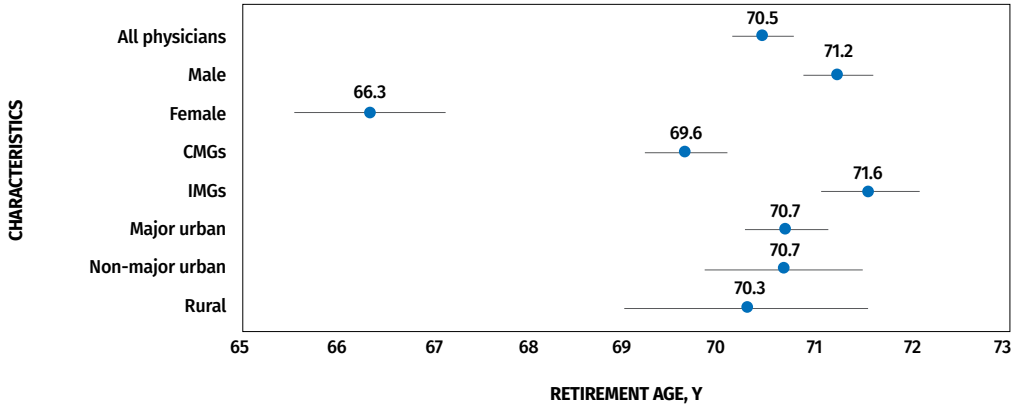
Our study is the first to document the relationship between workload and scope of practice near the ends of physicians' careers. In so doing, we identified that most retiring primary care physicians stop providing comprehensive care but remain in the work force with reduced workloads before full retirement. Hence, for these physicians, focused practice is a form of phased retirement. Physicians near the ends of their careers

Figure 3. Average annual workload (FTE): *Error bars indicate 95% CIs. Workload stratified by A) sex, B) location of training, C) location of practice, and D) remuneration model.*



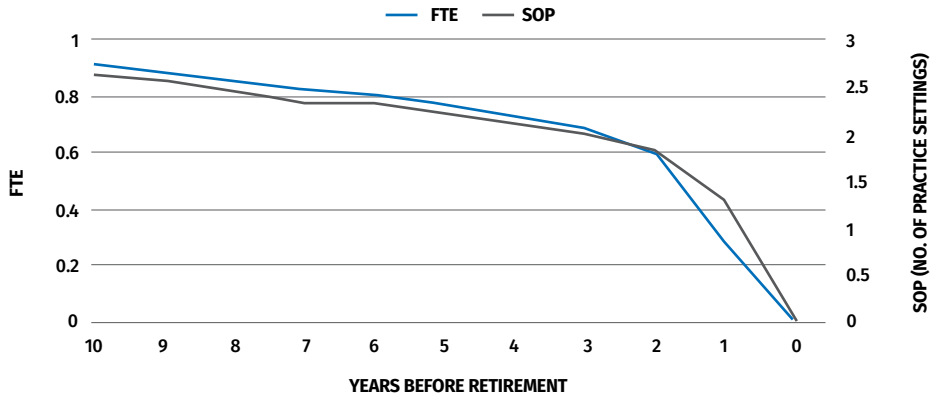
CMG—Canadian medical graduate, FFS—fee for service, FTE—full-time equivalent, IMG—international medical graduate.

Figure 4. Average retirement age of physicians aged 55 and older: *Error bars indicate 95% CIs.*



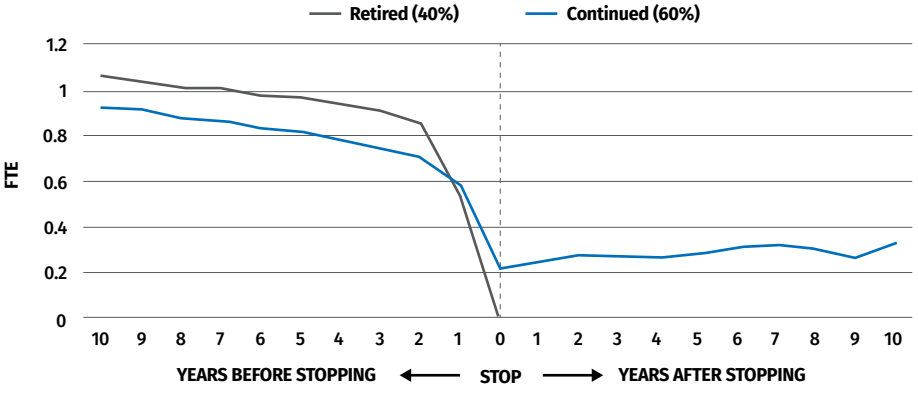
CMG—Canadian medical graduate, IMG—international medical graduate.

Figure 5. Practice patterns of physicians aged 55 and older before retirement



FTE—full-time equivalent, SOP—scope of practice.

Figure 6. Workload (FTE) of retired physicians aged 55 and older before and after they stop providing comprehensive care



FTE—full-time equivalent.

could prove to be an important source of flexibility in the work force by functioning as a work force "buffer," with the potential to respond to changes in demand for medical care. We have found that after these physicians stop providing comprehensive primary care, they continue with activities that were previously part of their practices. However, in the context of declining comprehensiveness,[15] our findings portend a work force that, while interested in maintaining participation in the work force, is potentially less able to provide service in a variety of settings. In order to foster a flexible work force, policy makers might need to provide incentives for physicians of all ages to maintain broad scopes of practice and to continue to practise in settings where future demand is anticipated, such as home visits and long-term care.

Internationally trained physicians have larger average workloads and retire 2 years later than their Canadian-trained colleagues. It seems logical that these physicians work more, and for longer, to compensate for the interruption in their practices while they have their credentials assessed before joining the Canadian work force. However, more in-depth study of international medical graduates is necessary to understand how and why location of training affects practice and retirement behaviour patterns.

The effect of the increasing number of female physicians on the service capacity of the primary care work force is not yet clear. A 2014 systematic review

concluded that additional research is necessary to explore career trajectories and retirement patterns of female physicians.[16] Evidence from the United States suggests that female physicians maintain higher activity rates for longer than their male colleagues, perhaps to compensate for decreased work activity during childbearing years.[17] However, we found that female primary care physicians in Ontario to date consistently have smaller workloads and retire earlier than their male colleagues do. While the results of our study bring us closer to being able to predict how much service female physicians are likely to provide at any given stage of their careers, we still lack a well-rounded understanding of how other activities these physicians engage in (such as teaching, administration, volunteer work in their profession or outside of medicine, or caregiving for children or elderly parents) affect their participation in clinical work and their retirement decisions.

Our results highlight some of the challenges inherent in predicting physician work force trends. Using retirement age in isolation to predict attrition from the work force risks underestimating or overestimating outflow, depending on whether sex and location of training are considered. Given the considerable number of primary care physicians who choose a phased approach to retirement, failure to consider the scope of practice of physicians at the ends of their careers might result in overestimation of the supply of physicians available to provide primary care services. Ideally, demographic factors, workload, and scope of practice should be considered in tandem when estimating the supply of physician services.

Limitations

Although the data we used in this study were comprehensive, spanning 22 years and including physicians practising in alternate remuneration models, information related to other factors that undoubtedly influence physicians' retirement decisions (such as spouses and dependants) was not available. And while the use of quantitative measures to examine changes in practice patterns provides a basis for understanding the phenomenon of physician retirement, our conclusions must be informed by the limitations of these measures. For example, the health administrative data used in our study capture only clinical activity, and so we know very little about other work-related activities of family physicians. And, even 2 decades of data did not allow us to characterize differences between generations of physicians that might influence their retirement behaviour patterns. Finally, data about physicians working in community health centres and nurse practitioners providing comprehensive primary care services were not available. A comprehensive understanding of the primary care work force and its role in providing patient care services will only be achieved when complete information about all providers is available.

Conclusion and next steps

This study documented the end-of-career practice patterns of Ontario primary care physicians between 1992 and 2013 and revealed that retirement is a gradual process that unfolds differently for different physicians. For more accurate prediction of physician retirement trends and effective work force planning, our study highlights the importance of considering physician workload, scope of practice, and demographic characteristics. It also sets the stage for further research: multivariate modeling is needed to quantify the effect of various factors on workload and scope of practice. Research using qualitative methods to clarify underlying reasons for the patterns we have observed, and to explore the broader context in which retirement decisions are made, will enrich our understanding of end-of-career issues among physicians. Finally, because the issues we explored are equally relevant to the specialty physician work force, a similar study of medical and surgical specialists is necessary.

Dr Simkin is a member of the Department of Family Medicine at the University of Ottawa in Ontario and was a student in the Master of Science in Health Systems program at the Telfer School of Management at the University of Ottawa at the time this research was conducted. **Dr Dahrouge** is Vice-Chair of Research in the Department of Family Medicine at the University of Ottawa and a scientist at the Bruyère Research Institute in Ottawa. **Dr Bourgeault** is Professor in the Telfer School of Management and Canadian Institutes of Health Research Chair in Gender, Work and Health Human Resources at the University of Ottawa.

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Contributors

All authors contributed to the conception and design of the study, analysis and interpretation of the data, and writing and approving the submitted version of the manuscript.

Competing interests

None declared

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This article has been peer reviewed.
Cet article a fait l'objet d'une révision par des pairs.
Can Fam Physician 2019;65:e221-30

TAB 16

Toronto

Physicians sound alarm over unfilled Ontario residency spots

108 family medicine spots vacant after first round of residency matching in Ontario

Ryan Patrick Jones · CBC News · Posted: Mar 24, 2024 4:00 AM EDT | Last Updated: March 24

Family doctors say an increase in the number of medical student graduates choosing not to pursue a career in family medicine could exacerbate Ontario's family doctor shortage. (David Donnelly/CBC)

comments

Physicians in Ontario are sounding the alarm as new data shows more than 100 reserved for training new family doctors have gone unfilled.

Each year, medical school graduates decide what type of medicine they want to specialize in. The Canadian Residency Matching Service (CaRMS) matches graduates with residency placements at medical schools in two rounds.

There were 108 unfilled family medicine spots out of a total of 560 in Ontario following the first round of this year's match, up from 103 unclaimed spots last year, according to CaRMS data.

That's an increase from 100 in 2023, itself a sharp rise from 61 in 2022, 52 in 2021 and 30 in 2020.

Dr. David Barber, a family doctor in Kingston, Ont., who chairs the section on general and family practice with the OMA, said the data is the latest in a worrying trend showing not enough medical students are choosing family medicine as a specialty.

"What this tells us is that medical students are not applying to family medicine," Barber said. "It's because during medical school the students work with family doctors and train under family doctors. They see how stressful it is, how underfunded it is and how unhappy that the family doctors are."

- **Want more family doctors in Ontario? Pay them better, say physicians**
- **Half a million people in Toronto don't have a family doctor, college says**

Across the province, 2.3 million people don't have a family doctor, and that number could grow to 4.4 million patients by 2026, the Ontario College of Family Physicians has warned.

The dwindling supply of family medicine residents in turn means an even smaller number of doctors choosing to enter family practice after finishing their residency. A slowdown of the pipeline of new family doctors could exacerbate Ontario's family doctor shortage and suggests that those without family doctors may continue to face challenges finding one.

Positions could be filled in 2nd round

Barely 30 per cent of last year's grads ranked family medicine as their first choice for their specialty training, according to CaRMS data. The figure was 38 per cent in 2015, and has been on the decline for years.

Many of this year's unfilled positions could be filled after the second round of matching is completed on April 25, said Lisa Turriff, communications director with CaRMS.

"Typically many unfilled first iteration positions do fill in second iteration," Turriff said. "For example, last year Ontario had 100 unfilled positions at the end of the first iteration, and three unfilled positions after second iteration."

Dr. Joseph Param, who was born and raised in Toronto, runs a family doctor clinic in Scarborough. (Laura Pedersen/CBC)

Dr. Joseph Param, who practices family medicine at a clinic in Scarborough, said he's seen firsthand medical students at his clinic get turned off of family medicine.

"Oftentimes, medical students come in, they're super excited, they're super enthusiastic," said Param. "The problem arises when they see how burdened we are due to systemic issues."

Family doctors say some of those systemic issues include long working hours, burdensome paperwork, inadequate financial compensation and the stresses of running a business while providing care to patients with complex health issues.

Param said these challenges can negatively impact physicians' mental health and lead to burnout. Witnessing the strain on the family doctors they work with is often enough to convince medical students to pursue a career in a different specialty where they have a chance of taking home a bigger paycheque and having better work-life balance, Param said.

'I would definitely think twice,' says physician

"If I was a medical student now ... I would definitely think twice because there are other specialties that seem to be far more attractive where you feel as though you're more valued, you're compensated more fairly and also just have a better work-life balance," Param said.

The provincial government needs to incentivize medical students to pursue family medicine by making it an attractive field to work in, said Dr. Ramsey Hijazi, a family physician in Ottawa and the founder of the Ontario Union of Family Physicians.

They should start by fixing the compensation problem to make family practice more sustainable, he said.

Dr. Ramsey Hijazi practices in Ottawa and is the founder of the Ontario Union of Family Physicians. (Submitted by Ramsey Hijazi)

Over the past 10 years, inflation as measured by Statistics Canada, has totalled about 25 per cent. During the same period, the average family physician's yearly billings to OHIP have risen just 6.1 per cent, according to figures provided by the OMA.

A typical Ontario family doctor's practice runs like a small business, with costs for staff, rent and other overhead paid out of their revenue from OHIP billings. But unlike the typical small business, Ontario family doctors can't just arbitrarily boost their prices to bring in more money.

Hijazi said he wants to see more investment in human resources, not just health infrastructure.

"Our problem in healthcare is not infrastructure, it is resources, it is personnel, it is family physicians that we lack. And so that's where the investment needs to come," Hijazi said.

Province has medical school spots, primary care teams

A spokesperson for Health Minister Sylvia Jones said the Progressive Conservative government has made "historic investments" to expand available medical school spots and added 78 new interdisciplinary primary care teams.

"Earlier this year, our government stood with the leadership of the Ontario Medical Association to announce the largest expansion of primary care in Ontario's history," Hannah Jensen wrote in an email. "Our government will not be deterred, by an interest group, from continuing to work with the OMA leadership to expand access to primary care and grow our healthcare workforce for years to come."

Jensen added that negotiations are currently underway with the OMA over a new physician services agreement, the contract that covers how doctors are paid in

this province, which expires at the end of March.

With files from Mike Crawley

Popular Now in Toronto

1 **Leafs announcer slams home crowd as 'very disappointing'**

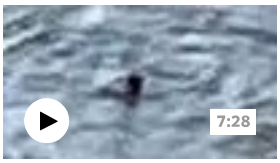
2 **Ontario scrapping sick notes to cut down on doctors' paperwork**

3 **Government tells Ajax woman she may not be Canadian**

4 CBC INVESTIGATES
Harry Jerome's daughter wants famed sprinter's name removed from embattled charity's awards

5 **Police investigating after man plunges to his death from balcony**

TRENDING VIDEOS



VIDEO

B.C. couple unsure if they saw Loch Ness Monster ... but they want to believe

CBC News B.C.

VIDEO

#TheMoment a San Francisco Giants home run landed in a kayaker's lap

The National

Fire crews respond to flaming railway cars in London, Ont.

VIDEO

Poilievre visits anti-carbon tax protest site on N.S.-N.B. border

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VIDE

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RECOMMENDED FOR YOU

Leafs announcer slams home crowd as 'very disappointing'

UPDATED

Honda to invest $15B to build 4 new EV plants in Ontario

Harvey Weinstein's 2020 rape conviction in New York overturned

Government tells Ajax woman she may not be Canadian

Cana more trans

TAB 17

A Profession in Crisis

The survival of family medicine in Ontario

Ontario College of Family Physicians

Leaders for a healthy Ontario

May 31, 2023

Executive Summary

- This report should be viewed as a wake-up call to all who are involved in supporting family medicine
- Family doctors have the lowest Net Promoter Score for any profession that the researchers who conducted this survey have ever seen
  - This NPS issue has clear and objective root causes, and it is clearly and objectively causing a:
    - Supply issue of family physicians in Ontario
    - Negative impact to the quality of patient care
- There are 5 clear, priority causes of their dissatisfaction; 4 of them are admin burden/systemic in nature.
- +1,300 family doctors were surveyed

This report is a call-to-action from professionals who desperately need support, advocacy and empathy.

Quantitative Research on the Impact of Administrative Burden on Family Medicine 2023: Detailed Results

Critical Challenges

These are prevailing pain points with widespread agreement and should be addressed across the board.

Challenge	Theme	Challenges Magnitude *(Strongly/Somewhat Agree %)*	Challenges Ranking *(% of times selected in Top 3)*
Other parts of the health care system often place unnecessary and/or inappropriate burden back onto me/my practice.	Burden/Stress	98	56
I am overwhelmed with administrative burden and paperwork related to the care requirements of my patients.	Burden/Stress	94	57
It is difficult to access specialist care for patients.	Access/Referrals	93	35
I spend a burdensome amount of time filling out patient forms.	Burden/Stress	92	22
It is difficult to manage patient expectations.	Burden/Stress	92	33

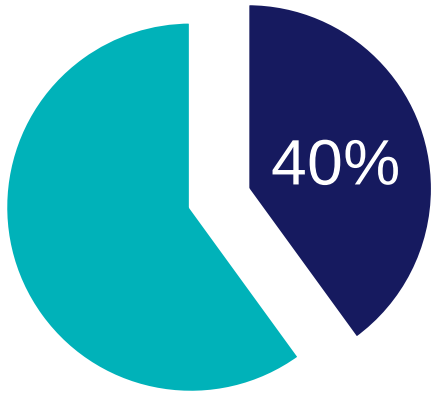
Q24. Below is a list of opinions we have heard from physicians about the challenges they face as a family physician. Please indicate the extent to which you agree or disagree these statements reflect significant pain points for you/your practice.
Q25.Below are the statements you agreed with as they relate to challenges you face as a family physician. What would you say are the biggest pain points you experience at the practice level? Please rank the top THREE (3) things you find most challenging, with ONE (1) being the most challenging. Base: Total Sample (n=1,343)

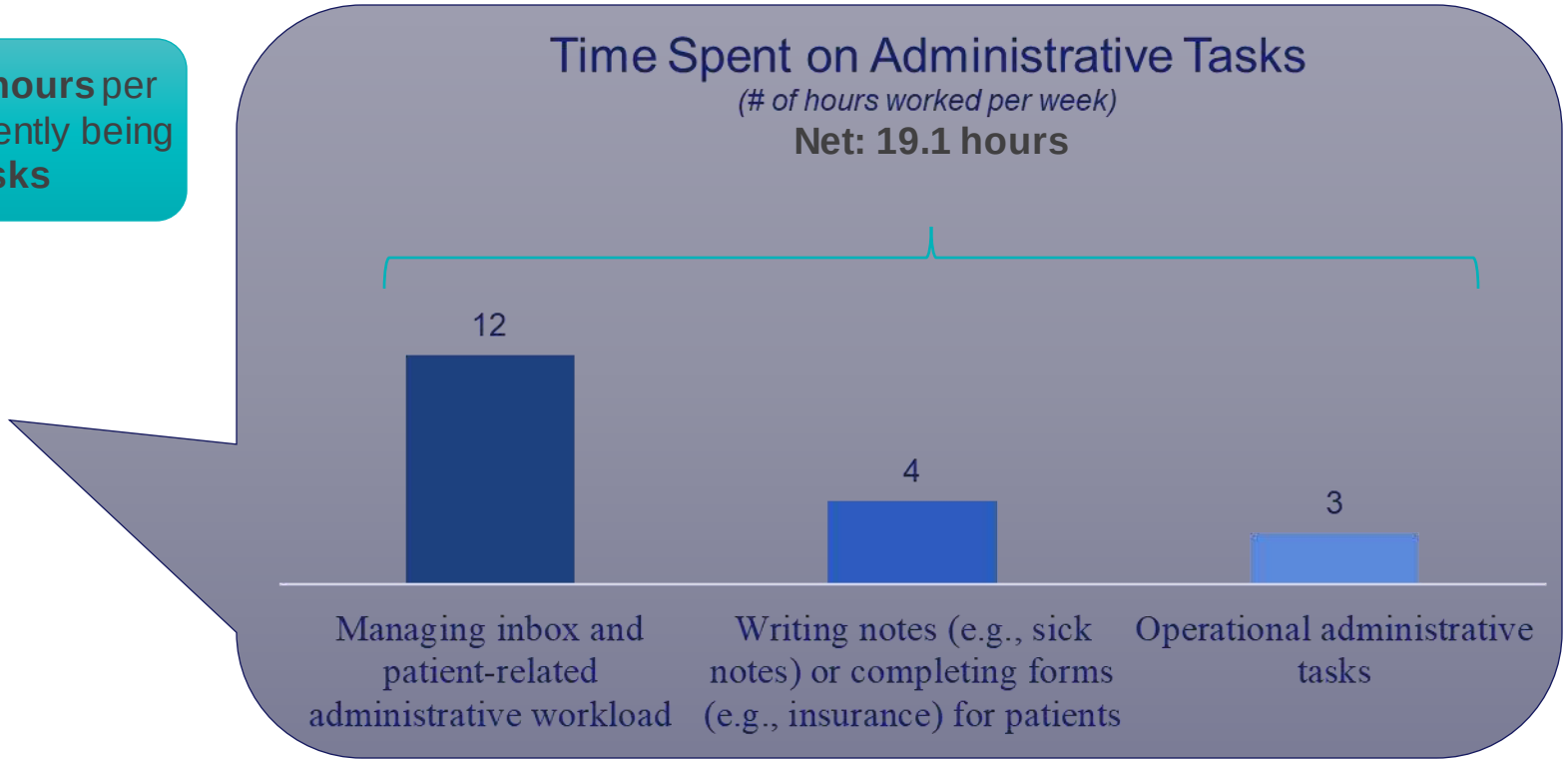
Burden/Stress	Access/Referrals
System Challenges & Mandates	Obligations

Largest Critical Challenges need priority focus.

Administrative burden is the largest challenge impacting family doctors' day-to-day work life: two-fifths of their working hours are dedicated to administrative tasks.

Physicians work on **average 47.7 hours** per week; **40% of those hours** are currently being spent **on administrative tasks**

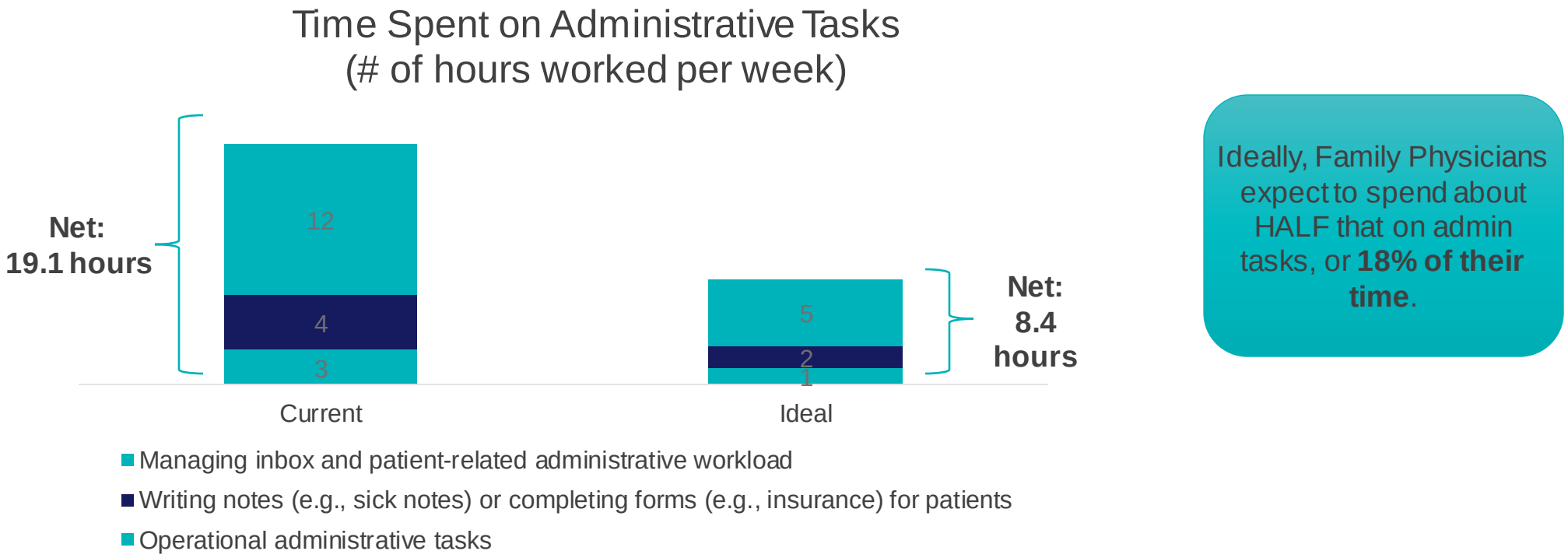




Q14. On average, how many hours do you work each week? Please consider all hours you spend on your practice, including the time you actively see patients as well as the time you are not seeing patients but conducting tasks related to being a family physician.
Q15. Out of that total number of work hours, on average how many hours per week do you spend on:
Base: Total Sample (n=1,343)

Manageable Time on Administrative Tasks

In an ideal world, family doctors envision spending HALF the time they do now on administrative tasks.



Ideally, Family Physicians expect to spend about HALF that on admin tasks, or **18% of their time**.

Q14. On average, how many hours do you work each week? Please consider all hours you spend on your practice, including the time you actively see patients as well as the time you are not seeing patients but conducting tasks related to being a family physician.
Q15. Out of that total number of work hours, on average how many hours per week do you spend on:
Q16. And in an average week, what would realistically be the ideal number of hours you would spend on:
Base: Total Sample (n=1,343)

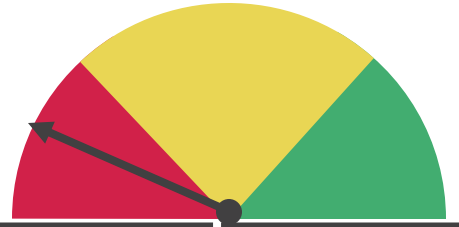
Most concerning, this has led to a crisis situation for the future of the family physician profession: family physicians are feeling VERY unlikely to recommend a career in family medicine.

This crisis is present across **ALL** Family Physicians: regardless of age, tenure, patient type, location.

NPS for practice model also shows consistent discontent. Those working in FHT-FHNs are slightly higher than average at -62. FHT-FHOs are -70 (though a very small sample size). Neither is an NPS reflective of satisfaction.

NPS* (Net Promoter Score) for the Family Physician Profession

-70



NPS* *(% Promoters – % Detractors)*	Age			Career Stage			Gender Identity**	
	<35 yrs	35-54 yrs	55+ yrs	10 years or less	11 to 24 years	25+ years	Man	Woman
Base (n)	309	746	283	662	406	275	419	873
Column Name	A	B	C	D	E	F	G	H
NPS= -100 to -51 / NPS= -50 to 50 / NPS= 51 to 100	-72	-73	-60	-72	-77	-55	-67	-70

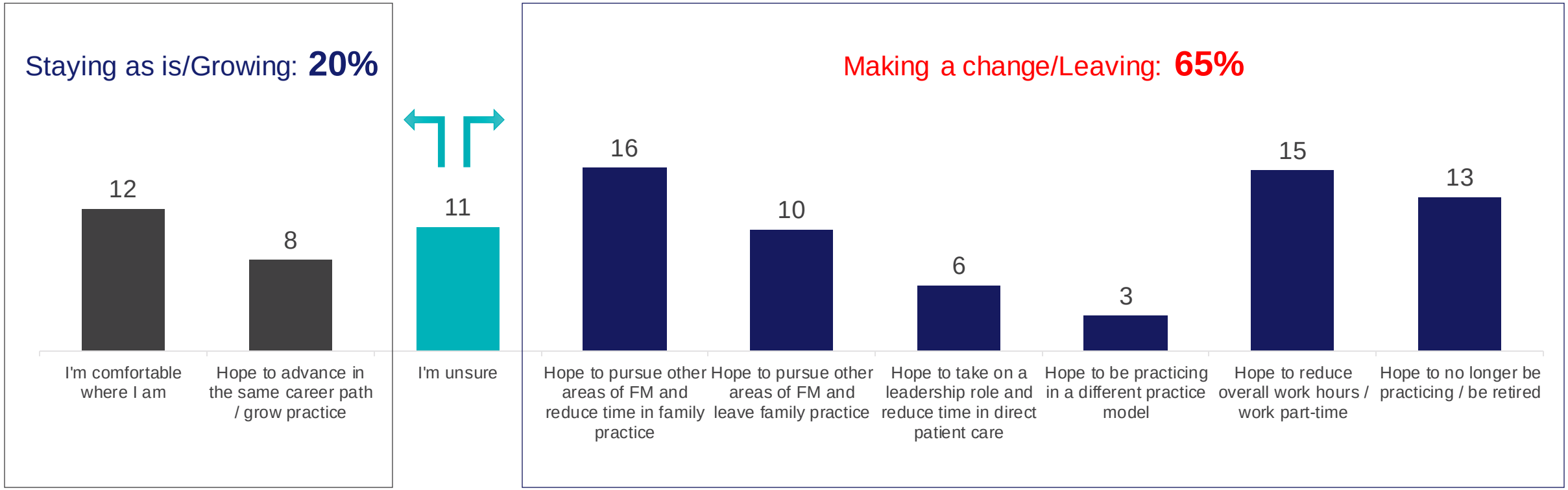
Q17. On a scale of 0 to 10, where 0 is "I definitely will not recommend" and 10 is "I definitely will recommend", how likely are you to recommend a career as a family physician to other people, if asked?
Base: Total Sample (n=1,343)
*NPS (Net Promoter Score) is a representation of positivity and enthusiasm felt about a brand/service ranging from -100 to 100. It is calculated as follows: % of Promoters (likelihood to recommend=9-10) minus % of Detractors (likelihood to recommend=1-6), **Sample size too small to report Non-binary/Nonconforming (n=9)

Future Looks Dire

Specifically, **two-thirds of family doctors are planning to make a change or leave the career** in the next 5 years.

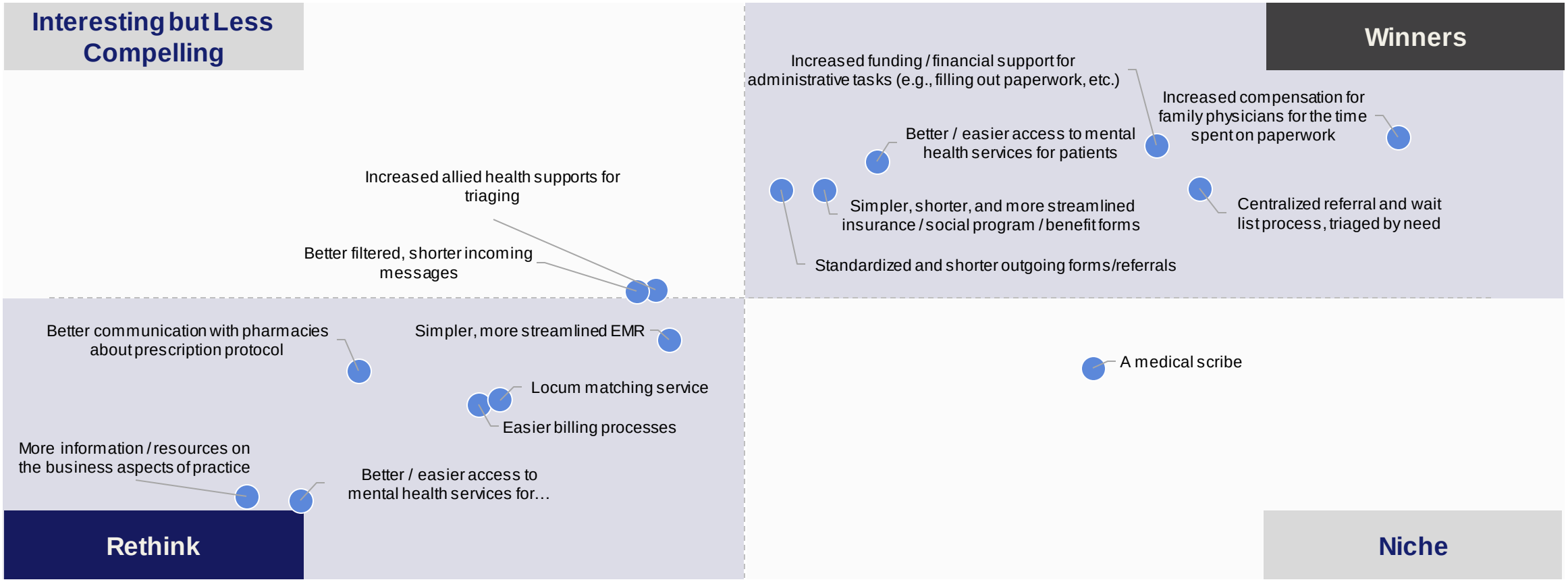
Next 5 years of career

(% selected)



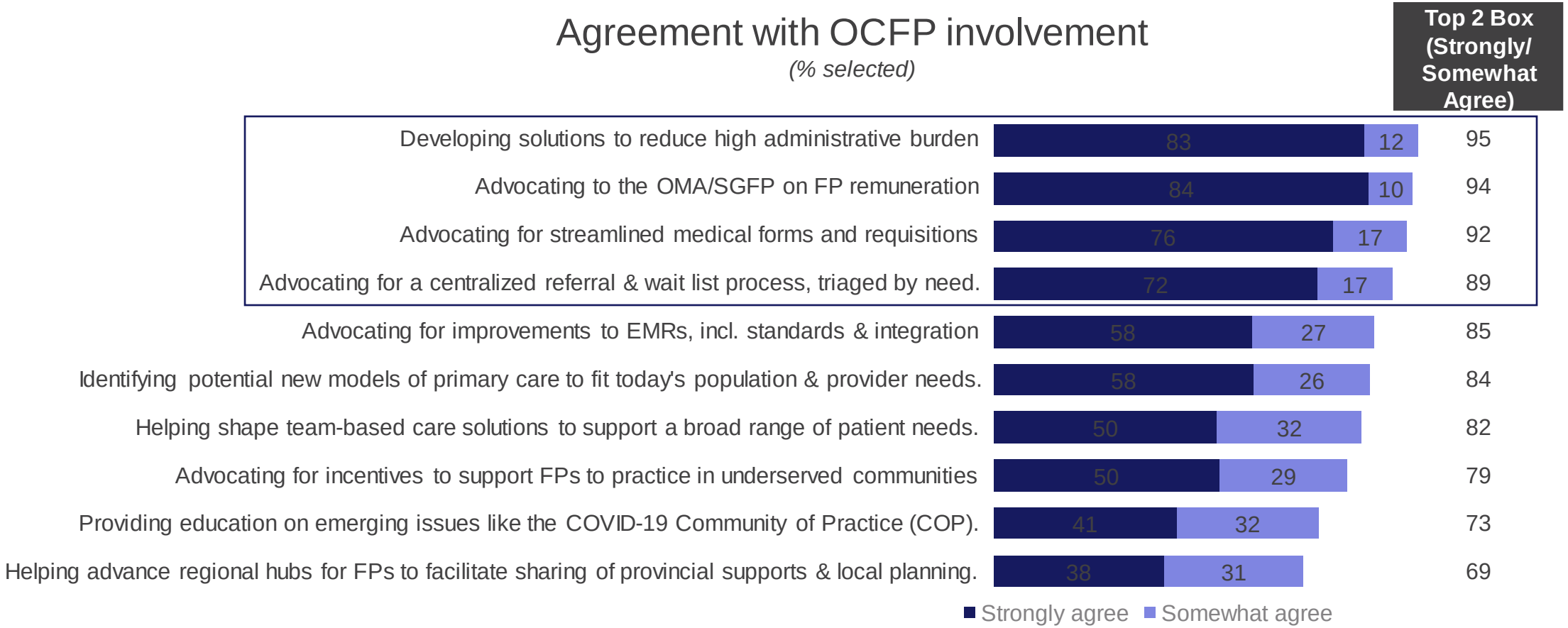
Q19. Where do you envision your career to be within the next five years?
Base: Total Sample (n=1,343)

Quadrant Map – Potential Solutions



Q30. Idea Screening task: On the next few screens we are going to show you some ideas for potential solutions and would like to know which solutions, if implemented, would help you to excel and thrive in your practice. If the idea presented would immediately improve your practice, select the □ or swipe right. If the idea presented would not immediately improve your practice, select the X or swipe left. After you select two ideas that would immediately improve your practice, you will be asked to tell us which ONE would have the most immediate impact.
Base: Total Sample (n=1,343)

Family Physicians WANT OCFP to be involved in advocating for them. They STRONGLY agree OCFP should be advocating on their behalf and helping develop solutions to the burden they are facing.



Q33. How much do you agree or disagree that the OCFP should be involved in the following?
Base: Total Sample (n=1,343)

TAB 18

CMA 2021

National Physician Health Survey

Prepared for the Canadian Medical Association

August 24, 2022

Association médicale canadienne | Canadian Medical Association

Ipsos

Table of contents

Executive summary

With physicians and medical learners experiencing unprecedented levels of personal and professional distress, supporting health and wellness in medicine has never been more important. The Canadian Medical Association (CMA) is committed to bringing the profession together to work to achieve our shared vision of better health, health care and a thriving health workforce.

With this in mind, the CMA conducts a national survey every three to four years to monitor health and wellness trends among physicians in Canada. Even before the global COVID-19 pandemic was declared in March 2020, research showed physicians are at a high risk of developing symptoms of burnout, depression and other psychological distress (2017 NPHS).

The pandemic has only exacerbated these issues. While everyone has been affected by personal stressors, physicians have had to face additional workplace and systemic challenges. With physician wellness as one of the CMA's key priorities, the 2021 NPHS comes at a pivotal juncture as the need to reform Canadian health care system intensifies.

The overarching goal of the 2021 NPHS is to generate an in-depth, up-to-date and relevant data set for a range of audiences, including organizations, researchers, educators and stakeholders, to inform and advance physician wellness initiatives. The survey uses an equity lens to track specific demographic subgroups; the results will help inform recommendations for system-level changes to improve physician health and wellness — from medical school through retirement. The survey is also crucial in supporting the work of the CMA as outlined in *Impact 2040*, a bold strategy to improve health, health care and the health workforce.

In comparing the results of the 2021 NPHS with those of the 2017 survey, it's clear that physicians' well-being has decreased significantly; indeed, many rate their mental health as being worse now than before the pandemic. Notably, there has been a sharp increase in the proportion of respondents reporting burnout and suicidal ideation in the past 12 months (1.7 and 1.5 times higher, respectively) compared with in 2017. It's likely that the pandemic has contributed to these increases, and this is particularly true among practising physicians, for whom larger shifts were seen since 2017 on several psychological indictors compared with medical residents.

Overall, the majority of respondents score low on professional fulfillment, which consists of sentiments around contentment, satisfaction and meaningfulness in one's work. Those who score low on professional fulfillment also show greater signs of fatigue and a lack of work–life integration; they are significantly more likely to be burned out and less likely to be thriving in terms of mental health.

The key findings from the study reveal that numerous subgroups are experiencing more negative wellness outcomes, including medical residents; those under 35 years of age; those identifying as women; those practising six to 10 years; caregivers of a child and/or parent or family member in the home; those living with disabilities; and those working in small town/rural or isolated/remote areas.

Still, not all the results are discouraging: there are signs of a culture shift toward prioritizing wellness. That is, medical residents and younger physicians report accessing support for their mental health challenges more frequently than practising physicians who are at a later career stage. While some of those who need wellness supports are accessing them, there are still significant barriers to overcome, such as stigma, availability and concerns around confidentiality.

A total of 4,121 physicians, medical residents and medical students completed the 2021 NPHS (*n* = 3,489 practising physicians, *n* = 375 medical residents, *n* = 257 medical students) using an open link survey offered in both English and French from Oct. 13 to Dec. 13, 2021. The survey was promoted by the CMA via email to its members, social media and creative advertising and through the CMA's communications channels, including partner organizations.

Respondents participated in the survey voluntarily for no monetary compensation and were asked numerous questions capturing behavioural, occupational and psychological factors. This report includes responses from practising physicians and medical residents only (*n* = 3,863 henceforth referred to as "respondents") and compares the results for key measures with data from the baseline 2017 NPHS.

Background/Introduction

Being a physician can be deeply gratifying, but it also comes with stresses and challenges that can take a toll on one's health and wellness. Heavy workloads, demanding standards of training and practice, and complex practice environments are just some of the factors that can put any physician at higher risk of personal and professional dissatisfaction, burnout and depression. The impacts of this — on physicians, on patient care and on the performance of the overall health system — make supporting physician health and wellness on imperative for the CMA and the system at large.

Previously, there was a lack of national data on health and wellness indicators for physicians in Canada. In response to this critical gap in knowledge, the CMA conducted the 2017 National Physician Health Survey (NPHS) to gain a deeper understanding of how physicians and medical residents are affected by a multitude of factors impacting their health and wellness. The goal of the 2017 NPHS was to generate an up-to-date and relevant baseline dataset for use by other organizations, researchers, educators and stakeholders and to use this dataset to inform and advance physician health initiatives. The survey included psychological measures (e.g., burnout, depression screening, suicidal ideation, mental health), behavioural measures (e.g., physical activity levels, sleep, diet) and occupational measures (e.g., work hours, collegiality, career satisfaction), as well as measures related to awareness of available physician health services, use of such services and barriers to accessing services.

The overarching goal for the 2021 NPHS was to generate an up-to-date and relevant dataset for a range of audiences, including organizations, researchers, educators and stakeholders, to inform and advance physician wellness initiatives, as well as support other strategic priorities for the CMA Enterprise. The COVID-19 pandemic drew attention to a deeply concerning mental health crisis. This is the very socio-cultural context that can provide essential data on major mental health and wellness indicators pertinent to the functioning of physicians. In general, how well are Canadian physicians coping with the pandemic? How different are mental health outcomes from the 2017 baseline data? As with socio-cultural vulnerabilities identified in managing a pandemic (e.g., age, gender/sexual orientation, racial/ethnic identity, education, socioeconomic status, occupation, physical/clinical comorbidities), are there key risk groups in the physician population? The purpose of this second iteration of the NPHS is to track changes in wellness indicators and to understand the key drivers of those changes. A secondary aim of this study is to identify demographic subgroups that are more vulnerable to poorer outcomes.

Moving forward, the CMA aims to administer the NPHS on a continuous, three-to-four-year cycle to ensure that data remain up to date and relevant. This allows for making comparisons between datasets over the years, to track any improvements and/or declines in wellness, as well as to identify emerging challenges facing physicians.

Methodology

Survey design

The development of the NPHS was guided by an Expert Working Group (EWG) including representatives with physician health expertise from the Forum of Canadian Physician Health Programs, the College of Family Physicians of Canada (CFPC), the Association of Faculties of Medicine of Canada (AFMC), the Canadian Medical Protective Association (CMPA) and Well Doc Alberta. The group was led and supported by internal expertise from the CMA. A third-party research firm was commissioned to collect and analyze the data with oversight from the CMA Physician Wellness and Medical Culture Team.

To begin the questionnaire drafting process, the 2017 study was reviewed to identify priority areas to obtain tracking data for comparison purposes. The EWG, including the CMA team, then generated a list of new concepts to be included in the current survey. From this, a draft of the 2021 questionnaire was developed, which was later edited (e.g., removing, rewording and rearranging questions) with an eye to maintaining sufficient consistency to enable comparison with 2017 results. The average length of the survey was 30 minutes.

The 2021 NPHS expands upon the 2017 NPHS to include a wider variety of concepts within the broad categories of psychological factors, behavioural factors, social support, environmental/cultural factors, accessing wellness supports and the impact of the COVID-19 pandemic. Please refer to Appendix C for the full questionnaire.

Before proceeding with the survey, ethics approval was obtained from the University of Ottawa Health Sciences and Science Research Ethics Board.

Participants and procedure

An open link survey, offered in both English and French, was promoted by the CMA via email to CMA members, social media, creative advertising and CMA communications channels including partner organizations. An open link survey methodology was used to ensure that physicians beyond the CMA membership were invited. The survey was open from Oct. 13 to Dec. 13, 2021. Participation in this study was voluntary.

A total of 4,121 physicians and medical learners completed the 2021 NPHS (*n* = 3,489 practising physicians, *n* = 375 medical residents, *n* = 257 medical students). This report includes responses from practising physicians and medical residents only (total *n* = 3,864) to facilitate comparison of results to the 2017 NPHS. When referring to responses from practising physicians and medical residents **combined** in this report, the term “respondents” is used. Note that a separate report on the medical student results is forthcoming.

Moreover, a separate survey was conducted during the fall/winter of 2021 among a sample of non-physician, employed Canadians (*n* = 1,973). This Employed Canadian Population Comparator Survey serves as a benchmark. The results for this comparator study will also be provided in a forthcoming report.

Throughout the NPHS 2021 report, special attention has been paid to various socio-demographic groups, including career stage (i.e., practising physicians vs. medical residents), gender, age, area of practice, years in practice, community size, disability and caregiver status.

Table 1 below provides a breakdown of the respondent sample.

Respondent sample counts and proportions

	Base size n	Proportion
TOTAL sample	**3,864**	**100%**
PHYSICIAN STAGE		
Practising physician	3,489	90.3%
Resident	375	9.7%
GENDER		
Men	1,486	38.5%
Women	2334	60.4%
Neither applies[1]	12	0.3%
No response	32	0.8%
AGE		
<35	662	17.1%
35-54	1,822	47.2%
55+	1,361	35.2%
AREA OF PRACTICE		
General Practitioner	1,564	40.5%
Medical Specialist	1,410	36.5%
Surgical Specialist	369	9.5%
Other/Admin[2]	500	12.9%
YEARS IN PRACTICE		
5 or less	469	12.1%
6 to 10	481	12.4%
11 to 20	826	21.4%
21 to 30	803	20.8%
Over 30	905	23.4%

	Base size n	Proportion
COMMUNITY SIZE		
Urban/suburban	2,750	71.2%
Small town/rural	740	19.2%
Isolated/remote	108	2.8%
Cannot identify/ prefer not to answer		
DISABILITY		
Self-identify as having disability	794	20.5%
Does not self-identify as having a disability	2,945	76.2%
CAREGIVER STATUS		
Caregiver of parent(s) and/or child(ren)	1,829	47.3%
Not a caregiver	2,035	52.7%
Caregiver of child(ren)	1,551	40.1%
Caregiver of parent(s)	393	10.2%
Caregiver of both parent(s) and child(ren)	115	3.0%
ETHNIC AND RACIAL IDENTITY[3]		
Self-identify as 'White' only	2,857	73.9%
Do not self-identify as 'White' only	644	16.7%
Other mentions	176	4.6%
Indigenous only	66	1.7%
Prefer not to answer	121	3.1%

Table 1. Sample counts and proportions by subgroups of analysis

[1] Note that the proportion of those who selected "Neither applies to me" was too small to run in the subgroup analysis. Several respondents who selected "neither applies to me" identified as "non-binary;" there were also single mentions of "gender neutral," "gender fluid," "Trans FTM - Male."

[2] "Admin" is defined as "administrative position"; "other" includes a range of responses including addictions, critical care, infectious diseases, palliative care, long-term care, among others.

[3] Results by ethnic/racial group were analyzed but there were very few differences at the aggregate level, i.e., identifying as white vs. others. Where differences did exist by ethnic/racial group, it was often due to intersectional characteristics, e.g., Black physicians in the sample were more likely to be medical specialists and with greater number of years in practice.

The sizes of the overall sample and the subgroups with larger sample sizes were sufficient to achieve statistical power; however, this was not the case for subgroups with small sample sizes (e.g., practising in isolated/remote areas).

In reporting, sample sizes may be further reduced because of survey skip logic, exclusion of "prefer not to answer" responses, respondents not giving consent to collect data on sensitive question topics, and respondents not completing the optional section of questions asked near the end of the survey.

In terms of overall representativeness of the respondent sample to the demographic distribution of practising physicians and medical residents in Canada, women in the study are over-represented, as are those in the Atlantic region (New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador), the Prairies (Alberta, Manitoba and Saskatchewan) and British Columbia and the Territories (Northwest Territories, Yukon and Nunavut). Respondents in Ontario and Quebec are under-represented in the respondent sample. As a part of the initial analysis, the data were weighted to determine how outcomes might be affected by the weighting. It was found that there were no major differences in outcomes when comparing the weighted and unweighted datasets. The decision was, therefore, made to leave the data unweighted to minimize the interaction of the weighting of a variable with the weighting of another variable.

Please refer to Appendix A for more details on the methodology for this research.

Measures

The NPHS is made up of a variety of scales and questions that were used to assess psychological factors (mental health and well-being, burnout, anxiety, etc.), as well as behavioural and occupational factors related to physician wellness. These were carefully selected on the basis of several criteria, including psychometric properties.

Psychological indicators included overall mental health and well-being (Mental Health Continuum Short Form [MHC-SF]), burnout (two-item Maslach Burnout Inventory),[4] anxiety symptoms (General Anxiety Disorder 7-Item Scale), depression screening (Patient Health Questionnaire–2), professional fulfillment (Professional Fulfillment Index) and suicidal ideation.

Behavioural and social support indicators included having a personal primary care physician, level of fatigue/optimal sleep, participation in self-care activities, healthy lifestyle barriers and perceived social support.

Occupational indicators included task-specific work hours, psychological safety, collegiality, workplace wellness supports, workplace harassment and bullying, work–life integration, satisfaction with efficiency/resources, and professional misconduct inquiries (i.e., college complaint or lawsuit).

Please refer to Appendix C for the full survey instrument.

Statistical analyses

The general procedure for statistical analysis in this report is as follows:

- **Descriptive statistics** were generated, which were then cross tabulated with demographic groups of interest (e.g., physician stage, gender, age, years of practice, type of physician, community size, self-identification of disability, and caregiver status).

[4] Note that the survey asked the full set of items for the Maslach Burnout Inventory for Human Health Services (MBI-HSS) for professionals. The results of further investigations will be presented in additional publications.

- A **chi-square test** was carried out on many measures:
  - In the instance of a 2x2 relationship being tested, statistical significance was taken to mean a *p*-value equal to or less than 0.05.
  - In the instance of a relationship other than 2x2 being tested, adjusted residuals were calculated for each category of the cross-tabulation. An adjusted *p*-value calculation was done, which was compared with a more conservative threshold for significance that considered total number of categories tested. Note that in some cases, base sizes were too small for statistical differences to show.
  - Chi-square tests were **not** run for questions with multiple response options (i.e., "select all that apply," such as barriers to maintaining a healthy lifestyle).
  - Chi-square values, degrees of freedom and *p*-values for statistically significant differences are noted in Appendix B.
- A ***t*-test** (95% confidence interval) was used to determine a significant difference between the means of numerical variables (e.g., total hours worked) for subgroups. It was also used in questions that were multi-select to help guide interpretation of the data.

Notes on terminology and reporting conventions

TERMINOLOGY

This report includes responses from both practising physicians and medical residents. When reporting on the two groups is combined, the umbrella term "respondents" is used. Findings for each group are also reported on separately, with the groups referred to as "practising physicians" and "medical residents."

REPORTING CONVENTIONS

Unless otherwise indicated, all questions reported exclude "don't know" and/or "not applicable" responses.

Statistical differences determined by chi-square testing are indicated by green or red lettering/ asterisks, where green means significantly higher and red means significantly lower. Statistical differences determined by *t*-tests are indicated by green and red arrows.

The term "statistically significant" is clearly stated in reporting on statistical differences (using chi-square tests or *t*-tests). For cases where there are notable differences that are **not** statistically significant, the terms "more likely" or "less likely" are used, and the results are not colour coded.

Where applicable, tracking to 2017 NPHS is provided. Note that respondents were not asked their age in 2017, so there are no tracking comparisons available for this subgroup.

In addition, reporting in the NPHS 2017 on key psychological factors included *no responses*. These *no responses* were excluded from the data in the NPHS 2021 report, resulting in minor discrepancies in the proportions reported for 2017 data in the 2017 and 2021 NPHS reports. [5]

[5] Example: In 2017, the incidence of flourishing mental health was 58%. In removing the 2017 *no responses*, the incidence increased to 63%. For reference, see: CMA NATIONAL PHYSICIAN HEALTH SURVEY

Survey results

Section 1. Psychological factors

OVERALL MENTAL HEALTH

While almost half of respondents are classified as "flourishing" in their mental health, an equal proportion are moderately" mentally healthy, and almost one in 10 are "languishing."

Mental health and well-being are measured using the Mental Health Continuum – Short Form (MHC-SF).[6] The scale measures mental health on a continuum from positive feelings and high psychosocial functioning (i.e., flourishing mental health) to lower levels of positive feelings and impaired psychosocial functioning (i.e., "languishing mental health").[7] Results show that over half of respondents are classified as either "moderate" (46%) or "languishing" (7%) in their mental health, while 47% are classified as "flourishing." Practising physicians are more likely than medical residents to be classified as "flourishing" (48% vs. 40% of medical residents).[8]

Mental Health Continuum – Short Form (MHC-SF)

MHC-SF is a scale measuring subjective well-being. Individuals are classified into categories of flourishing, moderate or languishing mental health on the basis of responses to emotional, psychological, and social well-being items.

The presence of positive feelings and positive functioning in life is characterized as flourishing mental health and the absence of is characterized as languishing. Those who are neither flourishing nor languishing are moderate in mental health.

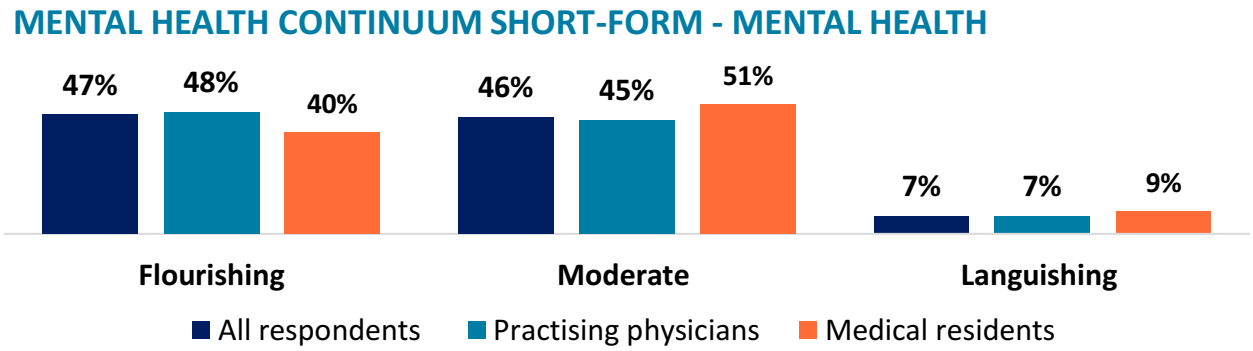


Figure 1. Mental Health Continuum Short-form (MHC-SF) Index created from responses to question 64. How often in the past month did you feel…Base: All respondents who opted into additional survey question (n = 3234), practising physicians (n = 2933), medical residents (n = 301).

[6] MENTAL HEALTH CONTIUUM SHORT-FORM (MHC-SF)INDEX. Responses to 14 questions assessing emotional well-being and aspects of psychological and social functioning are scored and scaled to categorize respondents into one of three categories (languis hing, moderate or flourishing).

[7] Corey L. M. Keyes. (2002). The Mental Health Continuum: From Languishing to Flourishing in Life. Journal of Health and Social Behavior, 43(2), 207–222. https://doi.org/10.2307/3090197

[8] P-value 0.045, not statistically significant but on the threshold.

Compared with before the pandemic, the proportion of respondents who are "flourishing" in mental health has declined significantly.

Overall, mental health among respondents has declined significantly since 2017: 47% are now classified as "flourishing" compared to 63% in 2017 (–16 percentage points). A larger proportion are classified as having "moderate" mental health, 46% compared with 33% in 2017 (+13 percentage points), and 7% are classified as "languishing" (+3 percentage points since 2017).

ALL RESPONDENTS	2021	2017	Percentage point difference between 2021 and 2017
Flourishing	47%	63%	-16
Moderately mentally healthy	46%	33%	+13
Languishing	7%	4%	+3

Table 2. Mental Health Continuum Short-form (MHC-SF) Index Categories, 2021 vs. 2017.

Base: Those answering all items to question 64.

Both practising physicians and medical residents have seen a similar percentage point decline in "flourishing" mental health; among practising physicians, it is now 48% (–16 percentage points since 2017); among medical residents, it is now 40% (–15 percentage points since 2017).

BY PHYSICIAN CAREER STAGE	2021	2017	Percentage point difference between 2021 and 2017
FLOURISHING			
Physicians	48%	64%	–16
Medical residents	40%	55%	–15
MODERATELY MENTALLY HEALTHY			
Physicians	45%	32%	+13
Medical residents	51%	40%	+11
LANGUISHING			
Physicians	7%	4%	+3
Medical residents	9%	6%	+3

Table 3. Classified as "flourishing," "moderate" or "languishing" by career stage, 2021 vs. 2017.

Base: Those who did not answer at least one question item in question 64 were excluded from the calculations.

By gender, age, area of practice, years in practice and community size

Men are *significantly* more likely to be classified as "flourishing" in their mental health (**51%*** vs. 45% of women). Both groups have seen similar decreases in "flourishing" mental health since 2017 (–14 and –16 percentage points, respectively).

Older respondents (55+ years of age) are *significantly* more likely to be "flourishing" than those who are younger (**57%*** vs. **41%*** of those aged 35 to 54 years and 42% of those <35 years old).

There are no significant differences by area of practice. However, note that the proportion of surgical specialists who are languishing has doubled since 2017 (5% in 2017 to 11% in 2021), and the proportion of respondents working in other/administration who are languishing has tripled from (2% in 2017 to 7% in 2021).

With respect to years of practice, physicians with the greatest number of years in practice (over 30 years) are *significantly* more likely to be classified as "flourishing" than those with six to 10 years (**63%*** vs. **35%***, respectively). Those practising from six to 10 years and 11 to 20 years have seen the sharpest declines in "flourishing" mental health (–24 and –22 percentage points, respectively).

There are no significant differences by community size, although those practising in isolated/remote areas are less likely to be "flourishing" and have seen the largest percentage point decrease (–29 percentage points).

	Mental health "flourishing" in 2021	Mental health "flourishing" in 2017	Percentage point difference between 2021 and 2017	Mental health "languishing" in 2021	Mental health "languishing" in 2017	Percentage point difference between 2021 and 2017
GENDER						
Men	**51%***	65%	–14	7%	5%	+2
Women	45%	61%	–16	7%	4%	+3
AGE						
<35	42%	–	–	7%	–	–
35–54	**41%***	–	–	**9%***	–	–
55+	**57%***	–	–	**5%***	–	–
AREA OF PRACTICE						
General practitioner	48%	63%	–15	7%	4%	+3
Medical specialist	45%	62%	–17	7%	5%	+2
Surgical specialist	47%	60%	–13	11%	5%	+6
Other/Admin	51%	84%	–33	7%	2%	+5
YEARS IN PRACTICE						
5 or less	40%	59%	–19	9%	4%	+5
6 to 10	**35%***	59%	–24	10%	4%	+6
11 to 20	40%	62%	–22	9%	5%	+4
21 to 30	49%	65%	–16	6%	4%	+2

	Mental health flourishing" in 2021	Mental health flourishing" in 2017	Percentage point difference between 2021 and 2017	Mental health languishing" in 2021	Mental health languishing" in 2017	Percentage point difference between 2021 and 2017
Over 30	63%*	74%	–11	4%	3%	+1
COMMUNITY SIZE						
Urban/suburban	47%	63%	–16	7%	4%	+3
Small town/rural	46%	64%	–18	9%	5%	+4
Isolated/remote	36%	65%	–29	3%	2%	+1

Table 4. Classified as "flourishing" or "languishing" by gender, age, area of practice, years in practice and community size, 2021 vs. 2017.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

WELL-BEING

A majority of respondents score higher on emotional and psychological well-being compared with social well-being.

Using the Mental Health Continuum Short Form sub-indices,[9] respondents are more likely to score higher on emotional (79%) and psychological well-being (77%) than they are on social well-being (53%).

Practising physicians are *significantly* more likely to score high on psychological well-being (78%* vs. 72% of medical residents).

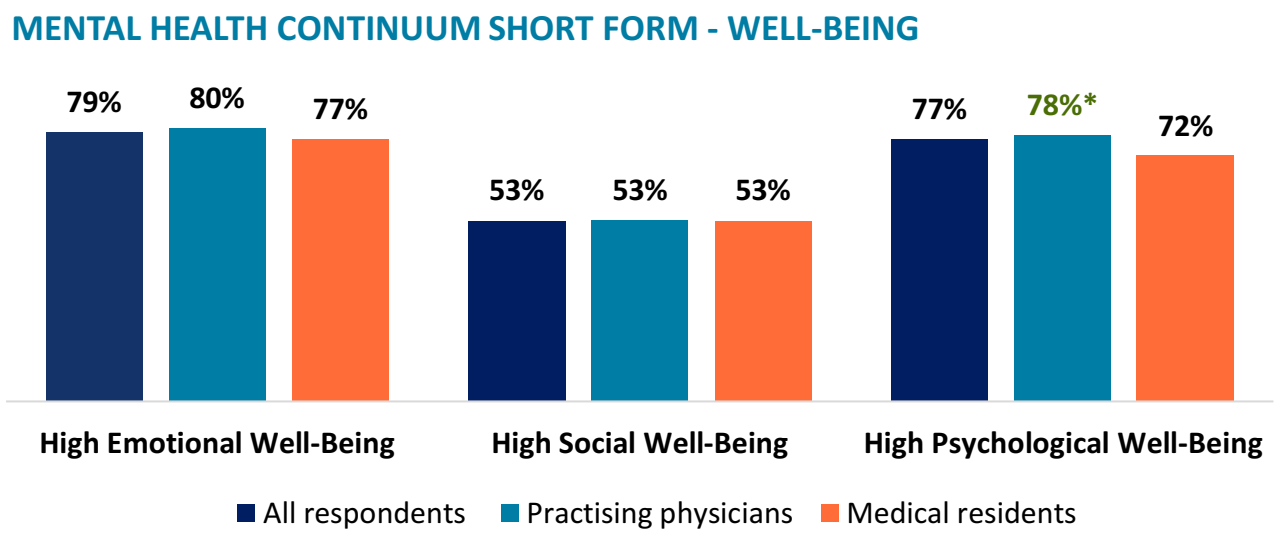


Figure 2. MENTAL HEALTH CONTIUUM SHORT FORM (MHC-SF) INDEX. Responses to question 64. Base: All respondents who opted into additional survey question; those who did not answer at least one question item were excluded from the calculations. (n = 3234), practising physicians (n = 2933), medical residents (n = 301).

[9] MHC-SF indices: Each response is scored 00 = "'Never," 1.00 = "Once or twice," 2.00 = "About once a week," 3.00 = "About 2 or 3 times a week," 4.00 = "Almost every day," 5.00 = "Every day." Sum scores for each respondent are classified above or below midpoint. Emotional well-being: 0–7 is low; 8–15 is high. Social well-being: 0–12 is low; 13–25 is high. Psychological well-being: 0–15 is low; 16–30 is high. Those who did not answer at least one question item were excluded from the calculations.

Across all three scales related to well-being (emotional, social and psychological well-being), there have been significant declines since 2017, with the largest decline in social Well-being (–16 percentage points).

BY PHYSICIAN CAREER STAGE	2021	2017	Percentage point difference between 2021 and 2017
HIGH ON EMOTIONAL WELL-BEING			
All respondents	79%	91%	–12
Physicians	80%	91%	–11
Medical residents	77%	88%	–11
HIGH ON SOCIAL WELL-BEING			
All respondents	53%	69%	–16
Physicians	53%	69%	–16
Medical residents	53%	67%	–14
HIGH ON PSYCHOLOGICAL WELL-BEING			
All respondents	77%	86%	–9
Physicians	78%*	87%	–9
Medical residents	72%	83%	–11

Table 5. Score high on emotional, social and psychological well-being indices by career stage, 2021 vs. 2017. Base: All respondents who opted into additional survey question (n = 3234), physicians (n = 2933), medical residents (n = 301).

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

By gender, age, area of practice, years in practice and community size

While there are few differences between men and women in terms of emotional and social well-being, men are *significantly* more likely to score high on psychological well-being compared with women (**80%*** vs. 76%). Women have seen a steeper decline in social and psychological well-being compared with men (–17 and –10 percentage points, respectively).

Older respondents (55+ years of age) are *significantly* more likely than those 35 to 54 years old to score high across all of the subscales:

1. Emotional well-being (**83%*** vs. **76%***)
2. Social well-being (**62%*** vs**. 47%***)
3. Psychological well-being (**85%*** vs. **73%***)

With respect to years of practice, physicians practising 30 or more years are *significantly* more likely than those practising 11 to 20 years to score high on emotional well-being (**87%*** vs. **73%***, respectively). This group is also *significantly* more likely than those practising six to 10 years to score high on both social well-being (**65%*** vs. **41%***, respectively) and psychological well-being (**87%*** vs. **69%***, respectively).

There are no significant differences by area of practice and community size.

	High emotional well being 2021	High emotional well being 2017	Percentage point difference between 2021 and 2017	High social well being 2021	High social well being 2017	Percentage point difference between 2021 and 2017	High psycho logical well being 2021	High psycho logical well being 2017	Percentage point difference between 2021 and 2017
GENDER									
Men	81%	91%	–10	55%	69%	–14	80%*	86%	–6
Women	79%	91%	–12	52%	69%	–17	76%	86%	–10
AGE									
<35	82%	–	–	51%	–	–	75%	–	–
35–54	76%*	–	–	47%*	–	–	73%*	–	–
55+	83%*	–	–	62%*	–	–	85%*	–	–
AREA OF PRACTICE									
General practitioner	81%	92%	–11	54%	70%	–16	79%	87%	–8
Medical specialist	78%	91%	–13	51%	68%	–17	77%	86%	–9
Surgical specialist	75%	86%	–11	51%	64%	–13	76%	83%	–7
Other/ Admin	81%	96%	–15	56%	81%	–25	75%	94%	–19
YEARS IN PRACTICE									
5 or less	79%	91%	–12	45%	67%	–22	72%	85%	–13
6 to 10	79%	94%	–15	41%*	67%	–26	69%*	86%	–17
11 to 20	73%*	90%	–17	48%	67%	–19	73%	83%	–10
21 to 30	79%	89%	–10	57%	67%	–10	81%	88%	–7
Over 30	87%*	95%	–8	65%*	75%	–10	87%*	91%	–4
COMMUNITY SIZE									
Urban/ suburban	80%	91%	–11	54%	69%	–15	78%	87%	–9
Small town/ rural	78%	90%	–12	50%	69%	–19	76%	86%	–10
Isolated/ remote	79%	89%	–10	52%	66%	–14	75%	86%	–11

Table 6. Score high on emotional, social and psychological well-being indices by gender, age, area of practice, years in practice and community size, 2021 vs. 2017.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

BURNOUT

Over half of respondents surveyed are experiencing symptoms of burnout, 1.7 times higher compared with pre-pandemic.

Burnout was measured using the Maslach Burnout Inventory (MBI) two-item scale.[10] Over half of respondents (53%) report symptoms of burnout, that is, they report a high level on at least one burnout indicator of depersonalization (28%) or emotional exhaustion (50%).

The prevalence of overall burnout is higher among medical residents (**58%*** vs. 52% of practising physicians), specifically on depersonalization (35% vs. 28% of practising physicians).

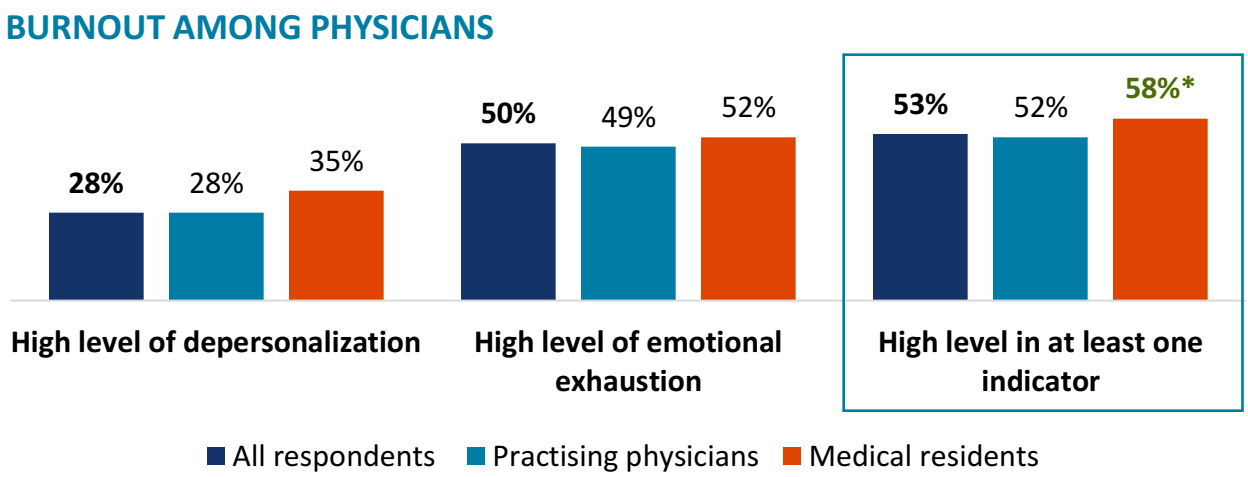


Figure 3. Maslach Burnout Inventory two-item scale. Base: All respondents (n = 3864), practising physicians (n = 3489), medical residents (n = 375).

Burnout is significantly higher among respondents in 2021 compared with those in the 2017 NPHS (53% in 2021 vs. 31% in 2017, 1.7 times higher or +22 percentage points). Both depersonalization (28% in 2021 vs. 16% in 2017) and emotional exhaustion (50% in 2021 vs. 26% in 2017) have roughly doubled.

ALL RESPONDENTS	2021	2017	Percentage point difference between 2021 and 2017
High depersonalization	28%	16%	+12
High emotional exhaustion	50%	26%	+24
High overall burnout	**53%**	**31%**	**+22**

Table 7. Maslach Burnout Inventory individual items and overall burnout, 2021 vs. 2017.

Base: All respondents, practising physicians + medical residents (n = 3864).

[10] MASLACH BURNOUT INVENTORY TWO-ITEM SCALE. Scoring on MBI two-item scale: To be classified as burned out, an individual must experience high levels of emotional exhaustion (item 1 – "I feel burned out from my work or training environment") and/or depersonalization (item 2 – "I have become more callous towards people since I took this job or started this training"). Rating high on these two items in question 41 is defined as occurring at least weekly (i.e., a respondent must select "everyday," "a few times a week" or "once a week" on at least one of the two items to be classified as burned out).

Compared with 2017, overall burnout has increased at a higher rate among practising physicians (1.7 times higher or +22 percentage points) compared with medical residents (1.5 times higher or +19 percentage points).

BY PHYSICIAN CAREER STAGE	Overall burnout in 2021	Overall burnout in 2017	Percentage point difference between 2021 and 2017
Physicians	52%	30%	+22
Medical residents	58%	39%	+19

Table 8. Maslach Burnout Inventory overall burnout, by career stage, 2021 vs. 2017.

By gender, age, area of practice, years in practice and community size

Burnout is *significantly* higher among women (**59%*** vs. 43% of men). The increase in burnout since 2017 is much higher among women (+26 percentage points from 2017 vs. +14 percentage points among men).

Respondents under the age of 54 (**61%***) are *significantly* more likely to be experiencing burnout than those 55 and older (38%).

The prevalence of burnout is *significantly* higher among respondents in general practice/family medicine (**57%***) compared with physicians practising in other/administration positions (**40%***)**.**

Regarding years of practice, respondents with 20 years or less in practice are *significantly* more likely to be experiencing burnout compared to those late in their career (over 30 years): those who have been practising five or less years (**62%***), six to 10 years (**68%***), and 11 to 20 years (**60%***) vs. over 30 years (**32%***). While symptoms of burnout increased across all groups from 2017 to 2021, the largest increase in burnout is among those earlier in their career at 6 to10 years of practice (+35 percentage points from 2017).

Respondents practising in small towns (**58%***) or isolated/remote areas (**60%***) are *significantly* more likely to be experiencing burnout than those in urban/suburban areas (51%*). The rate of increase in burnout is also higher in these two areas: it increased by 27 percentage points among respondents in small town/rural areas and increased by 16 percentage points, among respondents in isolated/remote areas.

	Burnout in 2021	Burnout in 2017	Percentage point difference between 2021 and 2017
GENDER			
Men	43%	29%	+14
Women	**59%***	33%	+26
Age			
<35	**61%***	–	–
35 to 54	**61%***	–	–
55+	38%	–	–

	Burnout in 2021	Burnout in 2017	Percentage point difference between 2021 and 2017
AREA OF PRACTICE			
General practitioner	**57%***	33%	+24
Medical specialist	52%	30%	+22
Surgical specialist	53%	30%	+23
Other/Admin	**40%***	19%	+21
YEARS IN PRACTICE			
5 or less	**62%***	36%	+26
6 to 10	**68%***	33%	+35
11 to 20	**60%***	34%	+26
21 to 30	51%	31%	+20
Over 30	**32%***	19%	+13
COMMUNITY SIZE			
Urban/suburban	51%*	31%	+20
Small town/rural	**58%***	31%	+27
Isolated/remote	**60%***	44%	+16

Table 9. Experiencing burnout by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

ANXIETY

One-quarter of respondents report moderate to severe levels of anxiety.

Using the General Anxiety Disorder 7-Item Scale screening tool,[11] the study finds that one-quarter (25%) of respondents indicate experiencing "severe" (10%) or "moderate" (15%) anxiety. Nearly one-quarter (24%) of practising physicians experience severe/moderate anxiety, while one-third (34%) report "mild" anxiety and 43% "minimal" anxiety.

Overall, medical residents are *significantly* more likely to score moderate/severe on the anxiety scale than practising physicians (**33%*** vs. 24%, respectively), while practising physicians are more likely to classify as having
a minimal level of anxiety (**43%*** vs. 33% of medical residents).

[11] Anxiety (General Anxiety Disorder) 7-Item Scale. This is calculated by assigning scores of 0, 1, 2 and 3 to the response categories, respectively, of "not at all," "several days," "more than half the days" and "nearly every day." Scoring is 0–4: minimal anxiety; 5–9: mild anxiety; 10–14: moderate anxiety; 15–21: severe anxiety.

GENERAL ANXIETY DISORDER SCALE

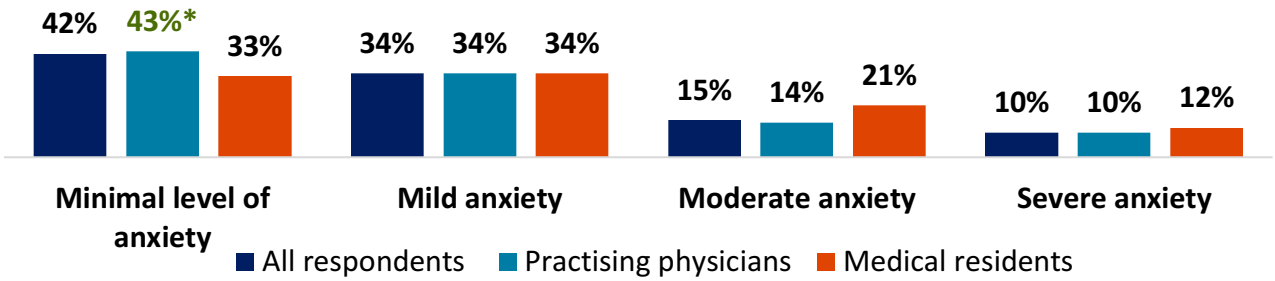


Figure 4. Anxiety (General Anxiety Disorder 7-Item Scale: GAD-7). Base: All respondents (n = 3864), physicians (n = 3489), medical residents (n = 375).

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely to report severe/moderate anxiety (**27%*** vs. 19% of men).

Respondents 35 to 54 years old are *significantly* more likely to be experiencing a severe/moderate level of anxiety (**30%***) compared with those 55+ years old (**15%***).

Physicians practising for six to 10 years are *significantly* more likely to report severe/moderate anxiety (**33%***) compared with those who have been practising over 30 years (**11%***)

There are no significant differences by area of practice or community size.

	% "Severe" + "moderate" anxiety
GENDER	
Men	19%
Women	**27%***
AGE	
<35	29%
35 to 54	**30%***
55+	**15%***
AREA OF PRACTICE	
General practitioner	24%
Medical specialist	26%
Surgical specialist	28%
Other/Admin	21%

	% "Severe" + "moderate" anxiety
YEARS IN PRACTICE	
5 or less	29%
6 to 10	**33%***
11 to 20	27%
21 to 30	24%
Over 30	**11%***
COMMUNITY SIZE	
Urban/suburban	24%
Small town/rural	26%
Isolated/remote	25%

Table 10. Anxiety General Anxiety Disorder) 7-Item Scale, scoring moderate + severe anxiety by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

DEPRESSION (SCREENING)

Not surprisingly, depression is also higher compared with before the COVID-19 pandemic, with almost half of respondents screening positive for depression.

The Patient Health Questionnaire-2 (PHQ-2) depression screening tool was used to measure depression in the survey.[12] Nearly half of respondents surveyed (48%) screened positive for depression, up significantly since 2017 (34%, +14 percentage points). There are no significant differences by career stage: 48% of practising physicians and 50% of medical residents screen positive for depression.

DEPRESSION SCREENING

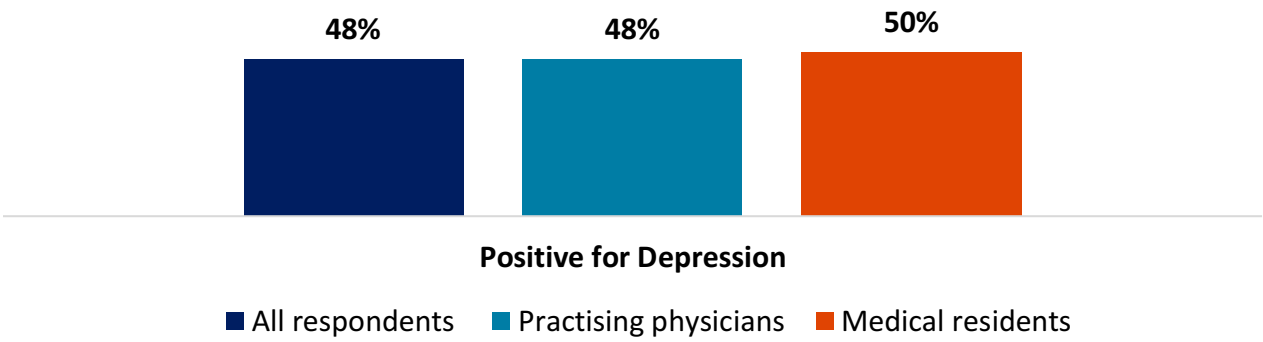


Figure 5. PHQ-2 Depression Scale. Base: All respondents (n = 3864), physicians (n = 3489), medical residents (n = 375).

Interestingly, practising physicians have seen a steep increase in positive screening for depression (48% in 2021 vs. 33% in 2017, 1.5 times higher or +15 percentage points), bringing the scores for practising physicians closer to those consistently reported by medical residents (50% in 2021 vs. 48% in 2017).

BY PHYSICIAN CAREER STAGE	Screen positive for depression in 2021	Screen positive for depression in 2017	Percentage point difference between 2021 and 2017
All respondents	48%	34%	+14
Practising physicians	48%	33%	+15
Medical residents	50%	48%	+2

Table 11. Mental Health Continuum Short-form (MHC-SF) Index Categories, 2021 vs. 2017.

[12] PHQ-2 DEPRESSION SCALE. If respondents answered "yes" to either item 1 ("Felt down, depressed or hopeless for two or more weeks in a row") or 2 ("'Lost interest or pleasure in most things like hobbies, and/or work activities that usually give you pleasure"), they are classified as "positive" for depression. If both items are "no," then they are classified as "negative" for depression.

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely to screen positive for depression (**50%*** vs. 43% of men). Both men and women have seen an increase in positive screening since 2017 (+12 and +13 percentage points, respectively).

Respondents 35–54 years (**53%***) are *significantly* more likely to screen positive for depression compared with those 55+ years old (**41%***).

Positive screening for depression is more prevalent among those in the earlier stages of their career. Those practising 6 to 10 years are *significantly* more likely to screen positive for depression (**56%***, +23 percentage points since 2017) compared with those practising over 30 years (**38%***, +10 percentage points since 2017).

Respondents practising in small town/rural areas (**55%***) are *significantly* more likely to screen positive for depression compared with those in urban/suburban areas (**46%***).

There are no significant differences by area of practice.

	% Screen positive for depression 2021	% Positive for depression 2017	Percentage point difference between 2021 and 2017
GENDER			
Men	43%	31%	+12
Women	**50%***	37%	+13
Age			
<35	48%	–	–
35 to 54	**53%***	–	–
55+	**41%***	–	–
AREA OF PRACTICE			
General practitioner	50%	36%	+14
Medical specialist	54%	33%	+21
Surgical specialist	52%	39%	+13
Other/Admin	55%	19%	+36
YEARS IN PRACTICE			
5 or less	49%	35%	+14
6 to 10	**56%***	33%	+23
11 to 20	52%	36%	+16
21 to 30	48%	31%	+17
Over 30	**38%***	28%	+10

	% Screen positive for depression 2021	% Positive for depression 2017	Percentage point difference between 2021 and 2017
COMMUNITY SIZE			
Urban/suburban	**46%***	34%	+12
Small town/rural	**55%***	37%	+18
Isolated/remote	49%	35%	+14

Table 12. PHQ-2 depression scale. Classify as "positive" for depression by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

SUICIDAL IDEATION

Over one-third of respondents report having had thoughts of suicide at some point in their life, almost doubled since before the pandemic.

Over one-third (36%) of respondents have had thoughts of suicide at some point in their life, an increase of +17 percentage points from 2017. There are no significant differences between practising physicians (36%) and medical residents (39%) although the increase is higher among practising physicians (almost doubled, or +18 percentage points from 2017) compared with medical residents (1.4 times higher or +12 percentage points from 2017).

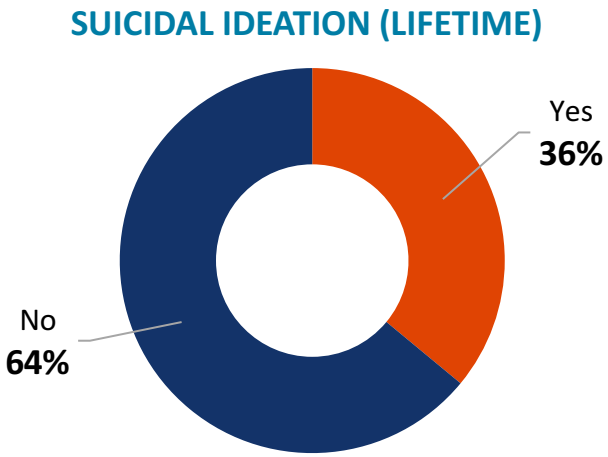


Figure 6. Responses to question 47. Have you had thoughts of suicide? Base: Those respondents consenting to the collection of sensitive data (n = 3750).

BY PHYSICIAN CAREER STAGE	Suicidal ideation (lifetime) in 2021	Suicidal ideation (lifetime) in 2017	Percentage point difference between 2021 and 2017
Total	36%	19%	+17
Physicians	36%	18%	+18
Medical residents	39%	27%	+12

Table 13. Suicidal ideation (lifetime) by physician vs. medical resident, 2021 vs. 2017.

Risk for suicidal ideation increases once physicians start their formal practice. Indeed, practising physicians are at higher risk for suicidal ideation during medical practice (24%), twice the rate compared with earlier stages leading to their medical career (12% in residency, 10% during medical school and 10% before medical school).

	Practising physicians
Yes (lifetime) NET	36%
Yes, before medical school	10%
Yes, during medical school	10%
Yes, during residency	12%
Yes, during medical practice	**24%**

Table 14. Suicidal ideation (lifetime) at different points among practising physicians. Base: Those respondents consenting to the collection of sensitive data AND who have had thoughts of suicide: practising physicians (n = 3386).

By gender, age, area of practice, years in practice and community size

Prevalence of suicidal ideation (lifetime) is *significantly* higher among women (**38%*** vs. 32% of men). Both genders saw an increase from 2017 to 2021, with men reaching +15 percentage points and women +17 percentage points.

Respondents in younger age groups are *significantly* more likely to have ever experienced suicidal ideation (**39%*** of those <35 years old and **38%*** of those 35 to 54 years old vs. 31% of those 55 years and older).

The number of years of practice does not associate significantly with lifetime suicidal ideation; however, those practising six to 10 years have seen the largest increase since 2017 (increased 2.6 times or 26 percentage points), followed by those practising 11 to 20 years (increased 2.3 times or 20 percentage points).

Respondents in urban/suburban areas (**34%***) are *significantly* less likely to have experienced suicidal ideation compared with those in small town/rural areas (**42%***) and are less likely compared with those in isolated/remote areas (48%).

There are no significant differences by area of practice.

	Suicidal ideation (lifetime) in 2021	Suicidal ideation (lifetime) in 2017	Percentage point difference between 2021 and 2017
GENDER			
Men	32%	17%	+15
Women	**38%***	21%	+17
AGE			
<35	**39%***	–	–
35 to 54	**38%***	–	–
55+	31%*	–	–
AREA OF PRACTICE			
General practitioner	37%	20%	+17
Medical specialist	37%	18%	+19
Surgical specialist	30%	16%	+14
Other/Admin	35%	19%	+16
YEARS IN PRACTICE			
5 or less	41%	22%	+19
6 to 10	42%	16%	+26
11 to 20	36%	16%	+20
21 to 30	34%	18%	+16
Over 30	31%	16%	+15
COMMUNITY SIZE			
Urban/suburban	**34%***	18%	+16
Small town/rural	**42%***	19%	+23
Isolated/remote	48%	32%	+16

Table 15. Suicidal ideation (lifetime) by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

Fourteen percent of respondents have had thoughts of suicide in the past 12 months.

Those who indicated having had thoughts of suicide at some point in their life were asked a follow-up question about whether they had thoughts of suicide in the last 12 months ("recent suicidal ideation"). Fourteen percent of respondents (rebased to total) have had thoughts of suicide over the past 12 months, an increase of 6 percentage points from 8% in 2017.

Medical residents are significantly more likely to report suicidal thoughts in the past 12 months (**20%*** vs. 13% of practising physicians).

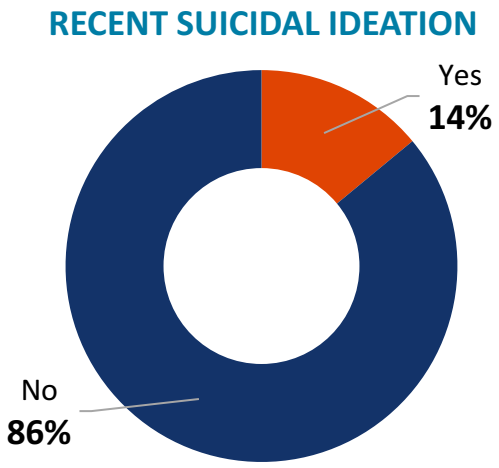


Figure 7. Responses to question 48. Have you had thoughts of suicide in the last 12 months? Base: Those respondents consenting to the collection of sensitive data AND who have had thoughts of suicide, rebased to total (n = 3750).

Even though medical residents are significantly more likely to report recent suicidal ideation (past 12 months), the prevalence among practising physicians increased at a slightly higher rate when comparing data from 2017 to 2021.

The number of practising physicians reporting recent suicidal ideation increased at a higher rate of 1.6 times from 2017 (13% vs. 8%, +5 percentage points); the number of medical residents reporting suicidal thoughts increased at a lower rate of 1.3 times over this same period (20% vs. 15%, +5 percentage points).

	Recent suicidal ideation in 2021	Recent suicidal ideation in 2017	Percentage point difference between 2021 and 2017
Total	**14%**	**8%**	**+6**
Practising physicians	13%	8%	+5
Medical residents	**20%***	15%	+5

Table 16. Suicidal ideation in past 12 months among practising physician vs. medical residents in 2021 vs. 2017. Rebased to total (n = 3750).

By gender, age, area of practice, years in practice and community size

There are no significant differences in the proportions of men and women who experienced suicidal ideation in the past 12 months, although both have seen an increase in prevalence from 2017 to 2021 (+5 percentage points each).

Younger generations tend to have experienced suicidal ideation more in the past 12 months, particularly those aged 35 to 54 years (**16%***) and under the age of 35 (**19%***), compared with 9% of those 55+ years old.

Physicians with 6 to 10 years of practice are significantly more likely to have experienced suicidal ideation in the past 12 months (**21%***, +15 percentage points from 2017) compared with those with over 30 years of practice (**8%***, +4 percentage points from 2017).

There are no significant differences by area of practice or community size, although those practising in isolated/remote areas are more likely than those in urban/rural areas to have had recent suicidal ideation (21% vs. 13%, respectively).

Rebased to total sample	Suicidal ideation past 12 months 2021	Suicidal ideation past 12 months 2017	Percentage point difference between 2021 and 2017
GENDER			
Men	13%	7%	+6
Women	14%	9%	+5
Age			
<35	**19%***	–	
35 to 54	**16%***	–	
55+	9%	–	
AREA OF PRACTICE			
General practitioner	15%	9%	+6
Medical specialist	13%	8%	+5
Surgical specialist	15%	7%	+8
Other/Admin	12%	3%	+9
YEARS IN PRACTICE			
5 or less	18%	12%	+6
6 to 10	**21%***	6%	+15
11 to 20	14%	8%	+6
21 to 30	11%	8%	+3
Over 30	**8%***	4%	+4

Rebased to total sample	Suicidal ideation past 12 months 2021	Suicidal ideation past 12 months 2017	Percentage point difference between 2021 and 2017
COMMUNITY SIZE			
Urban/suburban	13%	8%	+5
Small town/rural	16%	10%	+6
Isolated/remote	21%	13%	+8

Table 17. Suicidal ideation (past 12 months) by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

BOX 1. SUICIDAL IDEATION BY PSYCHOLOGICAL FACTORS

Physicians who are classified as "**languishing**" in mental health are 10 times more likely than those "flourishing" to have had thoughts of suicide in the past 12 months (50% vs. 5%, respectively).

Those who score **high on burnout** are more than three times more likely to have had thoughts of suicide in the past 12 months (21% vs. 6% of those who score low on the burnout scale).

Physicians experiencing **moderate or severe anxiety** are also at higher risk: they are eight times more likely than those who have minimal anxiety to have had thoughts of suicide in the past 12 months (33% vs. 4%, respectively). Among those with a mild level of anxiety, 13% report suicidal thoughts.

Physicians who score positive for **depression** are five times more likely than those scoring negative to have had suicidal thoughts in the past year (25% vs. 4%, respectively).

Section 2. Impact of COVID-19

IMPACT OF COVID-19 ON MENTAL HEALTH

Mental health is self-reported to be worse than before COVID-19.

When asked "Compared with before the COVID-19 pandemic, how would you rate your mental health now?", six in 10 respondents indicated that their mental health is worse now than before the pandemic: 39% rate their mental health as "slightly worse" now than before the pandemic and 21% rate it as "much worse." One-third rate their mental health to be "about the same," while less than one in 10 (8%) rate it as "much better" or "somewhat better" than before the pandemic.

Practising physicians are *significantly* more likely than medical residents to indicate their mental health is "slightly" or "much" worse during the COVID-19 pandemic (**60%*** vs. 53%, respectively).

RATING OF MENTAL HEALTH COMPARED WITH BEFORE THE PANDEMIC

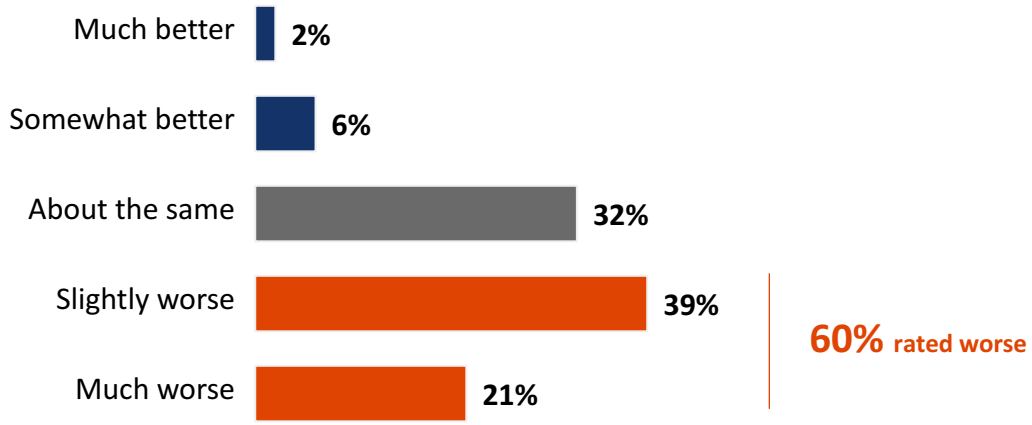


Figure 8. Responses to question 54. Compared with before the COVID-19 pandemic, how would you rate your mental health now? Base: All respondents (n = 3864).

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely than men to say their mental health is worse now than before the pandemic (**64%*** vs. 52% of men).

Respondents aged 35 to 54, compared with those who are older, are *significantly* more likely to rate their mental health as worse than before COVID-19 (**68%*** vs. **50%*** of those aged 55+ years).

Physicians practising six to 10 years (**69%***) and 11 to 20 years (**70%***) are *significantly* more likely to rate their mental health as being worse than before COVID-19, compared with those practising over 30 years (**46%***).

There are no significant differences by area of practice or community size.

	Mental health rated slightly + much worse compared with before COVID 19
GENDER	
Men	52%
Women	64%*
AGE	
<35	58%
35 to 54	68%*
55+	50%*
AREA OF PRACTICE	
General practitioner	61%
Medical specialist	61%
Surgical specialist	59%
Other/Admin	53%

	Mental health rated slightly + much worse compared with before COVID 19
YEARS IN PRACTICE	
5 or less	65%
6 to 10	69%*
11 to 20	70%*
21 to 30	61%
Over 30	46%*
COMMUNITY SIZE	
Urban/suburban	60%
Small town/rural	63%
Isolated/remote	56%

Table 18. Responses to question 54 by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

The largest self-reported contributors to poor mental health during the pandemic are increased workload, rapidly changing work policies/processes and the social impact of COVID-19 public health measures.

Several factors have negatively contributed to the worsening mental health of respondents since the onset of the pandemic. The top four factors are as follows:

- increased workload and/or lack of work–life integration (57%)
- longer time with social restrictions/social isolation (55%)
- rapidly changing policies/processes (55%)
- continued uncertainty about the future (51%)

As seen in the table below, practising physicians are more likely than medical residents to feel the impact of increased workload and/or lack of work–life integration (58% vs. 49%, respectively) and rapidly changing policies/processes (55% vs. 47%). Practising physicians are also more likely than medical residents to select personal factors such as family issues and obligations (35% vs. 27% of medical residents) and financial insecurity (18% vs. 10% of medical residents), as well as health system factors such as long waitlists (35% vs. 14% of medical residents) and adjustment to virtual care (29% vs. 19% of medical residents).

Medical residents are more likely than practising physicians to feel the effects of social restrictions and isolation (72% vs. 53% of practising physicians) and continued uncertainty about the future (61% vs. 51% of practising physicians). Adjustment to virtual learning is also a key issue among this group (37%), as is a lack of peer support (21%).

BY PHYSICIAN STAGE	All respondents	Practising physicians	Medical residents
Increased workload/lack of work–life integration	57%	58%	49%
Longer time with social restrictions/ isolation	55%	53%	72%
Rapidly changing policies/processes	55%	55%	47%
Continued uncertainty about the future	51%	51%	61%
Lack of human resources	35%	36%	29%
Family issues and obligations	34%	35%	27%
Long waitlists	33%	35%	14%
Adjustment to virtual care	28%	29%	19%
Concerns about vaccine rollout	23%	23%	20%
Adjustment to virtual learning	18%	15%	37%
Financial insecurity	17%	18%	10%
Challenges acquiring PPE	16%	16%	11%
Lack of peer support	14%	14%	21%
Physical health struggles	14%	14%	14%
Interpersonal conflict	12%	12%	11%
Concerns about long-term care	10%	10%	6%
College complaint or lawsuit	7%	7%	2%
Decreased workload	4%	4%	3%
Other	18%	19%	12%
None of the above	4%	4%	3%

Table 19. Responses to question 55. What do you believe has contributed negatively to your mental health during the pandemic? Select all that apply. Base: All respondents (n = 3864), practising physicians (n = 3489), medical residents (n = 375).

By gender, age, area of practice, years in practice and community size

Women are more likely than men to select the majority of the listed factors contributing to worse mental health. Compared with men, they are more likely to select increased workload (62% vs. 49% men), family issues and obligations (38% vs. 28% men), lack of human resources (38% vs. 30% men) and continued uncertainty about the future (54% vs. 47% men) (data not shown in table).

While the top three to four factors are relatively consistent across age groups, the ranking differs slightly (see Table 20). For those <35 years old, longer time with social restrictions/social isolation (69%) and continued uncertainty about the future (61%) rank as the top two. For those aged 35 to 54 years, it is increased workload (66%) and rapidly changing policies/processes (58%); family issues and obligations is also a key contributing issue for this age group (44%). For those aged 55+ years, longer time with social restrictions/social isolation (51%) and rapidly changing policies/processes (50%) rank highest.

The top three to four factors are also relatively consistent across areas of practice, although respondents in general practice/family medicine are the most likely to select increased workload/lack of work–life integration (62%) as the largest factor negatively affecting their mental health. This group is also more likely to select long wait lists (41%, along with surgical specialists 43%) and adjustment to virtual care (35%) as key issues, more than other areas of practice.

Respondents practising in small town/rural and isolated/remote areas are more likely to cite lack of resources (43% and 48%, respectively, vs. 33% of those practising in urban/suburban areas) (data not shown in table).

	<35	35 to 54	55+	General practitioner	Medical specialist	Surgical specialist	Other/ admin
Increased workload/lack of work–life integration	3rd (58%)	1st (66%)	3rd (44%)	1st (62%)	1st (56%)	3rd (44%)	2nd (54%)
Longer time with social restrictions/isolation	1st (69%)	3rd (54%)	1st (51%)	2nd (54%)	1st (56%)	1st (55%)	1st (56%)
Rapidly changing policies/processes	4th (54%)	2nd (58%)	1st (50%)	3rd (59%)	2nd (53%)	2nd (53%)	4th (47%)
Continued uncertainty about the future	2nd (61%)	4th (54%)	2nd (46%)	4th (52%)	3rd (51%)	2nd (52%)	3rd (51%)
Lack of human resources	5th (35%)	6th (41%)	6th (27%)	6th (36%)	4th (36%)	4th (32%)	6th (33%)
Family issues and obligations	6th (27%)	**5th (44%)**	7th (25%)	7th (35%)	5th (35%)	5th (29%)	5th (35%)
Long waitlists	7th (23%)	7th (37%)	4th (33%)	**5th (41%)**	6th (26%)	3rd (43%)	7th (25%)
Adjustment to virtual care	10th (20%)	8th (28%)	5th (32%)	**8th (35%)**	7th (24%)	8th (19%)	7th (24%)

Table 20. Rank ordering top responses to question 55. What do you believe has contributed negatively to your mental health during the pandemic? Select all that apply. Base: < 35 (n = 662), 35–54 (n = 1822), 55+ (n = 1361), General practitioner (n = 1564), medical specialist (n = 1410), surgical specialist (n = 369), other/admin (n =500).

FEELING MORAL DISTRESS

Moral distress is pronounced among respondents, with one in five saying they feel it "very often" or "always," and a further 33% saying "sometimes," since the start of the pandemic.

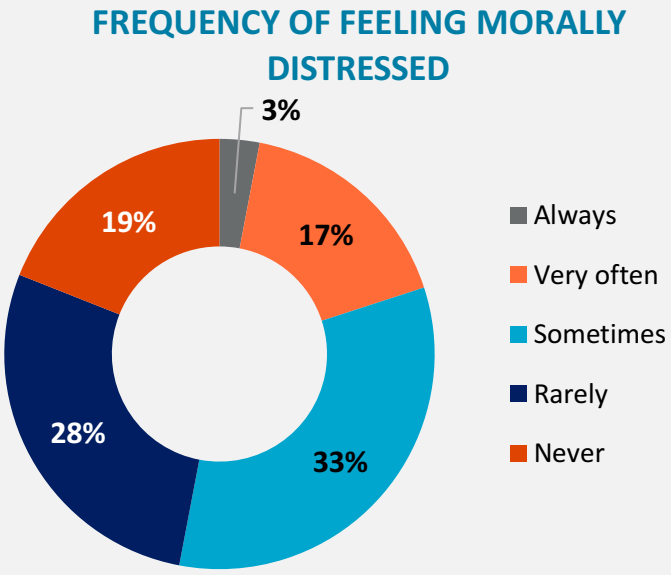
Overall, 20% of respondents say they frequently feel morally distressed in their work: 3% say they "always" feel morally distressed and 17% say they feel it "very often." Another 33% say they feel morally distressed "sometimes," and 47% feel it either "rarely" or "never."

The prevalence is *significantly* higher among practising physicians (**21%*** vs. 14% of medical residents).

Box 2. Moral distress by psychological factors

Frequent feelings (always/very often) of moral distress are higher among respondents who:

- are "languishing" in mental health (44% vs. 14% of those who are "flourishing"),
- score high on overall burnout (30% vs.10% of those who do not),
- screen positive for depression (30% vs. 12% of those who do not), and
- have had recent suicidal thoughts in the past 12 months (35% vs. 28% of those who have ever had such thoughts and 17% of those who have never had such thoughts).



Moral distress is defined as psychological distress that results from events that go against one's values and moral beliefs. It occurs when one feels unable to take what they believe to be an ethically appropriate or right course of action because of institutionalized obstacles.

Figure 9. Responses to question 56. Since the onset of the COVID-19 pandemic, how often have you felt morally distressed? Base: All respondents (n=3864).

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely to report feeling moral distress always/very often (**22%*** vs. 17% of men).

Respondents 35 to 54 years old are *significantly* more likely to say the same compared with those older (**26%*** vs. **15%*** of those 55+ years old).

Physicians practising six to 10 years (**28%***) and 11 to 20 years (**26%***) are also *significantly* more likely to report feeling morally distressed frequently compared with **14%*** of those practising over 30 years.

There are no significant differences by area of practice or community size.

	Feel morally distressed % always + very often
GENDER	
Men	17%
Women	**22%***
AGE	
<35	16%
35 to 54	**26%***
55+	**15%***
AREA OF PRACTICE	
General practitioner	21%
Medical specialist	21%
Surgical specialist	18%
Other/Admin	19%

	Feel morally distressed % always + very often
YEARS IN PRACTICE	
5 or less	21%
6 to 10	**28%***
11 to 20	**26%***
21 to 30	20%
Over 30	**14%***
COMMUNITY SIZE	
Urban/suburban	21%
Small town/rural	21%
Isolated/remote	24%

Table 21. Feel morally distressed always + very often, by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

REDUCTION OF CLINICAL HOURS AMONG PHYSICIANS

About half of physicians say they are likely to reduce or modify their clinical hours in the next two years.

Nearly half (49%) of respondents say they are likely or very likely to reduce or modify their clinical work hours in the next 24 months (higher among practising physicians: **51%*** vs. 22% of medical residents).

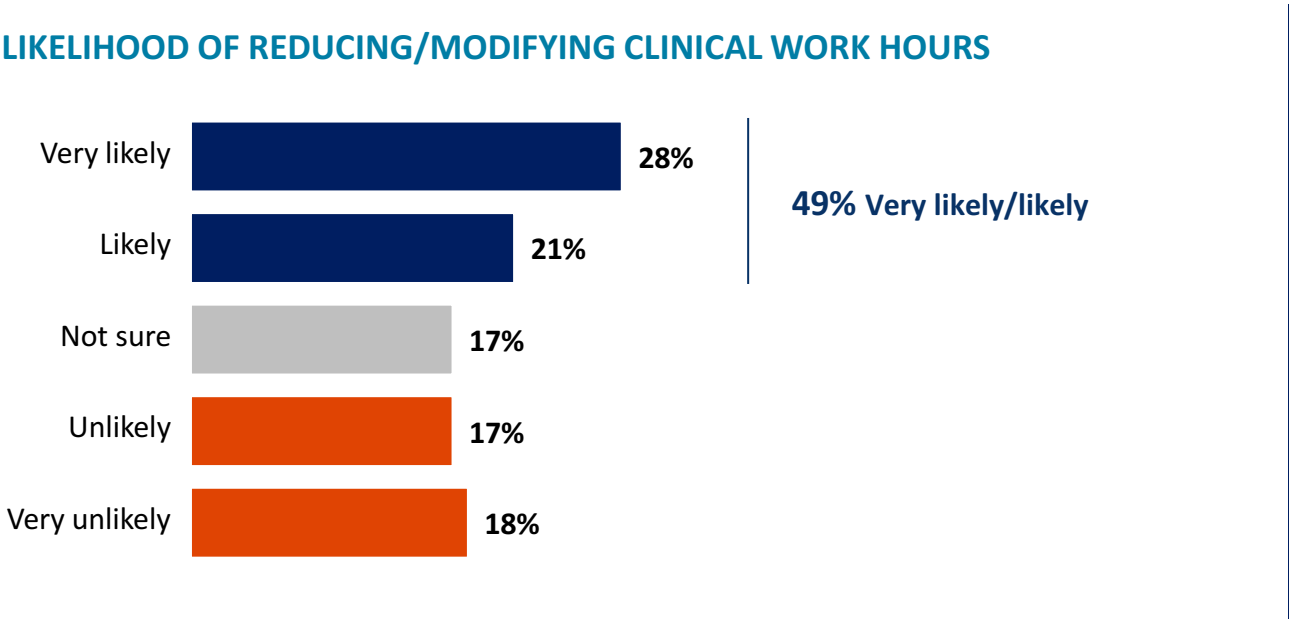


Figure 10. Responses to question 57. How likely is it that you will reduce or modify your clinical work hours in the next 24 months? Base: All respondents (n = 3864).

Box 3. Intention to reduce clinical hours by psychological factors

The following respondents are 1.3 times more likely to reduce their hours in the next 24 months:

- those whose mental health is languishing vs. those who are flourishing in mental health (59% vs. 45%, respectively)
- those experiencing overall burnout vs. those who do not score high on burnout (54% vs. 42%, respectively)
- those who have a moderate or severe level of anxiety vs. those who have a minimal level of anxiety (56% vs. 43% respectively)
- those who screen positive on depression vs. those who score low on depression (54% vs. 43%, respectively)

Those who score low on professional fulfillment are 1.4 times more likely than those who score high (52% vs. 37%, respectively) to say they will reduce their work hours in the next 24 months.

By gender, age, area of practice, years in practice and community size

Respondents who are ages <35 (**34%***) and 35–54 (**44%***) are *significantly* less likely to reduce or modify their clinical work hours in the next 24 months compared with 61% of those 55 and older.

Physicians practising 30 or less years are *significantly* less likely to reduce or modify their clinical work hours in the next 24 months (**48%*** with five or less years, **43%*** with six to 10 years, **45%*** with 11 to 20 years and **50%*** with 21 to 30 years vs. 64% of those practising 30 years or more). Notable is the large proportion of each of these subgroups of physicians practising 20 years or less (ranging from 43% to 45%) who say they are likely to reduce their clinical hours in the coming two years.

There are no significant differences by gender, area of practice and community size

	% Selected very likely + likely to reduce or modify clinical hours
GENDER	
Men	49%
Women	48%
AGE	
<35	**34%***
35 to 54	**44%***
55+	61%
AREA OF PRACTICE	
General practitioner	52%
Medical specialist	44%
Surgical specialist	49%
Other/Admin	47%

	% Selected very likely + likely to reduce or modify clinical hours
YEARS IN PRACTICE	
5 or less	**48%***
6 to 10	**43%***
11 to 20	**45%***
21 to 30	**50%***
Over 30	64%
COMMUNITY SIZE	
Urban/suburban	48%
Small town/rural	51%
Isolated/remote	56%

Table 22. Intention to reduce clinic hours, by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

Section 3. Behavioural factors and social support

LEVEL OF FATIGUE AND OPTIMAL SLEEP

Over half of all respondents surveyed say they "always" or "often" feel fatigued at work/school, and only a third of respondents feel they "always" or "often" get optimal sleep.

A substantial number of respondents (57%) report they frequently ("always" or "often") feel fatigued at work/school. Whereas over half of practising physicians (55%*) report frequently feeling fatigued, this figure is *significantly* higher for medical residents (**73%***).

Similarly, a little over a third of practising physicians (36%*) report "always" or "often" feeling they get optimal sleep, in contrast to significantly fewer medical residents (**22%***).

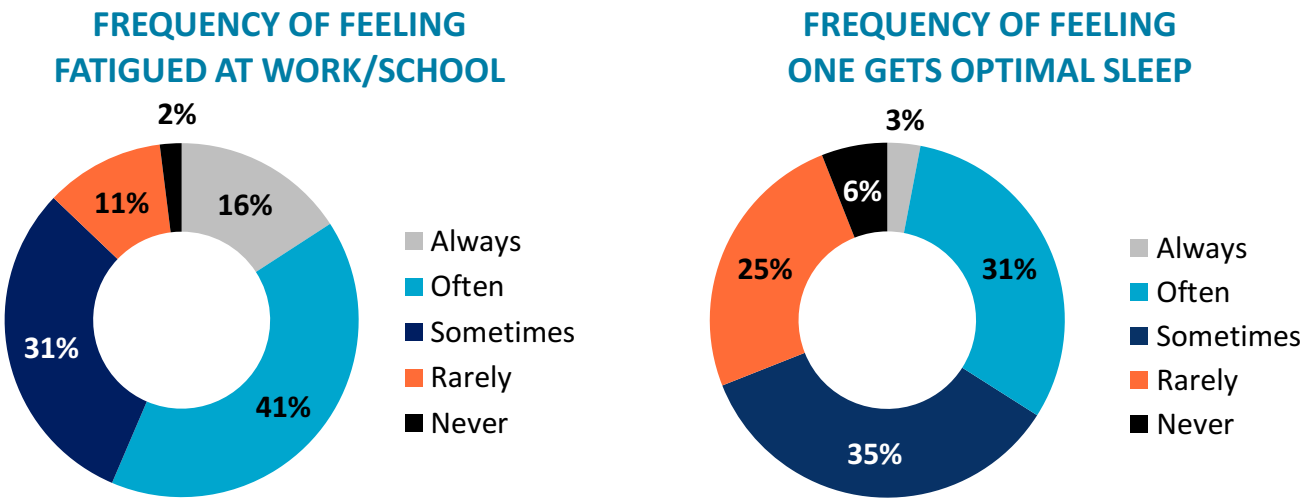


Figure 11. Responses to question 35. How often do you feel fatigued at work/school? Base: All respondents (n = 3864). Responses to question 37. How often do you feel you are getting optimal sleep? Base: All respondents (n = 3864).

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely to report frequent fatigue (i.e., "always" or "often") (**64%*** vs. 46% of men), and *significantly* less likely to report optimal sleep (i.e., "always" or "often") (**31%*** vs. 39% of men).

Respondents <35 (**70%***) and 35 to 54 (**64%***) years old are *significantly* more likely to report feeling fatigued than those older (41% of those 55 and older) and *significantly* less likely to get optimal sleep (**28%*** and **27%***, respectively, vs. 46% of those 55 and older).

General practitioners are *significantly* more likely than respondents practising in other/administration to feel fatigued frequently at work/school (**61%*** vs. **46%***, respectively)

Physicians with over 30 years in practice feel they get optimal sleep *significantly* more frequently (**50%***) than physicians with fewer years in practice (**28%*** 11 to 20 years; **25%*** six to 10 years; **29%*** five or less years in practice).

Respondents living in isolated/remote and small town/rural communities (**66%*** and **62%***, respectively) indicate that they feel fatigued at work/school *significantly* more frequently than physicians in urban/suburban communities (55%).

	Fatigued at work/school ("always" or "often")	Optimal sleep ("always" or "often")
GENDER		
Men	46%	39%
Women	**64%***	**31%***
AGE		
<35	**70%***	**28%***
35 to 54	**64%***	**27%***
55+	41%	46%
AREA OF PRACTICE		
General practitioner	**61%***	36%
Medical specialist	57%	32%
Surgical specialist	55%	33%
Other/Admin	**46%***	37%

	Fatigued at work/school ("always" or "often")	Optimal sleep ("always" or "often")
YEARS IN PRACTICE		
5 or less	**69%***	**29%***
6 to 10	**70%***	**25%***
11 to 20	**61%***	**28%***
21 to 30	55%	37%
Over 30	**35%***	**50%***
COMMUNITY SIZE		
Urban/suburban	55%	34%
Small town/rural	**62%***	34%
Isolated/remote	**66%***	26%

Table 23. Frequently ("always" or "often") fatigued at work/school and frequently ("always" or "often") getting optimal sleep by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

SELF-CARE ACTIVITIES

A large majority of respondents do some kind of activity for self-care, with socializing and physical activity topping the list.

Eighty-eight percent of respondents report supporting their well-being through healthy lifestyle behaviours, mostly in the form of physical activity at 79% (higher among men and those 55+), as well as healthy eating at 55%. They also turn to hobbies (87%) as a form of self-care, with reading topping the list (61%), followed by cooking and baking (42%) and music (39%).

A majority prioritize social time with family and friends as a form of self-care (82%). About half say they turn to spiritual and mindful practices to support their mental health (48%), including a quarter who use mindfulness or meditation (a proportion that is higher among women).

SELF-CARE ACTIVITIES TO SUPPORT WELL-BEING

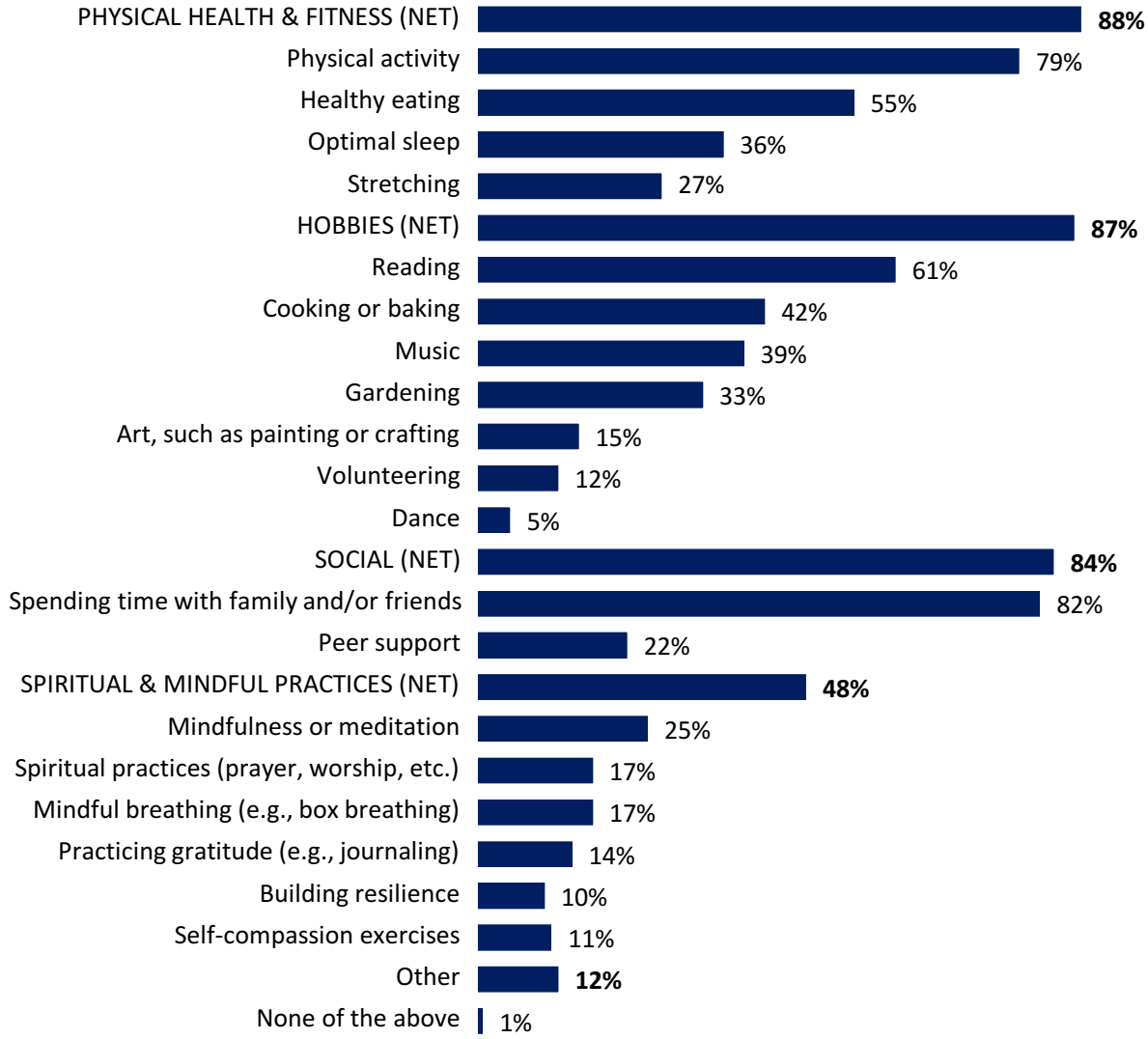


Figure 12. Responses to question 38. What self-care activities do you do to support your well-being in your personal life, outside of work (excluding household duties/chores/responsibilities)? Base: All respondents (n = 3864).

By gender, age, area of practice, years in practice and community size

While both men and women engage in self-care to a relatively high degree, women respondents are more likely to say they take part in self-care activities such as spiritual and mindful practices (52% vs. 43% of men), social activities (86% vs. 80%) and hobbies (88% vs. 85%).

As for men, they are more likely to say they engage in physical activities (81% vs. 77% of women), spiritual practices such as prayer or worship (20% vs. 16%) and music (45% vs. 36%) (data not shown in table).

Younger respondents (under 35 years of age) are more likely to say they do social activities, particularly peer support (30% vs. 22% among 35–54 and 19% among 55+). Older physicians (aged 55+ years) are more likely to say they engage in a variety of physical health and fitness activities (e.g., physical activity, healthy eating and stretching) and hobbies (e.g., music, gardening, volunteering and reading).

Middle-aged doctors (35–54 years) are less likely to say they are getting optimal sleep (30% vs. 45% of those under 35 years, 39% among 55+ years) (data not shown in table).

There are no strong differences by area of practice, years in practice or community size, although those in isolated/remote communities are less likely to participate in social activities (76%) compared with those practising in small town/rural and urban/suburban areas (83% and 84%, respectively).

	Physical health and fitness	Spiritual and mindful practices	Social	Hobbies
GENDER				
Men	88%	43%	80%	85%
Women	88%	52%	86%	88%
AGE				
<35	89%	46%	89%	82%
35 to 54	85%	49%	82%	85%
55+	92%	49%	83%	92%
AREA OF PRACTICE				
General practitioner	88%	52%	85%	87%
Medical specialist	89%	47%	83%	86%
Surgical specialist	88%	42%	84%	87%
Other/Admin	87%	47%	83%	86%
YEARS IN PRACTICE				
5 or less	84%	46%	86%	83%
6 to 10	83%	45%	82%	82%
11 to 20	85%	48%	86%	86%
21 to 30	91%	52%	90%	90%
Over 30	92%	49%	92%	92%

	Physical health and fitness	Spiritual and mindful practices	Social	Hobbies
COMMUNITY SIZE				
Urban/suburban	88%	48%	84%	87%
Small town/rural	86%	51%	83%	89%
Isolated/remote	87%	51%	**76%**	87%

Table 24. Self-care activities taken part in by gender, age, area of practice, years in practice and community size.

BARRIERS TO MAINTAINING A HEALTHY LIFESTYLE

Only one in 10 respondents say they do *not* face any barriers to maintaining a healthy lifestyle.

While a majority of respondents take part in some form of self-care activity for wellness, many also note a number of barriers that can hinder maintenance of a consistent healthy lifestyle. A lack of time (64%), a heavy workload and/or stressful work environment (60%), as well as challenges arising from scheduling (56%) are cited as the most common barriers preventing respondents from maintaining a healthy lifestyle.

BARRIERS PREVENTING A HEALTHY LIFESTYLE

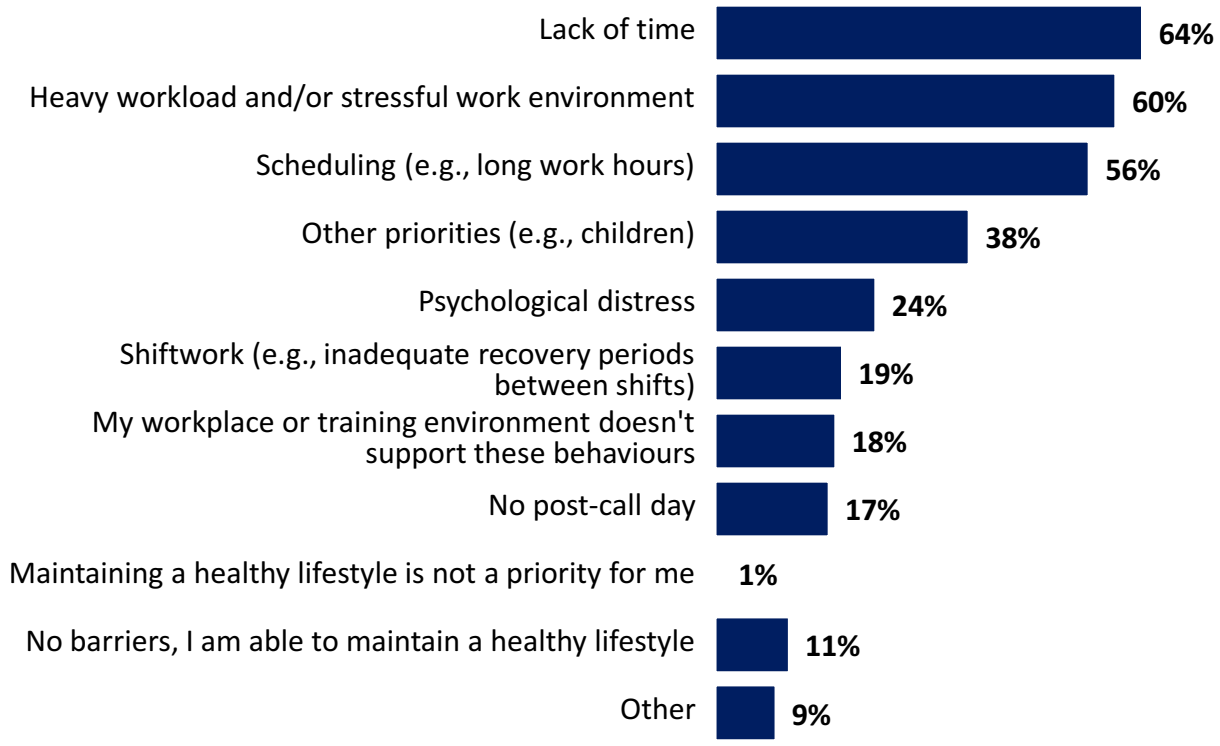


Figure 13. Responses to question 39. Which, if any, of the following barriers prevent you from maintaining a healthy lifestyle (e.g., being physically active, eating healthily, getting adequate sleep)? Check all that apply. Base: All respondents (n = 3864).

By gender, age, area of practice, years in practice and community size

Men are more likely to say that they don't experience any barriers to maintaining a healthy lifestyle (17% vs. 7% women). Women are more likely than men to cite lack of time (69% vs. 57% men), heavy workload and/or stressful work environment (64% vs. 53% men) and scheduling (59% vs. 51% men) as barriers to maintaining a healthy lifestyle, as well as having other priorities such as children (43% vs. 29% among men) (not shown in table).

Older respondents are also more likely to say they don't have any barriers to maintaining a healthy lifestyle (23% among those aged 55+ years vs. 5% among those aged 35–54 years, 2% of those under 35 years), as are those with more years in practice (28% among those with over 30 years in practice vs. 13% among those with 21 to 30 years, 5% with 11 to 20 years and 3% with less than 10 years). Respondents under 35 years of age are significantly more likely to cite lack of time (79% vs. 48% among those aged 55+), heavy workload and/or stressful work environment (71% vs. 46% among those aged 55+), scheduling (73% vs. 43% among those aged 55+) and shiftwork (32% vs. 10% of those aged 55+) as barriers to a healthy lifestyle.

Surgical specialists are more likely than other physicians to say scheduling is a barrier (63%).

Those working in small town/rural and isolated/remote areas are more likely to cite scheduling issues (e.g., long work hours) (60% and 66%, respectively, vs. 54% of those practising in urban/suburban areas) and shiftwork (e.g., inadequate recovery periods between shifts) (27% and 25%, respectively, vs. 17% of those practising in urban/suburban areas). They are also more likely to say that no post-call days are a barrier (24% small town/rural and 30% isolated/remote vs. 15% urban/suburban areas) (not shown in table).

	Lack of time	Heavy workload and/or stressful work environment	Scheduling	Shiftwork	No barriers
GENDER					
Men	57%	53%	51%	17%	**17%**
Women	**69%**	**64%**	**59%**	20%	7%
AGE					
<35	**79%**	**71%**	**73%**	**32%**	2%
35 to 54	71%	66%	60%	21%	5%
55+	48%	46%	43%	10%	**23%**
AREA OF PRACTICE					
General practitioner	**65%**	60%	54%	15%	12%
Medical specialist	**65%**	61%	57%	26%	8%
Surgical specialist	64%	62%	**63%**	20%	14%
Other/Admin	59%	51%	53%	11%	16%

	Lack of time	Heavy workload and/or stressful work environment	Scheduling	Shiftwork	No barriers
YEARS IN PRACTICE					
5 or less	**75%**	70%	58%	23%	3%
6 to 10	**77%**	68%	63%	24%	3%
11 to 20	69%	66%	62%	23%	5%
21 to 30	60%	59%	52%	14%	13%
Over 30	44%	39%	37%	8%	**28%**
COMMUNITY SIZE					
Urban/suburban	64%	59%	54%	17%	11%
Small town/rural	66%	62%	60%	**27%**	10%
Isolated/remote	63%	63%	**66%**	**25%**	6%

Table 25. Main barriers to a healthy lifestyle (greater than 50%) by gender, age, area of practice, years in practice and community size.

SOCIAL SUPPORT

Seven in 10 respondents score "high" on perceived level of support.

For measuring social support, the Multidimensional Scale of Perceived Social Support (MSPSS) was used.[13] A majority of respondents score "high" on the MSPSS; one-quarter score "medium" and only 3% score "low" on social support. There is no significant difference between practising physicians and medical residents.

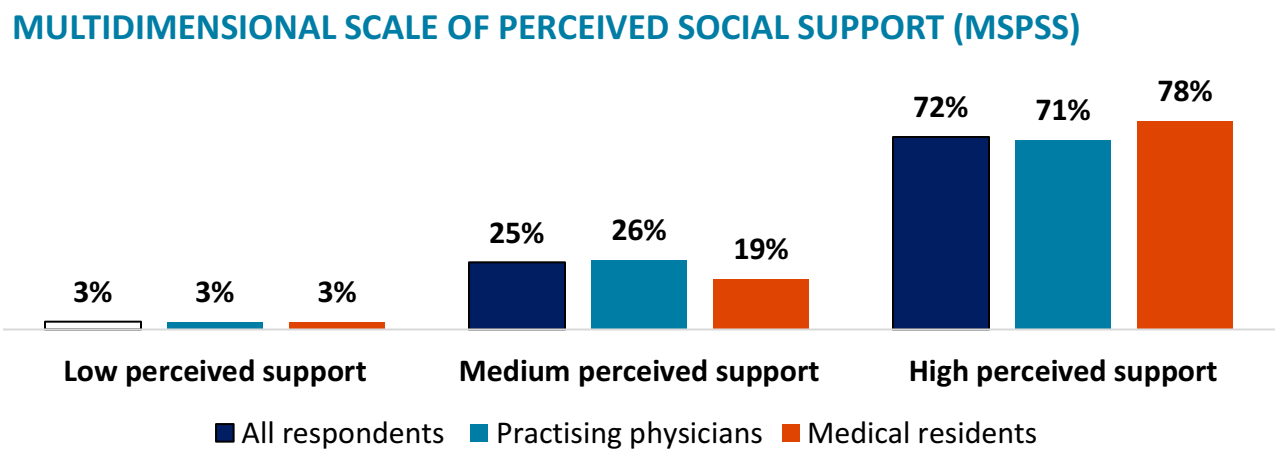


Figure 14. Scoring for Multidimensional Scale of Perceived Social Support (MSPSS) by practising physician and resident groups. Base: All respondents (n = 3864), practising physicians (n = 3489), medical residents (n = 375).

[13] The MSPSS measure accounts for social support received from family, a significant other and friends. To calculate total MSPSS score, scores across all 12 items in question 65 were summed together (those indicating "don't know" or refusing to answer for any of the 12 items were excluded). Those with an MSPSS score of 12–35 were classified as "low," 36–60 as "medium" and 61–84 as "high" perceived social support.

By gender, age, area of practice, years in practice and community size

Younger physicians (<35 years old) (**80%***) are *significantly* more likely to have a "high" degree of social support compared with those 35 to 54 years old (**69%***).

There are no statistically significant differences when it comes to gender, area of practice, years in practice and community size.

	Low social support	Medium social support	High social support
GENDER			
Men	3%	25%	72%
Women	3%	25%	72%
AGE			
<35	2%	18%	**80%***
35 to 54	3%	28%	**69%***
55+	4%	24%	72%
AREA OF PRACTICE			
General practitioner	3%	24%	74%
Medical specialist	4%	25%	71%
Surgical specialist	3%	24%	73%
Other/Admin	3%	28%	69%
YEARS IN PRACTICE			
5 or less	3%	22%	75%
6 to 10	3%	27%	69%
11 to 20	3%	30%	66%
21 to 30	4%	25%	71%
Over 30	3%	22%	75%
COMMUNITY SIZE			
Urban/suburban	3%	26%	71%
Small town/rural	4%	23%	73%
Isolated/remote	5%	28%	67%

Table 26. Multidimensional Scale of Perceived Social Support (MSPSS) by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

Social support was also measured using a single self-reported item in the survey using a five-point scale: "How often do you feel supported by your social network?" Seventeen percent indicate they "always" feel supported, 45% "very often," 30% "sometimes" and 8% "rarely/never." High social support (62%; 17% always + 45% very often) is slightly lower for this self-reported question compared with the MSPSS (72% high perceived support).

PRIMARY CARE PHYSICIAN

Eight in 10 respondents have a regular primary care provider.

Seventy-nine percent of respondents indicate they have a regular primary care physician (PCP). Medical residents are *significantly* less likely to have a PCP (**66%***) compared with practising physicians (81%).

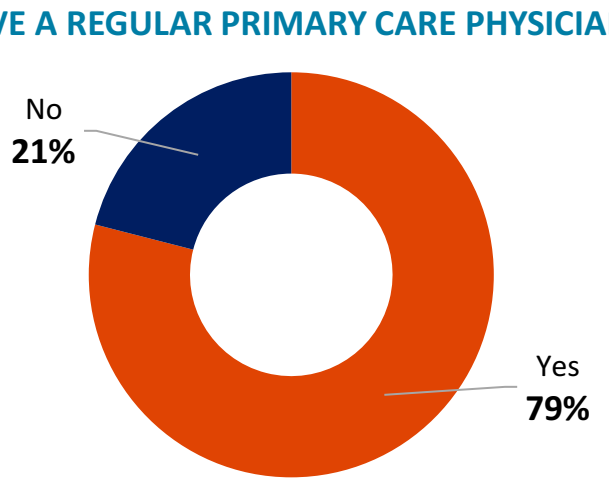


Figure 15. Responses to question 30. Do you have a regular primary care physician (i.e., registered)? Base: All respondents (n = 3864).

By gender, age, area of practice, years in practice and community size

Men are *significantly* less likely to say they have a family physician (**77%*** vs. 80% women).

Younger respondents (<35 years old) (**67%*)** are *significantly* less likely to have a regular family physician compared with **85%*** of those 55 and older.

Physicians with over 30 years in practice (**86%***) are *significantly* more likely to have a family physician than those with five or less years in practice years (**74%***).

Respondents practising in isolated/remote communities are *significantly* less likely to have a family physician (**64%*** vs. **81%*** in urban/suburban areas).

	% Have a primary care physician
GENDER	
Men	**77%***
Women	80%
AGE	
<35	**67%***
35 to 54	79%
55+	**85%***
AREA OF PRACTICE	
General practitioner	77%
Medical specialist	81%
Surgical specialist	78%
Other/Admin	80%

	% Have a primary care physician
YEARS IN PRACTICE	
5 or less	**74%***
6 to 10	78%
11 to 20	77%
21 to 30	82%
Over 30	**86%***
COMMUNITY SIZE	
Urban/suburban	**81%***
Small town/rural	78%
Isolated/remote	**64%***

Table 27. Have a regular primary care physician by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

WORKPLACE WELLNESS SUPPORTS

Less than six in 10 respondents say their current workplace offers wellness support offerings.

Psychological supports and/or peer support programs (33%) and back-up call for urgent life matters (21%) are the most commonly reported wellness supports offered by workplaces.

Overall, **75%*** of medical residents say their current workplace offers at least one wellness support, *significantly* higher than practising physicians (54%). Medical residents have more access to psychological supports (58% vs. 30% of practising physicians), exercise facilities (15% vs. 11%) and other wellness-related activities and/or incentives (11% vs. 6%), and interestingly, also access to primary care physicians, although the proportion is relatively low (17% vs. 8%).

WELLNESS SUPPORT OFFERINGS AT CURRENT WORKPLACE

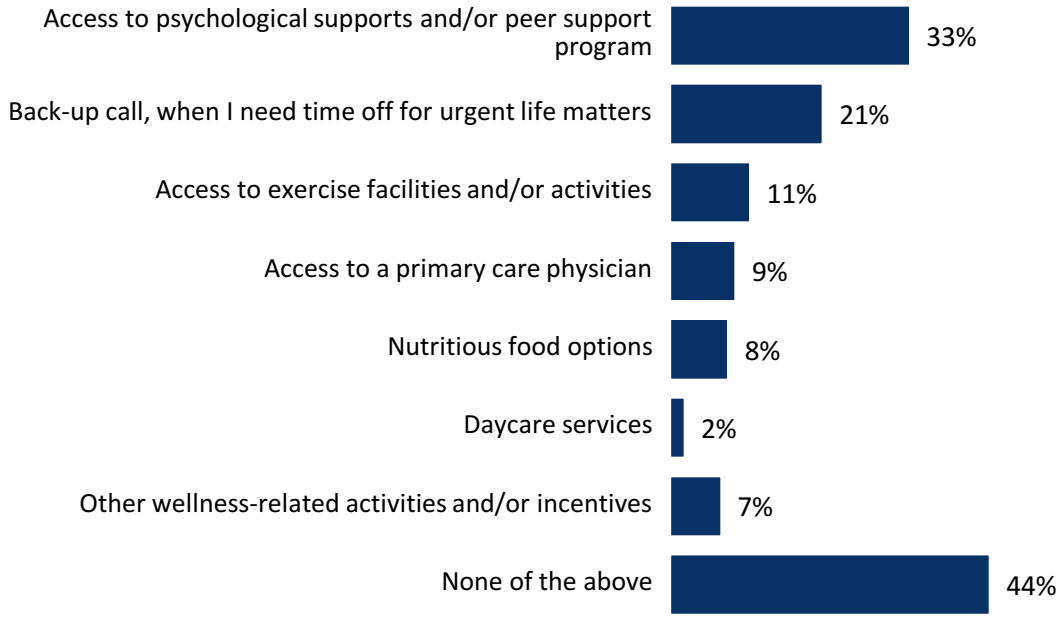


Figure 16. Responses to question 40. Which of the following does your current workplace offer to support your wellness (if any)? Base: All respondents (n = 3864).

By gender, age, area of practice, years in practice and community size

Respondents who are over 35 years are *significantly* less likely than their younger counterparts to say they have access to wellness supports offered by their current workplace (**55%*** among those 35–54 years and **54%*** among those 55+ years vs. 62% of those under 35 years).

General practitioners are *significantly* less likely than medical specialists to say their current workplace offers any wellness supports (**49%*** vs. **61%*,** respectively).

Those practising in small town/rural (**51%***) or isolated/remote areas (**45%***) are *significantly* less likely than those in urban/suburban communities (57%) to report that their current workplace offers wellness supports.

There are no statistically significant differences in workplace wellness supports when it comes to gender or years in practice.

	% Indicating current workplace has wellness supports
GENDER	
Men	54%
Women	57%
AGE	
<35	62%
35 to 54	**55%***
55+	**54%***
AREA OF PRACTICE	
General practitioner	**49%***
Medical specialist	**61%***
Surgical specialist	55%
Other/Admin	63%

	% Indicating current workplace has wellness supports
YEARS IN PRACTICE	
5 or less	53%
6 to 10	56%
11 to 20	52%
21 to 30	56%
Over 30	52%
COMMUNITY SIZE	
Urban/suburban	57%
Small town/rural	**51%***
Isolated/remote	**45%***

Table 28. Availability of wellness supports by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

WELLNESS SUPPORTS ACCESSED IN PAST FIVE YEARS

When asked about the type of wellness supports (including mental health and crisis supports) accessed in the past five years, almost half of respondents say they have not accessed any.

One-third (32%) of respondents say they have accessed their primary care physician, one-quarter have accessed a mental health professional (psychiatrist, psychologist, licensed counsellor, etc.), 15% have accessed their Provincial Physician Health Program (PHP) and 12% have accessed mentorship or coaching.

Forty-six percent have **not** accessed any wellness supports. This is *significantly* higher among practising physicians **47%*** vs. 37% of medical residents.

WELLNESS SUPPORTS ACCESSED IN PAST FIVE YEARS

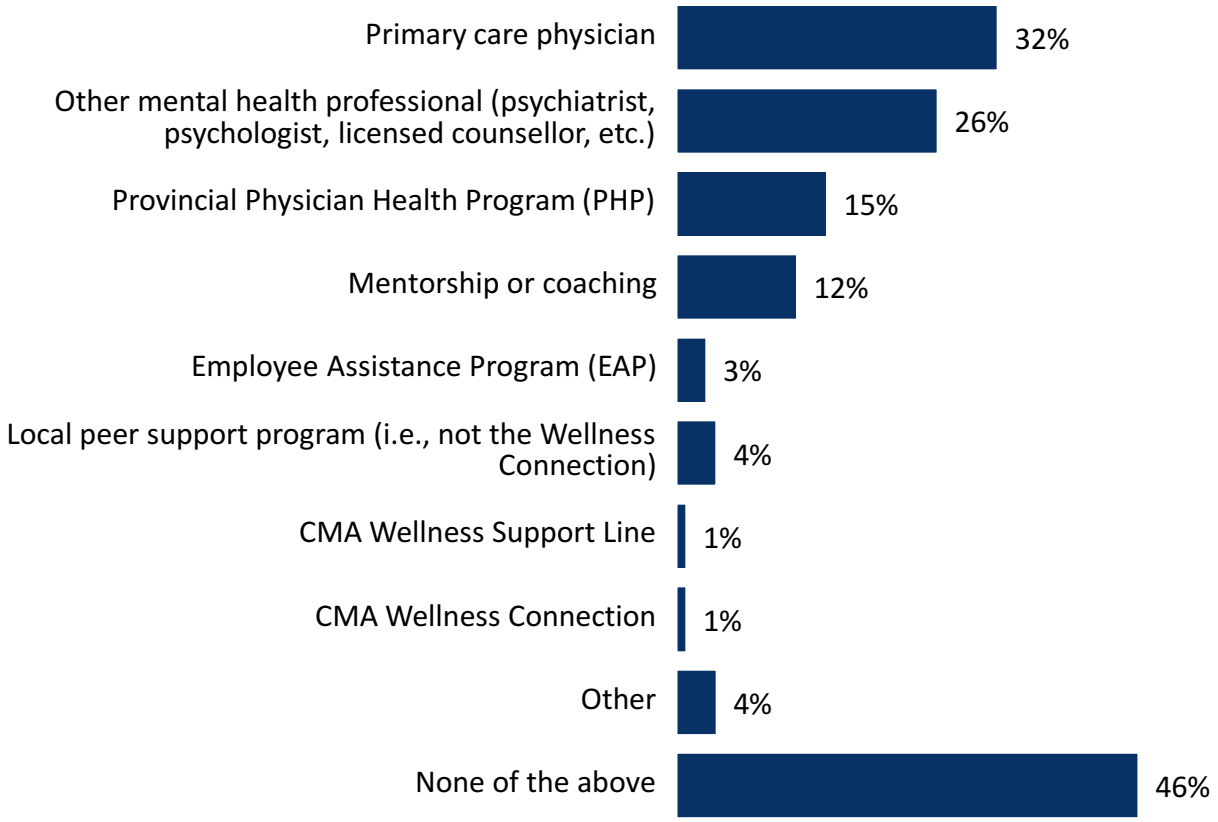


Figure 17. Responses to question 58. In the last five years, have you accessed any of the following wellness supports (including mental health and crisis supports)? Select all that apply. Base: All respondents (n = 3864).

By gender, age, area of practice, years in practice and community size

Men are *significantly* more likely than women to say they have **not** accessed any wellness supports in the past five years (**58%*** vs. 38% among women).

Younger respondents are *significantly* less likely than older ones to say they have **not** accessed any of these resources (**40%*** of those under 54 years old vs. 57% of those 55+ years).

Generally, physicians practising 10 or less years (a factor also related to their age) are *significantly* more likely to access wellness supports (**63%*** of those practising five or less years and **62%*** of those practising six to 10 years).

Respondents working in urban/suburban areas are less likely to have accessed wellness supports in the past five years (53% vs. 58% in small town/rural and 63% in isolated/remote areas), although not significantly.

There are no statistically significant differences in accessing wellness supports by area of practice.

	Have accessed wellness supports in past five years	Have not accessed wellness supports in past five years
GENDER		
Men	42%*	58%*
Women	62%	38%
AGE		
<35	60%*	40%*
35 to 54	60%*	40%*
55+	43%	57%
AREA OF PRACTICE		
General practitioner	56%	44%
Medical specialist	56%	44%
Surgical specialist	46%	54%
Other/Admin	50%	50%

	Have accessed wellness supports in past five years	Have not accessed wellness supports in past five years
YEARS IN PRACTICE		
5 or less	63%*	37%*
6 to 10	62%*	38%*
11 to 20	59%	41%
21 to 30	51%	49%
Over 30	41%*	59%*
COMMUNITY SIZE		
Urban/suburban	53%	47%
Small town/rural	58%	42%
Isolated/remote	63%	37%

Table 29. Accessed wellness supports in the past five years by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

POSSIBLE REASONS FOR NOT SEEKING WELLNESS SUPPORT

When respondents were asked what may prevent some physicians from seeking wellness supports, having no time and believing the situation is not severe enough were identified as the two largest barriers, followed by being ashamed to seek help.

Having no time (55%; higher among medical residents at 75%), believing the situation is not severe enough (55%) and being ashamed to seek help (47%) are perceived as the main barriers to seeking wellness supports.

Three in 10 cite confidentiality as a barrier (higher among practising physicians at 30% vs. 24% among medical residents), while 21% believe risk of losing medical licence and ability to practise (higher among practising physicians at 22% vs. 16% among medical residents) could prevent physicians and medical residents from looking for wellness support. Twenty-one percent indicate other professional consequences (fewer career advancement opportunities, denied insurance, etc.) as a possible barrier (30% of medical residents compared with 20% of practising physicians). One in five (19%) cite lack of awareness of available services as a barrier.

POSSIBLE REASONS PHYSICIANS NOT SEEKING WELLNESS SUPPORT

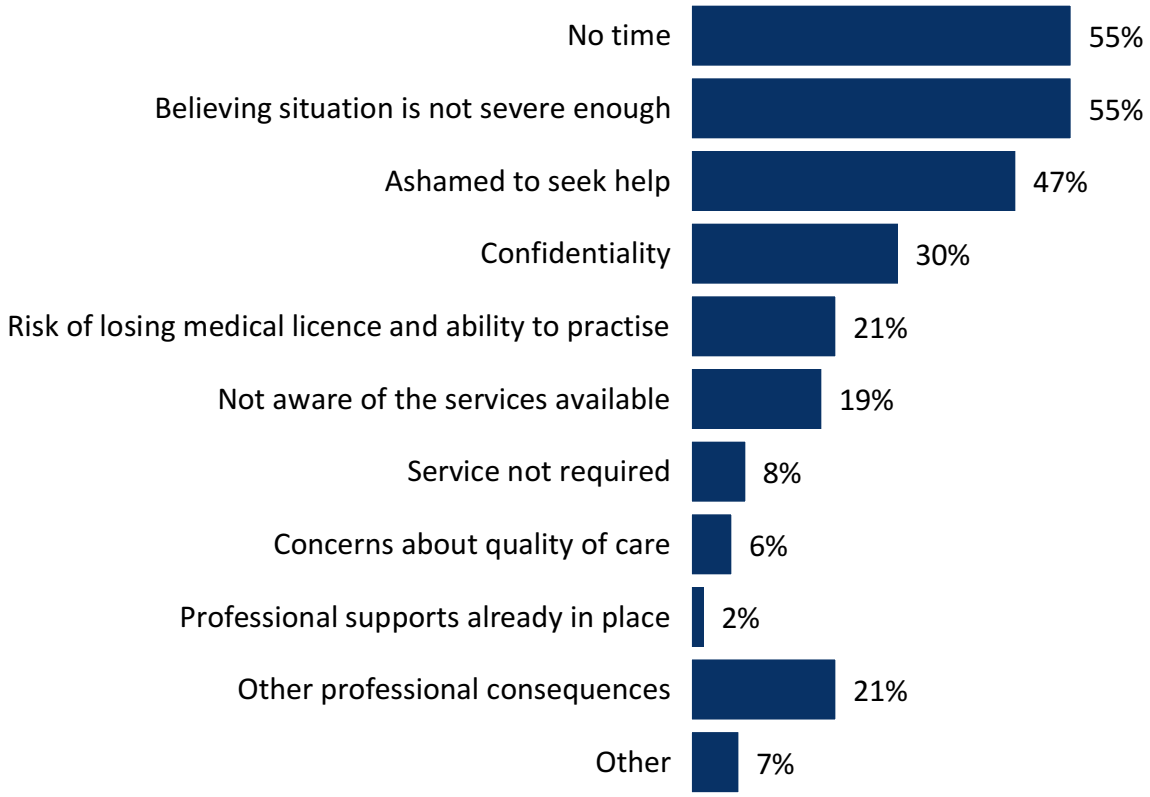


Figure 18. Responses to question 60. Some physicians may access resources for wellness supports (including mental health), while others manage in other ways when needed. What do you think are the main reasons some physicians may have for NOT seeking wellness supports (including mental health)? Select up to three reasons. Base: All respondents (n = 3864).

By gender, age, area of practice, years in practice and community size

Men are more likely than women to say that one of the main reasons physicians are reluctant to seek help is shame (51% vs. 44%). Women are more likely to cite a lack of time (61% vs. 45%), believing the situation is not severe enough (56% vs. 52%) and confidentiality (31% vs. 27%).

Younger respondents (<35 years old) are less likely to think that confidentiality is a barrier to seeking help (24%), and physicians 55+ years old (39%) are less likely to think a lack of time is a barrier.

Relatedly, physicians with over 30 years in practice are significantly less likely to say that a lack of time is a barrier (and are more likely to name being ashamed to seek help as a barrier).

General practitioners and medical specialists are more likely than surgical specialists and those working in other specialties/admin to think that a lack of time is an obstacle to seeking help.

Respondents practising in small town/rural and isolated/remote areas are more likely to think that confidentiality is a reason why physicians are reluctant to seek help (33% and 42%, respectively).

	No time	Believing situation is not severe enough	Ashamed to seek help	Confidentiality
GENDER				
Men	45%	52%	51%	27%
Women	61%	56%	44%	31%
AGE				
<35	73%	58%	47%	24%
35 to 54	60%	52%	44%	30%
55+	39%	57%	50%	32%
AREA OF PRACTICE				
General practitioner	58%	56%	48%	27%
Medical specialist	55%	54%	46%	31%
Surgical specialist	51%	53%	43%	34%
Other/Admin	49%	56%	48%	28%
YEARS IN PRACTICE				
5 or less	66%	55%	43%	30%
6 to 10	66%	53%	42%	29%
11 to 20	57%	54%	44%	28%
21 to 30	52%	52%	50%	32%
Over 30	34%	58%	50%	31%
COMMUNITY SIZE				
Urban/suburban	55%	54%	46%	28%
Small town/rural	54%	55%	48%	33%
Isolated/remote	56%	51%	41%	42%

Table 30. Main possible reasons (greater than 25%) physicians not seeking wellness support by gender, age, area of practice, years in practice and community size.

To understand the extent to which different subgroups see issues around privacy and risks to practice, an index was created. Those who selected at least one of “confidentiality,” “risk of losing medical licence and ability to practise” and “other professional consequences” were classified as “high” on the Professional Consequences Index (PCI). Overall, half (51%) of respondents score high on the PCI. There is no significant difference between practising physicians and medical residents (52% each).

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely than men to score high on the PCI, being more likely to fear professional consequences (**54%*** vs. 48%, respectively).

Medical specialists are *significantly* more likely than general practitioners to score high on the PCI (**55%*** vs. **48%***, respectively).

There are no significant differences by respondents' age, years in practice and community size.

	Professional Consequences Index (PCI) % HIGH
GENDER	
Men	48%
Women	**54%***
AGE	
<35	50%
35 to 54	52%
55+	51%
AREA OF PRACTICE	
General practitioner	**48%***
Medical specialist	**55%***
Surgical specialist	53%
Other/Admin	50%

	Professional Consequences Index (PCI) % HIGH
YEARS IN PRACTICE	
5 or less	55%
6 to 10	49%
11 to 20	52%
21 to 30	52%
Over 30	50%
COMMUNITY SIZE	
Urban/suburban	51%
Small town/rural	52%
Isolated/remote	56%

Table 31. Professional Consequences Index by gender, age, area of practice, years in practice and community size.

SUBSTANCE USE

Very small proportions of respondents report regular substance use in the past year. Among those who do, alcohol is consumed most regularly. Very few turn to cannabis or tobacco or to unauthorized use of stimulants, opioids, etc. Overall reported consumption in the past year among respondents is significantly lower than that of the employed general population in Canada.

Two in 10 respondents (20%) say they have consumed alcohol at *least monthly* in the past year and 4% have consumed cannabis at the same level of frequency. Only 1% of respondents report consuming tobacco *daily/almost daily or weekly*.

Medical residents are *significantly* more likely to have consumed alcohol at *least monthly* in the past year compared with practising physicians (**30%*** vs. 18%, respectively). Consumption is also *significantly* higher among men (**22%*** vs. 17% of women) and those under 55 years old (**24%** of those <35 years old and **21%*** of those 35 to 54 years old vs. 14% of those 55 years and older).

Similarly, medical residents are *significantly* more likely to have consumed cannabis *at least monthly* compared with practising physicians (**9%*** vs. 4%, respectively).

	AT LEAST MONTHLY IN THE PAST YEAR NET	Daily/almost daily or weekly	Monthly	Once or twice a year	Never
Alcohol (for men, five or more drinks in a day; for women, four or more drinks in a day)	**20%**	9%	11%	23%	58%
Cannabis (recreationally)	**4%**	2%	2%	10%	86%
Tobacco products	**2%**	**1%**	1%	3%	96%

Table 32. Responses to question 49. In the past year, how many times have you used the following substances for non-medical reasons? Note: Totals may not add up to 100% because of rounding. Base: All respondents consenting to the collection of sensitive data on suicidal ideation and substance use (n = 3750).

The CMA conducted a comparator survey among employed Canadians (excluding physicians and medical learners) that included many of the same measures at the same time the NPHS 2021 was fielded.[14] This allows for direct comparison between respondents in the 2021 NPHS and the employed general population. When compared with the employed Canadian population, physicians and resident respondents of this survey are significantly less likely to report turning to substances in general: 34% of employed Canadians consumed alcohol and 29% consumed cannabis at *least monthly* in the past year; 24% smoked tobacco *daily/almost daily or weekly*.

[14] Results from the same question asked among the general population (employed or currently in graduate school), Employed Canadian Population Comparator Survey. Fielded November 26 to December 10, 2021, via an online non-probability panel. A full report comparing the NPHS 2021 data with the Employed Canadians Survey dataset is forthcoming.

Very few respondents report having ever used other substances in the past year:

- One percent have ever taken stimulants (unauthorized, e.g., Ritalin, Dexedrine, Adderall, Vyvanse) vs. 13% of the employed general population.
- One percent have ever taken opioids (unauthorized) vs. 11% of the employed general population.
- Three percent have ever taken another substance (e.g., narcotics, benzodiazepine, cocaine, mushrooms) vs. 17% of the employed general population.

	EVER CONSUMED IN THE PAST YEAR NET	Daily/almost daily or weekly	Monthly	Once or twice a year	Never
Stimulants (unauthorized, e.g., Ritalin, Dexedrine, Adderall, Vyvanse)	**1%**	*	*	1%	99%
Opioids (unauthorized)	**1%**	*	*	1%	99%
Other (e.g., narcotics, benzodiazepine, cocaine, mushrooms)	**3%**	*	*	3%	97%

Table 33. Responses to question 49. In the past year, how many times have you used the following substances for non-medical reasons? Note: Totals may not add up to 100% because of rounding. Base: All respondents consenting to the collection of sensitive data on suicidal ideation and substance use (n = 3750).
***Less than 10 respondents**

Section 4: Occupational factors

JOB SATISFACTION AND JOB-RELATED STRESS

Six in 10 respondents say they are satisfied with their job or training position, but they also say they feel a great deal of stress because of it.

Six in 10 (59%) agree or strongly agree that they are satisfied with their current job or training position and just over half (56%) agree or strongly agree that their professional values are aligned with those of their department or academic leaders. However, a similar proportion also agree or strongly agree that they feel a great deal of stress because of their job or training position (57%).

Medical residents are more likely to be satisfied with their job (**64%*** vs. 59% of practising physicians) and to agree or strongly agree that their professional values are aligned with those of their department or academic leaders (**61%*** vs. 54% of practising physicians). However, they are also more likely to agree or strongly agree that they feel stress from their job (**66%*** vs. 56% of practising physicians).

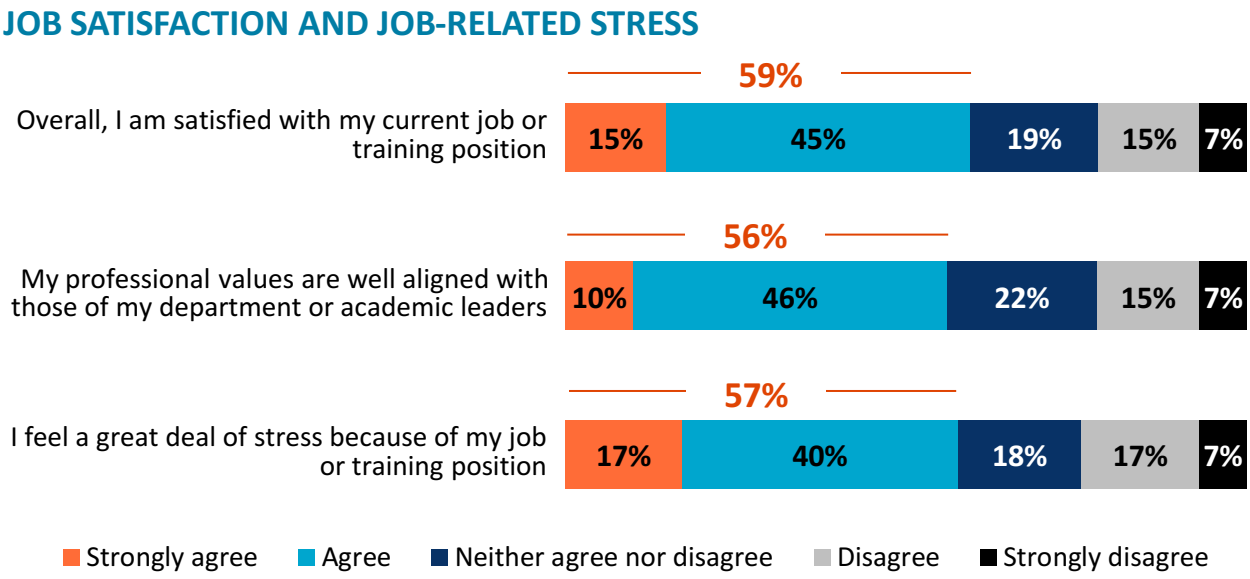


Figure 19. Responses to question 43, part of Mini-Z scale. To what extent do you agree or disagree with the following statements? Base: All respondents excluding not applicable for each statement: Overall I am satisfied with my job or training position (n = 3859); My professional values are well aligned with those of my department or academic leaders (n = 3699); I feel a great deal of stress because of my job/training position (n = 3840).

By gender, age, area of practice, years in practice and community size

Women are *significantly* less likely to be satisfied with their job or training position (**55%*** vs. 67% men) and less likely to feel their professional values are well aligned with those of their department of academic leaders (**53%*** vs. 59% men). They are *significantly* more likely to feel a great deal of stress because of their job (**64%*** vs 46% men).

Respondents aged 35 to 54 years are *significantly* less likely to be satisfied with their jobs (**53%*** vs. **66%*** of those aged 55+ years) and less likely to feel their professional values are well aligned with those of their department or academic leaders (**50%***). Those under 55 years of age are *significantly* more likely to feel a great deal of stress because of their job or training position (**66%*** for each of <35 years and 35 to 54 years vs. 41% of those 55 and older).

General practitioners, medical specialists and surgical specialists are *significantly* less likely to be satisfied with their jobs (**57%***, **61%*** and **54%***, respectively) than those in other specialties/administration positions (67%).

Physicians practising 11 to 20 years are *significantly* less likely to agree they are satisfied with their jobs (**52%*** vs. **70%*** of those practising for over 30 years). Those with over 30 years are also the least likely to say they feel a great deal of stress because of their job (**35%***).

Respondents practising in urban/suburban and small town/rural areas are *significantly* more likely to agree or strongly agree that their values are well aligned with those of their department or academic leaders (**56%*** and **54%*** respectively vs. 37% in isolated areas).

% "Strongly agree" + "Agree"	Satisfaction with current job or training position	My professional values are well aligned with those of my department or academic leaders	I feel a great deal of stress because of my job or training position
GENDER			
Men	67%	59%	46%
Women	**55%***	**53%***	**64%***
AGE			
<35	63%	**61%***	**66%***
35 to 54	**53%***	**50%***	**66%***
55+	**66%***	**59%***	41%
AREA OF PRACTICE			
General practitioner	**57%***	56%	**59%***
Medical specialist	**61%***	56%	**57%***
Surgical specialist	**54%***	49%	**59%***
Other/Admin	67%	56%	47%

% "Strongly agree" + "Agree"	Satisfaction with current job or training position	My professional values are well aligned with those of my department or academic leaders	I feel a great deal of stress because of my job or training position
YEARS IN PRACTICE			
5 or less	59%	53%	68%*
6 to 10	53%	50%	70%*
11 to 20	52%*	49%	64%*
21 to 30	58%	55%	56%*
Over 30	70%*	62%*	35%
COMMUNITY SIZE			
Urban/suburban	61%	56%*	56%
Small town/rural	57%	54%*	59%
Isolated/remote	51%	37%	64%

Table 34. Agreement with statements in question 43 by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-squared test of independence. See Appendix B for more details.*

CONTROL OVER WORKLOAD

Almost half of respondents consider the control they have over their workload to be poor or marginal.

Almost half of respondents claim to have a low level of control over their workload (46%: 15% poor control and 31% marginal control). Only 26% feel that their control over their workload is good or optimal.

Medical residents are *significantly* more likely to feel that their control over their workload is poor or marginal (64%* vs. 45% of practising physicians).

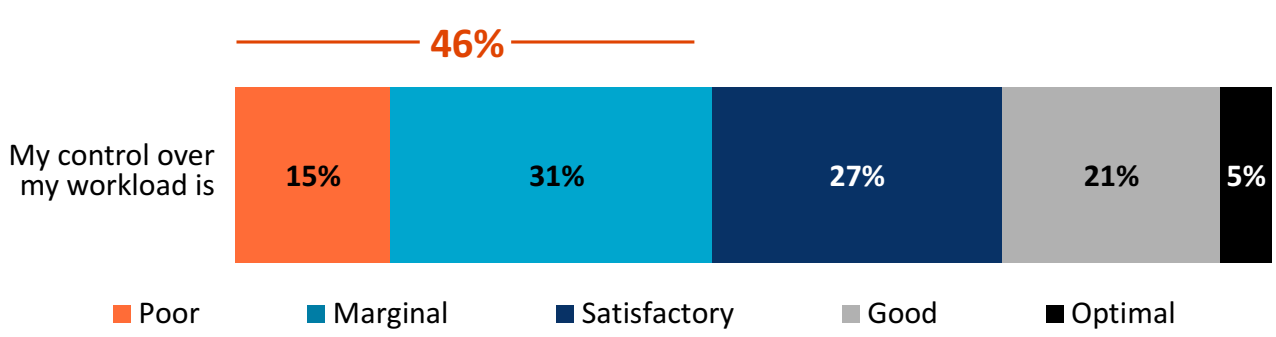


Figure 20. Responses to question 45, part of Mini-Z survey. How would you rate the following? Base: All respondents excluding not applicable for each statement: Sufficiency of time for documentation is (n = 3768); My control over my workload is (n = 3849); The degree to which my care team works efficiently together is (n = 3726).

By gender, age, area of practice, years in practice and community size

Women are more likely to say they have poor or marginal control over their workload (**51%*** vs. men 39%).

A greater percentage of those under 55 years of age say they have poor or marginal control compared with those who are older (**52%*** of those <35, **51%*** of those 35 to 54 vs. **38%*** of those 55+).

Years in practice also interacts with workload, with those practising 11 to 20 years *significantly* more likely (**53%***) to report poor or marginal control compared with those with over 30 years of practice (**33%***).

There is no significant difference by community size, but those in an isolated/remote area (56%) show a higher skew toward selecting poor or marginal control over workload compared with those practising in other areas (45% in small town/rural and 46% in urban/suburban areas).

	Control over workload % poor/marginal
GENDER	
Men	39%
Women	**51%***
AGE	
<35	**52%***
35 to 54	**51%***
55+	38%
AREA OF PRACTICE	
General practitioner	45%
Medical specialist	49%
Surgical specialist	45%
Other/Admin	43%

	Control over workload % poor/marginal
YEARS IN PRACTICE	
5 or less	45%
6 to 10	48%
11 to 20	**53%***
21 to 30	48%
Over 30	**33%***
COMMUNITY SIZE	
Urban/suburban	46%
Small town/rural	45%
Isolated/remote	56%

Table 35. Poor + marginal control over workload by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

WORK–LIFE INTEGRATION

Half of respondents say they are dissatisfied with work–life integration.

Half of respondents (51%: 10% very dissatisfied and 41% dissatisfied) say they are dissatisfied with their work–life integration (i.e., meeting personal and professional obligations).

Medical residents are *significantly* more likely to say they are very dissatisfied/dissatisfied with their work–life integration (**56%*** vs. 50% of practising physicians).

WORK–LIFE INTEGRATION

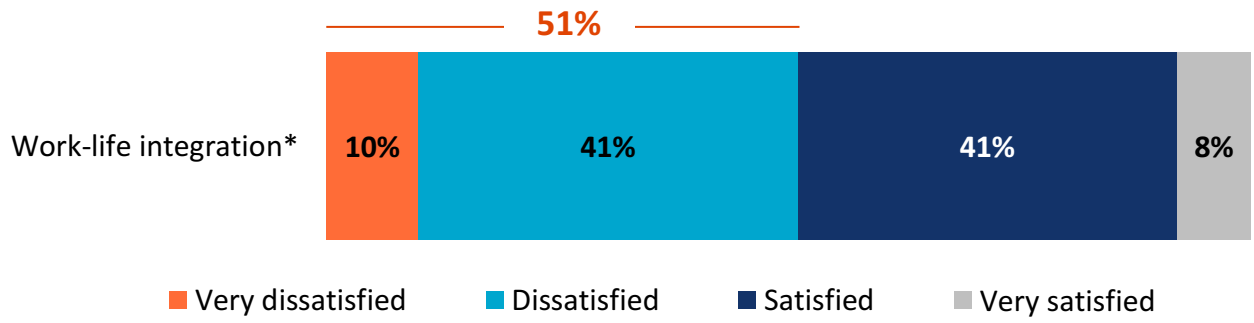


Figure 21. Responses to question 45aa. Please rate your degree of satisfaction with each of the following dimensions of your workplace. Base: Total answering: work–life integration (n = 3847) and efficiency and resources (n = 3626).

**i.e., meeting personal and professional obligations*

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely to be dissatisfied with their work–life integration (**56%*** vs. 43% among men).

Respondents aged 35 to 54 years are *significantly* more likely than those aged 55+ years to say they are dissatisfied with their work–life integration (**59%*** vs. **40%***, respectively).

Respondents practising as General Practitioners (**52%***), Medical Specialists (**51%***), and Surgical Specialists (**54%***) are *significantly* more likely than other/administration positions to be dissatisfied (42%).

Physicians practising from six to 10 years and 11 to 20 years are *significantly* more likely to be dissatisfied with work–life integration (**62%*** and **60%***, respectively, vs. **33%*** those with over 30 years in practice).

There is no significant difference by community size.

	Work life integration % very dissatisfied or dissatisfied
GENDER	
Men	43%
Women	56%*
AGE	
<35	52%
35 to 54	59%*
55+	40%*
AREA OF PRACTICE	
General practitioner	52%*
Medical specialist	51%*
Surgical specialist	54%*
Other/Admin	42%

	Work life integration % very dissatisfied or dissatisfied
YEARS IN PRACTICE	
5 or less	54%
6 to 10	62%*
11 to 20	60%*
21 to 30	51%
Over 30	33%*
COMMUNITY SIZE	
Urban/suburban	51%
Small town/rural	51%
Isolated/remote	59%

Table 36. Dissatisfied + very dissatisfied with each statement by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

EFFICIENCY AND RESOURCES

Six in 10 respondents say they are dissatisfied with efficiency and resources

Fifty-nine percent say they are dissatisfied (18% very dissatisfied, 41% dissatisfied) with efficiency and resources at work (e.g., use of scribes, availability of support staff, efficiency/use of EHR, appointment system and ordering systems). Practising physicians are *significantly* more likely to be dissatisfied with efficiency and resources (60%* compared with 52% of medical residents).

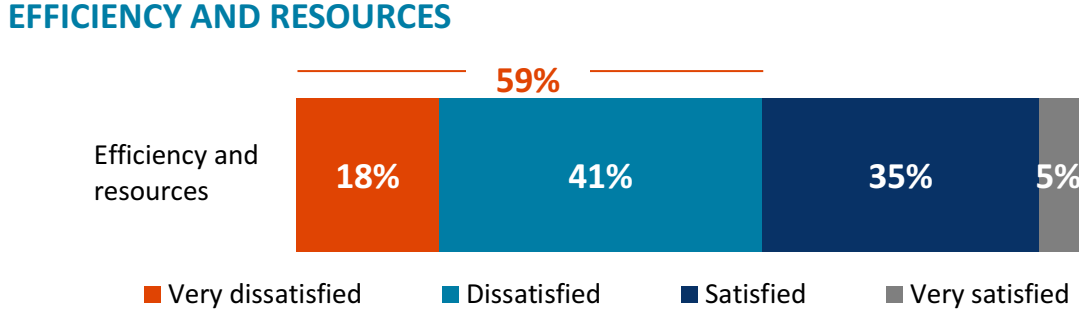


Figure 22. Responses to question 45aa. Please rate your degree of satisfaction with each of the following dimensions of your workplace. Base: Total answering: efficiency and resources (n = 3626).

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely to be dissatisfied with the efficiency and resources available in their workplace (**65%*** vs. 51% of men).

Respondents aged 35 to 54 years are *significantly* more likely than older age groups to say they are dissatisfied with efficiency and resources (**68%*** vs. **49%*** of those aged 55+ years).

Physicians practising six to 10 years and 11 to 20 years are *significantly* more likely to be dissatisfied with efficiency and resources (**72%*** and **69%**, respectively) than those more tenured (**46%*** of those practising 30 or more years in practice).

Those in urban/suburban areas (**59%***) and in small town/rural communities (**58%***) are *significantly* less likely to be dissatisfied with efficiency and resources compared with those in isolated communities (87%).

	Efficiency and resources % very dissatisfied or dissatisfied
GENDER	
Men	51%
Women	**65%***
AGE	
<35	58%
35 to 54	**68%***
55+	**49%***
AREA OF PRACTICE	
General practitioner	57%
Medical specialist	61%
Surgical specialist	58%
Other/Admin	61%

	Efficiency and resources % very dissatisfied or dissatisfied
YEARS IN PRACTICE	
5 or less	63%
6 to 10	**72%***
11 to 20	**69%***
21 to 30	57%
Over 30	**46%***
COMMUNITY SIZE	
Urban/suburban	**59%***
Small town/rural	**58%***
Isolated/remote	87%

Table 37. Dissatisfied + very dissatisfied with each statement by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

ADMINISTRATIVE BURDEN: ELECTRONIC MEDICAL RECORDS (EMR)

Time spent on the EMR at home is seen as excessive or moderately high among half of respondents.

Half (49%) of respondents feel that the amount of time they spend on the EMR at home is “excessive” or “moderately high;” this is higher among practising physicians (50% vs. 43% of medical residents).

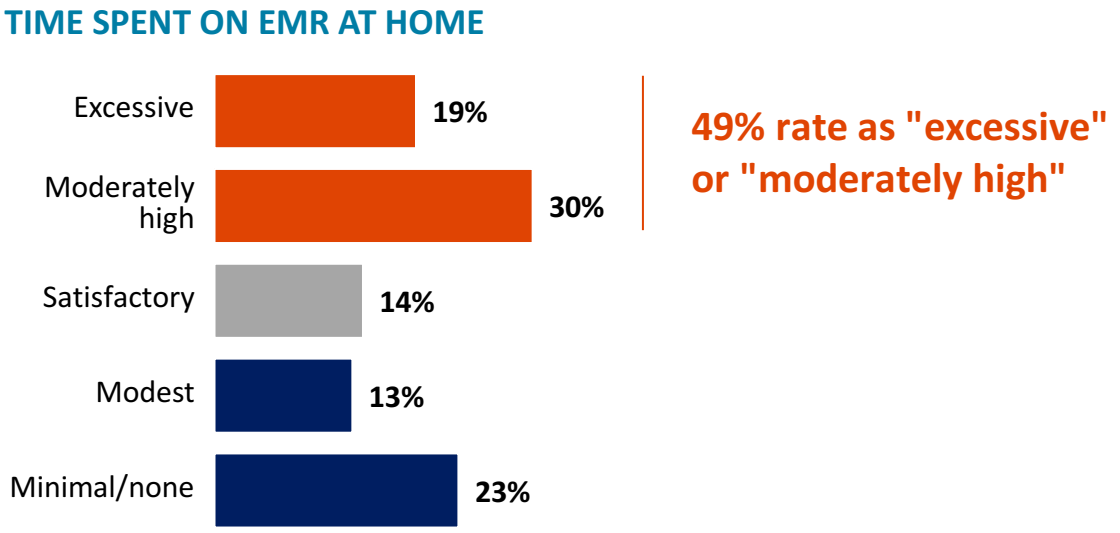


Figure 23. Responses to question 45a (part of Mini-Z scale). Please complete the following statement: Base: All respondents excluding not applicable (n = 3306).

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely to feel that the time they spend on the EMR at home is “excessive” or “moderately high” (**54%*** vs. 41% of men).

General practitioners are *significantly* more likely to say the time they spend on the EMR at home is “excessive” or “moderately high” (**61%*** vs. **40%*** of medical specialists, 39% of surgical specialists and 41% other/admin).

There are no significant differences by age or community size.

	My professional time spent on EMR at home % Rated "excessive" or "moderately high"
GENDER	
Men	41%
Women	**54%***
AGE	
<35	48%
35 to 54	52%
55+	46%
AREA OF PRACTICE	
General practitioner	**61%***
Medical specialist	**40%***
Surgical specialist	39%
Other/Admin	41%

	My professional time spent on EMR at home % Rated "excessive" or "moderately high"
YEARS IN PRACTICE	
5 or less	**58%***
6 to 10	**50%***
11 to 20	**49%***
21 to 30	**54%***
Over 30	43%
COMMUNITY SIZE	
Urban/suburban	49%
Small town/rural	50%
Isolated/remote	51%

Table 38. Rated excessive or moderately high in question 45a by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

WORK HOURS

Physicians work more hours in an average week than the average Canadian employee.

Overall, respondents work on average 53.7 hours a week (total hours combined including patient care, administrative tasks and other duties/responsibilities).[15] Practising physicians average about 52.4 hours of work a week: they spend, on average, about 35.5 hours a week on patient care, 10.0 hours on administrative tasks and 6.9 hours on other duties. Medical residents average about **65.9↑** hours of work a week, typically spending more time than practising physicians on patient care (**48.0↑** hours a week, on average); their hours are similar to those of practising physicians on administrative tasks (10.2 hours) and other duties (7.8 hours).

[15] Combined total hours for each of the following: 1) Patient care (including direct patient care, indirect patient care, and on-call work hours); 2) Administrative tasks (including electronic documentation time, email, prescriptions, or dering tests, etc.); 3) Other duties/responsibilities: Including teaching, committee work, research, leadership role, etc.

	All respondents	Practising physicians	Medical residents
	Mean hours	**Mean hours**	**Mean hours**
Patient care	36.7	35.5	**48.0 ↑**
Admin	10.0	10.0	10.2
Other duties	7.0	6.9	7.8
Total average	**53.7**	**52.4**	**65.9 ↑**

Table 39. Average hours worked by type of work, by practising physicians vs. medical residents.

↑↓ = significantly higher/lower than other subgroup(s). T-test for statistical significance used (95% confidence interval).

By gender, age, area of practice, years in practice and community size

Women put *significantly* more hours into administrative tasks than men (average **10.6↑** vs. 9.0) (probably because women are more likely to be general practitioners). On average, total hours spent by men and women are roughly similar (52.9 and 54.1 hours, respectively).

Surgical specialists are *significantly* more likely to be working a greater number of hours in a typical week compared with other types of physicians (**61.6↑** hours on average); they spend *significantly* more time on patient care (**46.3↑** hours compared with the average of 35.5 hours) specifically. General practitioners and physicians working in other/administration positions are spending more time, on average, on administrative tasks (**10.9↑** and **11.2↑** hours, respectively, compared with the average of 10 hours).

Physicians with over 30 years in practice are spending significantly less time working on average (**45.2↓** hours) than physicians practising less than 20 years (55.5 hours an average a week).

Respondents practising in isolated/remote and small town/rural communities work more hours on average per week (**59↑** and **55.6↑** hours, respectively, vs. 52.9 hours in urban/suburban areas), spending significantly more time on patient care and administrative tasks.

	Patient care	Administrative tasks	Other duties	Average # of hours worked
GENDER				
Men	37	9	6.9	52.9
Women	36.5	**10.6 ↑**	7.0	54.1
AREA OF PRACTICE				
General practitioner	**36.1 ↓**	**10.9 ↑**	**4.9 ↓**	**51.8 ↓**
Medical specialist	36.3	8.8	8.3	53.4
Surgical specialist	**46.3 ↑**	8.7	6.5	**61.6 ↑**
Other/Admin	32.9	**11.2 ↑**	**10.3 ↑**	54.4

	Patient care	Administrative tasks	Other duties	Average # of hours worked
YEARS IN PRACTICE				
5 or less	39	11.8 ↑	4.8 ↓	55.7
6 to 10	37.8	10.6	7	55.4
11 to 20	37.5	10.5	7.6 ↑	55.5
21 to 30	35.4	9.9	8.4 ↑	53.6
Over 30	30.9 ↓	8.3 ↓	6.0 ↓	45.2 ↓
COMMUNITY SIZE				
Urban/suburban	35.9	9.6	7.4 ↑	52.9
Small town/rural	40.7 ↑	10.3 ↑	4.6	55.6 ↑
Isolated/remote	40.8 ↑	12.0 ↑	6.2 ↑	59 ↑

Table 40. Average hours worked by gender, area of practice, years in practice and community size.

↑↓ *= significantly higher/lower than other subgroup(s). T-test for statistical significance used (95% confidence interval).*

ATMOSPHERE IN PRIMARY WORK AREA

Work environment is considered hectic or chaotic among four in 10 respondents.

Four in 10 respondents (39%) rate the atmosphere at their work as 1 or 2 on a scale of 1 to 5, where 1 is "hectic, chaotic," 3 is "busy but reasonable" and 5 is "calm." There is no difference between practising physicians and medical residents.

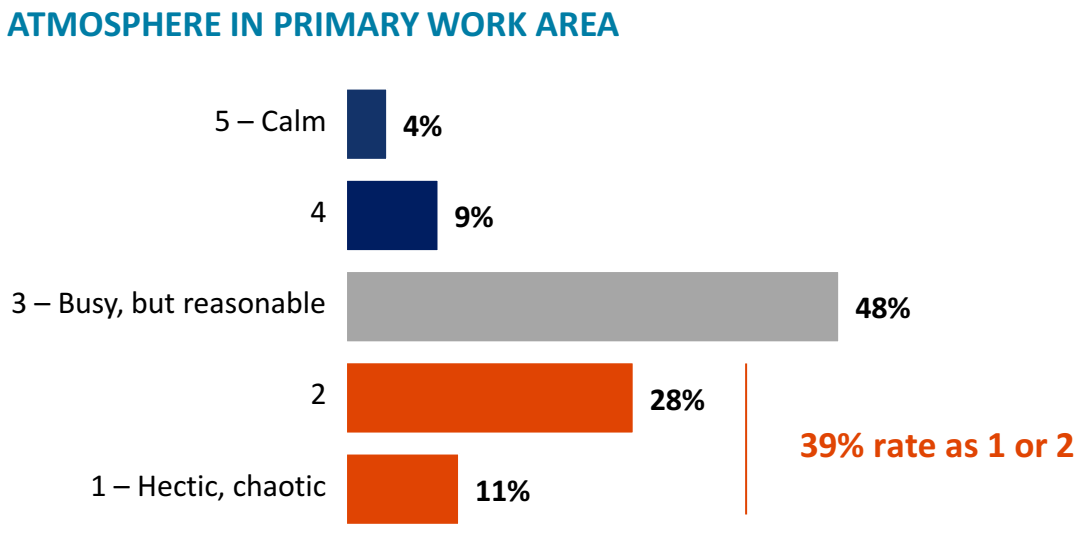


Figure 24. Responses to question 45b. Which number best describes the atmosphere in your primary work area? Base: All respondents (n = 3864).

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely to rate their atmosphere at work as 1 or 2 on a scale of 1-hectic to 5-calm (**42%*** vs. 34% of men).

Respondents aged 35 to 54 years are *significantly* more likely to rate the atmosphere at their primary work area as 1 or 2 (**45%*** vs. **32%*** of those 55+ years old).

Medical specialists are *significantly* more likely than general practitioners to rate their atmosphere at work as 1 or 2 (**46%*** vs. **32%***, respectively).

Physicians practising between 11 and 20 years are *significantly* more likely to say their atmosphere at work as 1 or 2 (**46%*** vs. **29%*** of those who have been practising for more than 30 years).

Those working in larger urban/suburban areas and isolated/remote areas (**41%*** and **40%***, respectively) are *significantly* more likely to rate their workplace as 1 or 2 than those in small town/rural communities (32%).

	Atmosphere in primary work area % rated 1 or 2 hectic, chaotic
GENDER	
Men	34%
Women	**42%***
AGE	
<35	38%
35 to 54	**45%***
55+	**32%***
AREA OF PRACTICE	
General practitioner	**32%***
Medical specialist	**46%***
Surgical specialist	43%
Other/Admin	38%

	Atmosphere in primary work area % rated 1 or 2 hectic, chaotic
YEARS IN PRACTICE	
5 or less	39%
6 to 10	47%
11 to 20	**46%***
21 to 30	38%
Over 30	**29%***
COMMUNITY SIZE	
Urban/suburban	**41%***
Small town/rural	32%
Isolated/remote	**40%***

Table 41. Atmosphere in primary work area by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

PROFESSIONAL FULFILLMENT

One in five respondents score high on professional fulfillment.

Professional fulfillment is measured by the Professional Fulfilment Index, which includes question items on meaningfulness of work and contributing professionally in ways that are valued most, among others.[16] Twenty-one percent of respondents score high on the Professional Fulfillment Index. The percentage of physicians with a high score was significantly greater among practising physicians (**22%*** vs. 14% of medical residents).

PROFESSIONAL FULFILLMENT INDEX

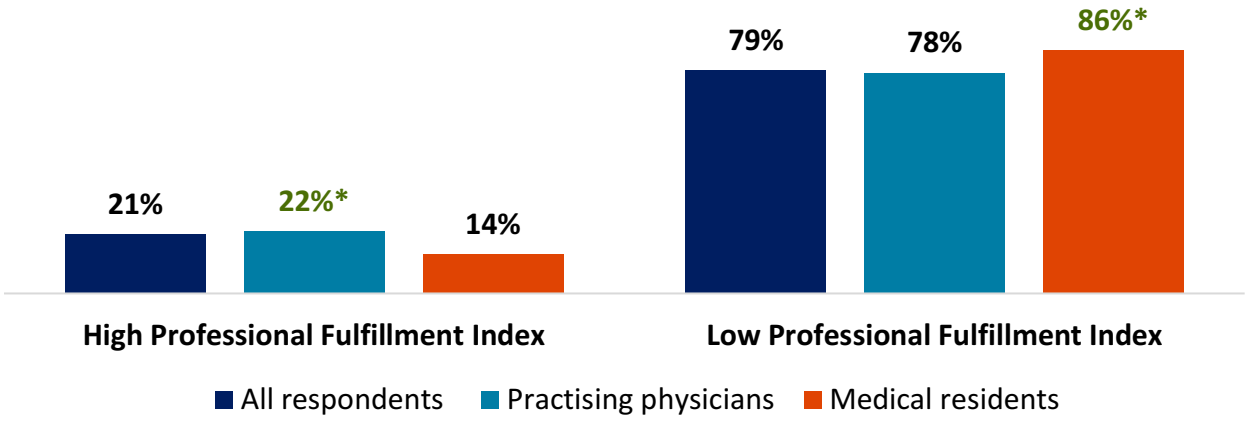


Figure 25. PROFESSIONAL FUFILLMENT INDEX. Dichotomous professional fulfillment subscale (6-item average) is recommended at an average item score cut-off point of >3.0. Base: All respondents, excluding those who did not agree to continue with the optional questions (n = 3864).

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

[16] The Professional Fulfillment Index (PFI) is measured using the dichotomous scale on the Professional Fulfillment subscale (6-item average). Items are scored 0 to 4 and treated as a continuous variable. Scale score is calculated by averaging the item scores. Dichotomous professional fulfillment is calculated at an average item score cut-point of >3.0.

By gender, age, area of practice, years in practice and community size

Men are *significantly* more likely to score "high" on the Professional Fulfilment Index (**27%*** vs. 17% of women).

Respondents who are under the age of 55 years (**17%*** of those aged 35 to 54 years and **14%*** of those under the age of 35 years) are *significantly* less likely to score "high" on the Professional Fulfillment Index than older respondents (30%).

General practitioners are *significantly* less likely to score "high" on the Professional Fulfillment Index than other areas of practice (18% vs. **21%*** of medical specialists, **24%*** of surgical specialists and **29%*** of other/admin physicians).

Physicians with 21 to 30 years of experience (**22%***) and over 30 years of practice (**34%***) are *significantly* more likely to score "high" on the Professional Fulfillment Index compared with those with 20 years of practice or less (14%–17%).

Respondents practising in in small town/rural (**17%***) and those in isolated/remote areas (**14%***) are *significantly* less likely to score "high" on professional fulfillment compared with those in urban/suburban communities (22%).

	High score on Professional Fulfillment Index
GENDER	
Men	**27%***
Women	17%
AGE	
<35	**14%***
35 to 54	**17%***
55+	30%
AREA OF PRACTICE	
General practitioner	18%
Medical specialist	**21%***
Surgical specialist	**24%***
Other/Admin	**29%***

	High score on Professional Fulfillment Index
YEARS IN PRACTICE	
5 or less	14%
6 to 10	14%
11 to 20	17%
21 to 30	**22%***
Over 30	**34%***
COMMUNITY SIZE	
Urban/suburban	22%
Small town/rural	**17%***
Isolated/remote	**14%***

Table 42. Score high on Professional Fulfillment Index by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

BOX 4. PROFESSIONAL FUFILLMENT INDEX (PFI) BY PSYCHOLOGICAL FACTORS

Of those who are classified as **"languishing"** in mental health, none score high on professional fulfillment (0% vs. 6% of those who are "moderate" or 37% of those "flourishing" in mental health).

Physicians who report **burnout** are 4.5 times less likely to score high on professional fulfillment (8% vs. 36% of respondents who do not report burnout).

Those who have **moderate or severe anxiety** are six times less likely to be high on professional fulfillment (6% vs.13% of those with mild and 36% of those with minimal levels of anxiety).

Physicians who score positive on **depression** are three times less likely than those who score negative to score high on professional fulfillment (10% vs. 31%, respectively).

PSYCHOLOGICAL SAFETY

Almost six in 10 respondents score high on feeling a sense of psychological safety on their team.

Psychological safety was assessed using Amy Edmondson's Psychological Safety and Learning Behavior in Work Teams measure.[17] A majority of respondents (58%) score high on psychological safety, 39% score moderate and 3% score low. Practising physicians are more likely to score high on psychological safety (58% vs. 51% of medical residents), while medical residents are more likely to score moderate on the scale (47% vs. 39% of practising physicians). This difference is statistically significant when using the mean calculation of psychological safety (practising physicians mean of **24.74*** vs. medical residents 23.89).

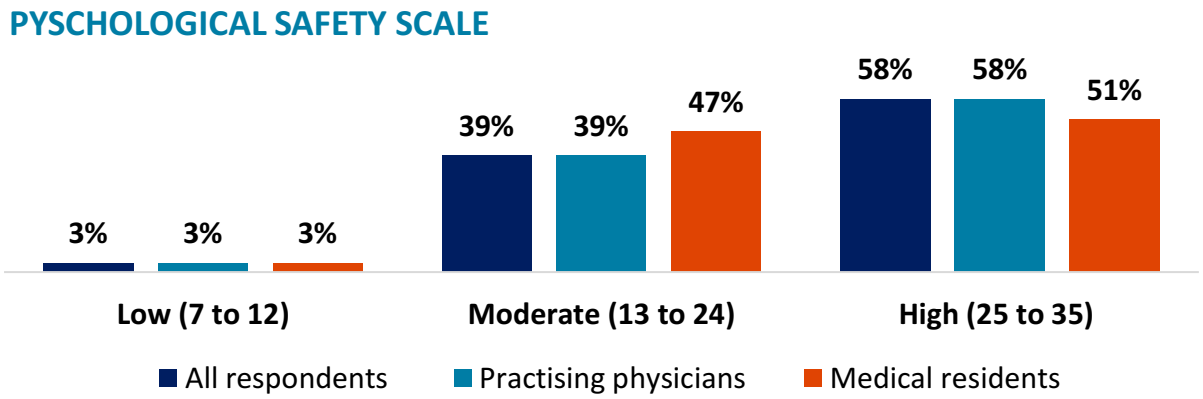


Figure 26. Psychological Safety: calculated total continuous score in tertiles. Base: All respondents (n = 3620), physicians (n = 3265), medical residents (n = 355), excluding not applicable.

[17] Psychological Safety and Learning Behavior in Work Teams: seven items scored 1 to 5 with a range from 7 to 35. Scores are calculated into tertiles: 7 to 12, 13 to 24 and 25 to 35.

By gender, age, area of practice, years in practice and community size

Men are *significantly* more likely to score high on psychological safety (mean **25.47↑** vs. mean 24.21 women).

Respondents over the age of 55 years are *significantly* more likely to score a higher mean on psychological safety (mean **25.53↑**) compared with younger age groups.

Surgical specialists have a *significantly* lower mean psychological safety score (mean **23.23↓**) than all other area of practice.

Physicians with over 30 years of practice are *significantly* more likely to have a higher mean psychological safety score (**26.08↑**) than those with fewer years of practice. Those with six to 10 years of experience (mean **23.8 ↓**) and 11 to 20 years of practice (mean **23.98↓**) score *significantly* lower on the scale compared with those practising fewer years or more years.

Those in isolated/remote areas have a *significantly* lower mean score on psychological safety (mean **23.15↓** vs. those in urban/suburban areas – mean 24.76; and small town/rural areas – mean 24.5).

	High score on psychological safety
Overall mean: All physicians	**24.65**
GENDER	
Men	**25.47 ↑**
Women	24.21
AGE	
<35	**24.56 ↓**
35 to 54	**24.07↓**
55+	25.53
AREA OF PRACTICE	
General practitioner	**25.22↑**
Medical specialist	**24.38↑**
Surgical specialist	**23.23 ↓**
Other/Admin	**24.91↑**

	High score on psychological safety
YEARS IN PRACTICE	
5 or less	24.78
6 to 10	**23.8 ↓**
11 to 20	**23.98 ↓**
21 to 30	24.6
Over 30	**26.08 ↑**
COMMUNITY SIZE	
Urban/suburban	**24.76 ↑**
Small town/rural	**24.5 ↑**
Isolated/remote	**23.15 ↓**

Table 43. Psychological Safety Scale mean score by gender, age, area of practice, years in practice and community size.

↑↓ = significantly higher/lower than other subgroup(s). T-test for statistical significance used (95% confidence interval).

COLLEGIALITY AT WORK

About six in 10 respondents score high on the Collegiality Index.

Sixty-two percent of respondents score high on the Collegiality Index, which was calculated by summing four survey items related to perceived support, respect, cooperation and teamwork between colleagues at work. There is no difference between practising physicians and medical residents (62% vs. 60%, respectively).

COLLEGIALITY INDEX

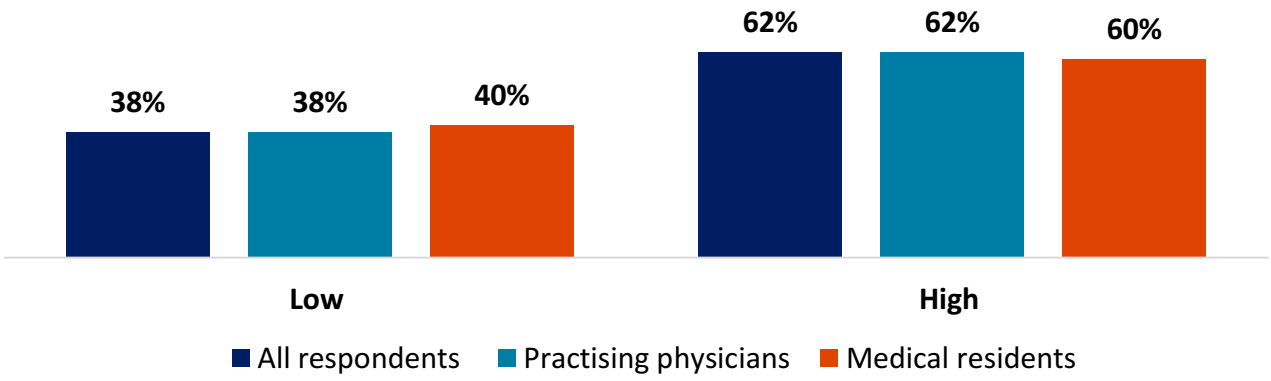


Figure 27. Collegiality Index: sum of four items; then dichotomized above/below mean of the sum. The four items included (agreement scale): In general, I find my colleagues to be supportive; People treat each other with respect in my work group; A spirit of cooperation and teamwork exists in my work group; Disputes or conflicts are resolved fairly in my work group. Base: excluding those who selected not applicable to at least one statement (n = 3703).

By gender, age, area of practice, years in practice and community size

Men are *significantly* more likely to score high on collegiality at work (**67%*** vs. women 58%).

Respondents 55+ years old (**65%***) are *significantly* more likely to score high on collegiality at work compared with those 35 to 54 years old (**57%***). The same is true for physicians practising over 30 years (**68%***) compared with those 11 to 20 years in practice (**57%***).

General practitioners are *significantly* more likely to score high (**66%***) compared with surgical specialists (**53%***).

Respondents practising in urban/suburban areas (**63%***) are significantly more likely to score high on collegiality at work compared with those in isolated/remote areas (**51%***).

	High on Collegiality Index
GENDER	
Men	67%*
Women	58%
AGE	
<35	66%
35 to 54	57%*
55+	65%*
AREA OF PRACTICE	
General practitioner	66%*
Medical specialist	59%
Surgical specialist	53%*
Other/Admin	61%

	High on Collegiality Index
YEARS IN PRACTICE	
5 or less	65%
6 to 10	58%
11 to 20	57%*
21 to 30	60%
Over 30	68%*
COMMUNITY SIZE	
Urban/suburban	63%*
Small town/rural	60%
Isolated/remote	51%*

Table 44. Collegiality Index score by gender, age, area of practice, years in practice and community size

EXPERIENCED INTIMIDATION, BULLYING, HARASSMENT AND/OR MICROAGGRESSIONS IN THE WORKPLACE

Eight in 10 respondents report having ever experienced intimidation, bullying, harassment and/or microaggressions in their workplace or training environment; four in 10 respondents report experiencing it "frequently" or "often."

A total of 78% of respondents report having experienced intimidation, bullying, harassment and/or microaggressions in their workplace or training environment: 15% reported having these experiences "frequently" (at least once a week) or 25% "often" (a few times a month), and a further 38% report experience it "less often" (a few times a year).

The proportion of respondents who experience intimidation, bullying, harassment and/or microaggressions frequently (at least once a week) is similar among both practising physicians and medical residents (15% and 13%, respectively).

EXPERIENCED INTIMIDATION, BULLYING, HARASSMENT, MICROAGGRESSIONS IN WORKPLACE

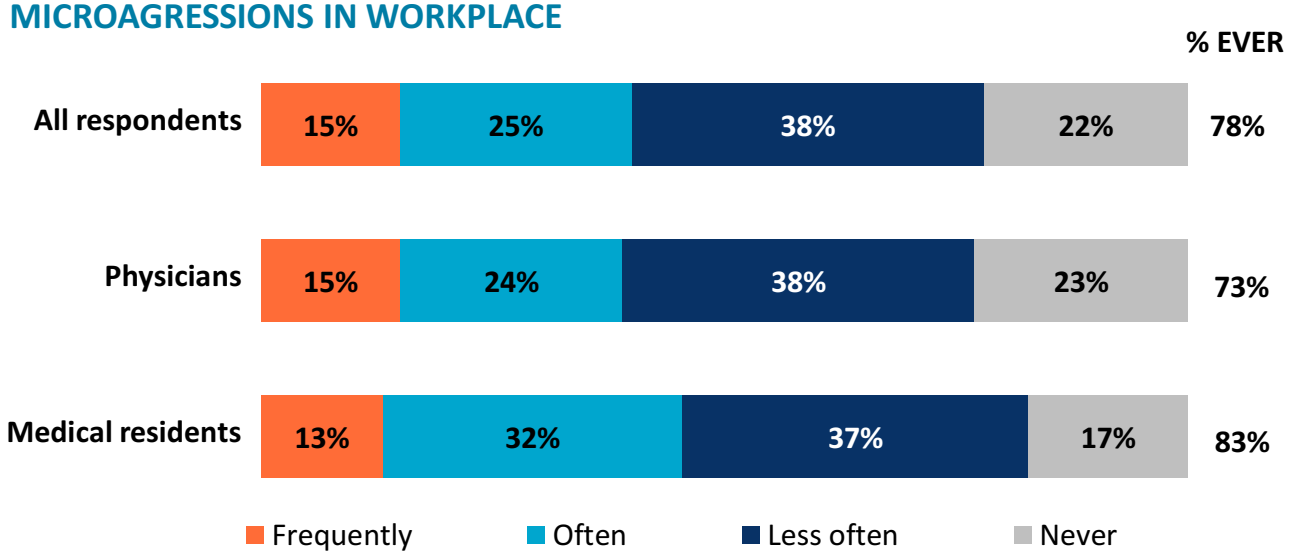


Figure 28. Responses to question 25. Have you ever personally experienced intimidation, bullying, harassment and/or microaggressions in the workplace or in a training environment? Base: All respondents (n = 3864), practising physicians (n = 3489), medical residents (n = 375).

**Frequently = every day, a few times a week, once a week; Often = a few times a month; Less often = a few times a year. Ever = 100% minus "Never"*

By gender, age, area of practice, years in practice and community size

Women are *significantly* more likely to say they have experienced intimidation, bullying, harassment and/or microaggressions at least once a week (**17%*** vs. 11% men) and *significantly* less likely to say "never" (**16%*** vs. 31% men).

Those over the age of 55 years are *significantly* less likely to experience intimidation, bullying, harassment and/or microaggressions at least once a week than those 35–54 years old (**12%*** vs. **18%***, respectively).

Surgical specialists are *significantly* more likely to have experienced intimidation, bullying, harassment and/or microaggressions than those working in other settings (**24%*** vs. **12%*** of general practitioners, **16%*** of medical specialists and **13%*** of other/admin).

There were no differences according to community size.

	Experienced intimidation, bullying, harassment and/or microaggressions / % experience it "frequently" (at least once a week)	Experienced intimidation, bullying, harassment and/or microaggressions / % "never" experienced it
GENDER		
Men	11%	31%
Women	**17%***	**16%***
AGE		
<35	14%	19%
35-54	**18%***	**18%***
55+	**12%***	**30%***
AREA OF PRACTICE		
General practitioner	**12%***	27%
Medical specialist	**16%***	**18%***
Surgical specialist	**24%***	**16%***
Other/Admin	**13%***	**22%***
YEARS IN PRACTICE		
5 or less	15%	**17%***
6 to 10	21%	**18%***
11 to 20	18%	**18%***
21 to 30	14%	**21%***
Over 30	11%	35%
COMMUNITY SIZE		
Urban/suburban	15%	23%
Small town/rural	15%	20%
Isolated/remote	17%	13%

Table 45. Experienced intimidation, bullying, harassment and/or microaggressions by gender, age, area of practice, years in practice and community size.

* *Frequently = every day, a few times a week, once a week.*
** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

BOX 5. EXPERIENCED INTIMIDATION, BULLYING, HARRASSMENT AND/OR MICROAGRESSIONS BY PSYCHOLOGICAL FACTORS

Respondents who are classified as "**languishing**" in mental health are three times as likely compared with those who are "flourishing" to have experienced intimidation, bullying and/or harassment frequently (31% vs. 11%, respectively). Among those who are classified as "moderate" in mental health, 18% have had these experiences.

Those who are **burned out** are three times as likely to have experienced intimidation, bullying, harassment and/or microaggressions frequently (at least once a week) in their workplace or training environment (22% vs. 7% those who do not).

Those who experience **moderate or severe anxiety** are four times more likely to have experienced intimidation, bullying and/or harassment frequently (29%) compared with those with minimal anxiety (7%).

Respondents who score positive on **depression** are twice as likely as those who score negative to have experienced intimidation, bullying and/or harassment frequently (21% vs. 10%, respectively).

INVOLVED IN A COLLEGE COMPLAINT OR LAWSUIT

Four in 10 respondents have had a College complaint or lawsuit in their career.

Forty-three percent of respondents have had a College complaint or lawsuit at some point in their career.

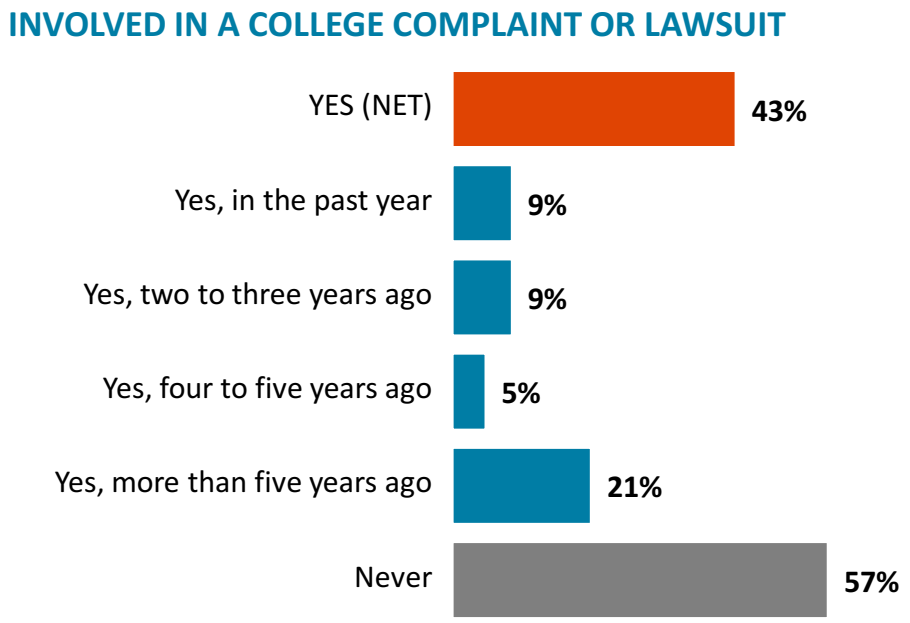


Figure 29. Responses to question 29. Have you been involved in a College complaint or lawsuit?
Base: All respondents (n = 3864).

By gender, age, area of practice, years in practice and community size

Men are *significantly* more likely to report having been involved in a College complaint or lawsuit (**53%*** vs. women 36%).

Respondents aged 35 to 54 years (**39%***) and 55+ years (**65%***) are *significantly* more likely to have had a College complaint in their career compared with those <35 years old (9%).

Medical specialists are *significantly* less likely to have been involved in a College complaint or lawsuit (**38%***) compared with surgical specialists (**60%***).

Physicians practising five or less years and six to 10 years of practice are significantly less likely to have been involved in a College complaint or lawsuit (**16%*** and **30%*,** respectively) compared with those practising 21 to 30 and over 30 years (**54%*** and **68%*,** respectively).

There is no difference by community size.

	% Involved in a College complaint or lawsuit ever
GENDER	
Men	**53%***
Women	36%
AGE	
<35	9%
35 to 54	**39%***
55+	**65%***
AREA OF PRACTICE	
General practitioner	43%
Medical specialist	**38%***
Surgical specialist	**60%***
Other/Admin	45%

	% Involved in a College complaint or lawsuit ever
YEARS IN PRACTICE	
5 or less	**16%***
6 to 10	**30%***
11 to 20	45%
21 to 30	**54%***
Over 30	**68%***
COMMUNITY SIZE	
Urban/suburban	43%
Small town/rural	46%
Isolated/remote	43%

Table 46. Involved in a College complaint or lawsuit by gender, age, area of practice, years in practice and community size.

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

BOX 6. COLLEGE COMPLAINT BY PSYCHOLOGICAL FACTORS

Respondents who have had a College complaint in the past year are not any more likely than those who have never had a complaint to be classified as "languishing" in mental health (9% vs. 7%, respectively), score high on overall burnout (57% vs. 56%, respectively) or screen positive for depression (52% vs. 48%, respectively).

Subgroup analyses

Respondents with disabilities or those who are caregivers, either of children or of parents/family members/others, were included in an extended subgroup analysis as they were identified as a demographic that are more vulnerable to poorer outcomes. Details about these two subgroups are presented in this section.

PROFILE OF THOSE WITH DISABILITIES

Respondents living with disabilities experience worse outcomes across all psychological measures compared with those without disabilities, particularly individuals with mental health-related disabilities and those who are neurodivergent. This group also reports lower levels of perceived workplace collegiality and social support.

Respondents within the broader sample had the option to self-identify as a person living with a disability. Of the total sample, 77% say they do not have a disability. Among the 23% who identify as having a disability, the most prevalent disabilities include chronic long-term conditions, such as diabetes or multiple sclerosis (10%) and mental health conditions (8%). Additionally, 3% identify as having a neurodevelopment disorder (such as ADHD, autism or dyspraxia), 2% with a hearing or speech disability, 2% with a physical mobility disability and 2% with another form of disability.

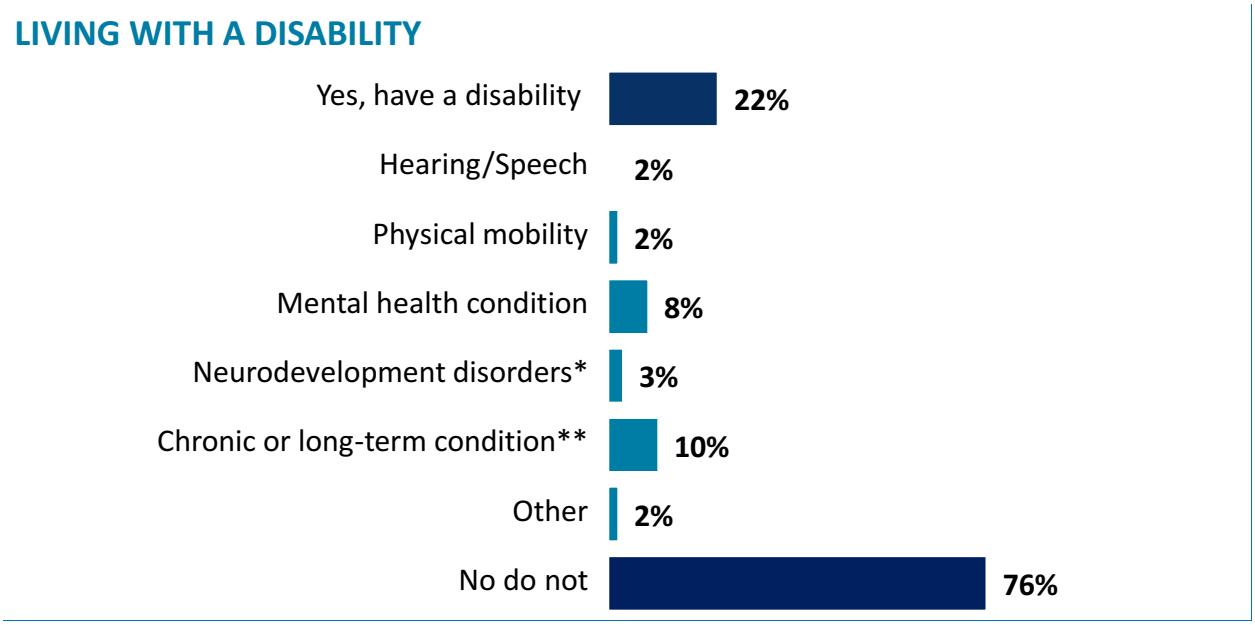


Figure 30. Responses to question 11. Do you consider yourself a person living with a disability, impairment or long-term condition related to any of the following? Base: All respondents (n = 3864).

* *(ADHD, autism, dyspraxia, Tourette syndrome, others)*
** *(Diabetes, multiple sclerosis, heart conditions, epilepsy, chronic pain, others)*

Breaking down those with disabilities by key demographic characteristics:

- Women (23%) are more likely than men (20%) to report having a disability, as are medical residents (25% vs. 22% of practising physicians).
- These groups are also more likely to report having a mental health condition (women 10%, medical residents 14%). Those aged 35 years and under are significantly more likely to report having a mental health condition (12%).
- By contrast, practising physicians (10%) and those aged 55 years or older (13%) are more likely to report having a chronic or long-term condition.

In comparing outcomes between those living with disabilities and those who are not, those living with disabilities have poorer mental health outcomes across all key psychological factors. They are significantly more likely to be "languishing" in their mental health (**12%*** vs. 6% of those not living with a disability), to be burned out (**61%*** vs. 39%), to screen positive for depression (**62%*** vs. 43%), to report having moderate or severe anxiety (**36%*** vs. 21%) and to report having considered suicide (lifetime) compared with those without disabilities (**56%*** vs. 29%).

In addition, those with mental health-related disabilities and those who are neurodiverse tend to have poorer outcomes on psychological measures compared with those with long-term chronic conditions (as illustrated in the table below).

Reporting on key differences among this subgroup, those with disabilities, are *significantly* less likely to score high on professional fulfilment (**15%*** compared to those living without a disability at 23%).

	Disability	No disability	Mental health condition	Neurodiverse	Long term chronic condition
Flourishing mental health	**39%***	50%	22%	36%	**45%**
Languishing mental health	**12%***	6%	**19%**	**14%**	9%
Overall burnout	**61%***	39%	**83%**	**81%**	65%
Positive for depression	**63%***	43%	**83%**	**73%**	54%
Severe or moderate anxiety	**36%***	21%	**53%**	**49%**	31%
Suicidal ideation (lifetime)	**56%***	30%	**75%**	**60%**	46%
Professional fulfillment (HIGH)	**15%***	23%	8%	13%	**18%**
Psychological safety (HIGH)	**49%**	60%	43%	39%	**50%**
Social support (HIGH)	**63%**	75%	60%	63%	62%
Bullying/harassment/microaggressions	**19%***	14%	**21%**	**26%**	17%

Table 47. Psychological factors by self-reported disability vs. no disability, and type of condition

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

Those living with disabilities are *significantly* less likely to score high on psychological safety (**49%*** vs. 60% of those not living with a disability) and *significantly* less likely to score high on social support including family, a significant other or friends (**63%*** vs. 75% of those without disabilities). They are also more likely to have experienced microaggressions at least once a week or more often (**19%*** vs. 14% of those with no disability). Future interventions, programs, initiatives, etc., should aim to improve the wellness of physicians living with disabilities who are at a particularly high risk of experiencing wellness challenges.

	Disability	No disability
In general, I find my colleagues to be supportive	78%	85%
People treat each other with respect in my work group	76%	84%
A spirit of cooperation and teamwork exists in my work group	72%	80%
Disputes or conflicts are resolved fairly in my work group	56%	65%
Working with members of this team, my unique skills and talents are valued and used	68%	77%
Members of this team are able to bring up problems and tough issues (including colleagues, nurses, admin)	64%	70%
No one on this team would deliberately act in a way that undermines my efforts (including colleagues, nurses, admin)	57%	65%
It is safe to take a risk in this team	39%	48%
If I make a mistake in this team, it is held against me	29%	24%
People on this team sometimes reject others for being different (including colleagues, nurses, admin)	32%	23%
It is difficult to ask other members of this team for help (including colleagues, nurses, admin)	25%	19%

Table 48. Statistical testing was not run for individual items, only for the Psychological Safety Scale.

Those living with disabilities are *significantly* less likely to score high on social support (**63%*** vs. 75% of those without disabilities). Future interventions, programs, initiatives, etc., should aim to improve the wellness of physicians living with disabilities.

	Disability	No disability
There is a special person who cares about my feelings	70%	77%
There is a special person with whom I can share joys and sorrows	68%	75%
There is a special person who is around when I am in need	66%	74%
I have a special person who is a real source of comfort to me	65%	72%
My family really tries to help me	55%	66%
I get the emotional help and support I need from my family	49%	60%
My family is willing to help me make decisions	51%	59%
I have friends with whom I can share my joys and sorrows	48%	58%
I can talk about my problems with my family	48%	57%
I can count on my friends when things go wrong	46%	57%
My friends really try to help me	43%	52%
I can talk about my problems with my friends	44%	51%

Table 49. Statistical testing was not run for individual items, only for the MSPSS.

PROFILE OF CAREGIVERS

Caregivers, either of children or of parents, other family members or friends, report worse outcomes across psychological measures than those without caregiving responsibilities. This group also reports lower levels of professional fulfilment and concerns around workload and environment.

Physicians were also given the opportunity to identify whether they act as a caregiver and/or have any dependents. Of the total sample, 53% say they do not have caregiving responsibilities. Among the 47% who say they are a caregiver, 40% indicate that they care for a child or children under 18 and 10% say they provide care for a parent, other family member or friend who has a long-term physical health or mental health issue. Three percent of respondents care for **both** a child and a parent, other family member or friend.

PARENT AND/OR CAREGIVER

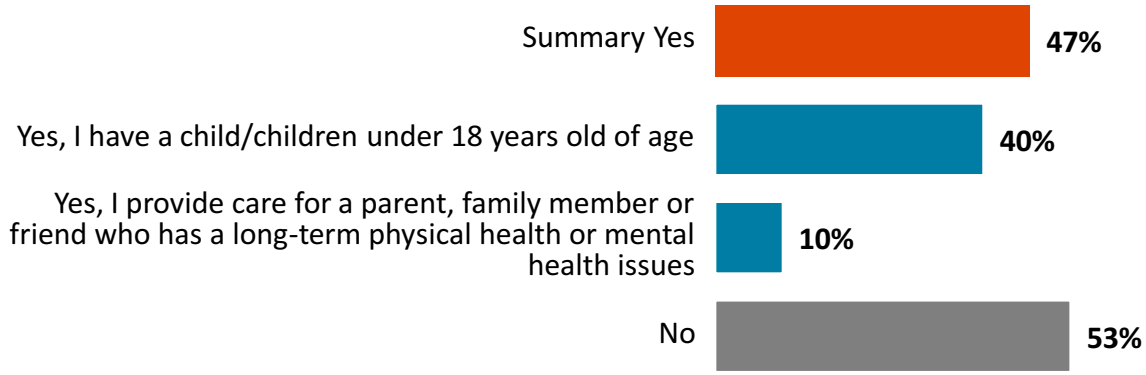


Figure 31. Responses to question 14. Do you have dependents for whom you are the primary caregiver? Base: All respondents (n = 3864).

Breaking down caregivers by key demographic characteristics:

- **Women** (52%) are more likely than men (41%) to report being a caregiver of a child, parent, other family member or friend, as are practising physicians (51% vs. 15% of medical residents, probably because of the intersection of age).
- Notably, those who identify as a **member of an ethnic or racial group** are also more likely to be a caregiver (52% are a caregiver: 45% are a parent and 11% care for another) than those who identify as white only (45%: 39% are a parent and 9% care for another).
- Age is also a factor:
  - Respondents who are aged **35 to 54 years** are more likely to say they care for a parent (74% are a caregiver: 71% are a parent and 9% care for another) compared with those <35 years old (23% are a caregiver: 21% are a parent and 2% care for another) and those 55+ years old (23% are a caregiver: 9% are a parent and 16% care for another)
- As is years in practice:
  - Physicians **practising six to 20 years** are more likely to be a parent of a child under 18 years old (71% of those with six to 10 years and 75% of those with 11 to 20 years vs. 40% of those with five or less years, 38% of those 21 to 30 years and 5% of those with over 30 years of experience).

- Caregivers tend to have **poorer mental health outcomes across all key metrics** compared with those without any caregiving responsibilities. They are *significantly* **less likely to be "flourishing"** in mental health (**41%*** of parents vs. 47% of both parents and caregivers of another and 50% of those who are not parents or caregivers), more likely to be **burned out** (**61%*** of parents and 65% of both parents and caregivers of another vs. **47%*** of those who are not a parent or caregiver), to rate their **mental health "worse"** than before the pandemic (**69%*** of parents and **77%*** of both parents and caregivers of another vs. 54% of those who are not a parent or caregiver), to score **positive for depression** (**52%*** of parents and 61% of parents and caregivers of another vs. **44%*** of those who are not) and to report having **moderate or severe anxiety** (**29%*** of parents and 37% of both parents and caregivers of another vs. **22%*** of those who are not a parent or caregiver).

	Parent only	Both parent and caregiver of another[18]	Not a parent or caregiver
Flourishing mental health	**41%***	47%	50%
Languishing mental health	8%	13%	7%
Overall burnout	**61%***	65%	**47%***
Self-report worse mental health than before COVID	**69%***	**77%***	54%
Score positive for depression	**52%***	61%	**44%***
Severe and moderate anxiety	**29%***	37%	**22%***
Professional fulfillment (HIGH)	**16%***	22%	24%

Table 50. Psychological factors by parent vs. parent and caregiver of another vs. neither.

Parent only: respondents who selected "Yes, I have child/children under 18 years of age."
Both parent and caregiver: respondents who selected "Yes, I have a child/children under 18 years of age" and "Yes, I provide care for a parent, family member or friend who has a long-term physical health or mental health issues."

** *Statistically significant using chi-square test of independence. See Appendix B for more details.*

Parents are *significantly* more likely to score lower on high professional fulfilment (**16%*** vs. 22% of both parents and caregivers of another vs. 24% of those who are not).

On the individual subscale items of professional fulfilment (comprising fulfilment, work exhaustion and disengagement), caregivers are consistently less likely to feel fulfilled and more likely to be exhausted and disengaged, particularly caregivers of both a parent or other family member plus a child.

[18] Parent and caregiver of another: small base size *n* = 94.

	Parent only	Both parent and caregiver of another	Not a parent or caregiver
My work is meaningful to me	54%	57%	62%
I feel worthwhile at work or school	42%	47%	49%
My work is satisfying to me	38%	36%	48%
I'm contributing professionally in the ways I value most (e.g., patient care, research and leadership)	38%	42%	46%
I feel happy at work or school	23%	24%	33%
I feel in control when dealing with difficult problems at work or school	21%	23%	27%
Emotionally exhausted at work or school	39%	48%	28%
Physically exhausted at work or school	36%	47%	28%
A sense of dread when I think about work I have to do	34%	44%	26%
Lacking in enthusiasm at work or school	28%	38%	22%
Less connected with my colleagues	16%	22%	13%
Less interested in talking with my patients	13%	17%	10%
Less empathetic with my colleagues	10%	16%	7%
Less sensitive to others' feelings and emotions	10%	14%	7%
Less connected with my patients	9%	15%	7%
Less empathetic with my patients	9%	15%	6%

Table 51. Statistical testing was not run for individual items, only for the PFI by parent only vs. both parent and caregiver of another vs. neither.

Parent only: respondents who selected "Yes, I have child/children under 18 years of age."

Both parent and caregiver: respondents who selected "Yes, I have a child/children under 18 years of age" and "Yes, I provide care for a parent, family member or friend who has a long-term physical health or mental health issues."

When asked what barriers prevent them from having a healthy lifestyle, both "parents" and "both parents and caregivers" are significantly more likely than those without caregiving responsibilities to cite lack of time (74% and 81%, vs. 58%, respectively), heavy workload (65% and 71% vs. 56%), scheduling (60% and 57% vs. 54%) and other priorities (74% and 72% vs. 11%).

	Parent only	Both parent and caregiver of another	Not a parent or caregiver
Lack of time	74%	81%	58%
Heavy workload and/or stressful work environment	65%	71%	56%
Scheduling (e.g., long work hours)	60%	57%	54%
Other priorities (e.g., children)	74%	72%	11%

Table 52. Barriers preventing healthy lifestyle by parent only vs. both parent and caregiver of another vs. neither.

Parent only: respondents who selected "Yes, I have child/children under 18 years of age."

Both parent and caregiver: respondents who selected "Yes, I have a child/children under 18 years of age" and "Yes, I provide care for a parent, family member or friend who has a long-term physical health or mental health issues."

The data indicate that parents and caregivers experience more negative wellness outcomes compared with those who are not caregivers. These results can be used to help advocate for additional resources to support the wellness of caregivers, responsibilities for whom has increased throughout the pandemic.

Discussion

The National Physician Health (NPHS) Survey in 2021 is the second national wellness study conducted among physicians in Canada by the Canadian Medical Association (CMA). The primary objectives of the study are to track physicians' wellness over time since the initial baseline study in 2017 and to delve deeper into understanding factors related to physician wellness (i.e., behavioural and occupational factors). At the time of the survey (fall 2021), Canadians were still living under various COVID-19 provincial/territorial public health measures. The health system was strained by yet another rise in COVID-19 cases; hospitals were facing health human resource challenges;[19] and average wait times between referral and medically necessary elective treatments increased significantly.[20]

Many physicians faced the day-to-day realities of exceptionally challenging workplace environments. Further, the pandemic has increased family obligations, which may explain the increased strain on physicians who are parents and caregivers. An important, secondary goal arising from this context is to understand the impact of the pandemic on physician health and wellness and, as well, to determine whether specific demographic subgroups have been disproportionately affected. The results from this study can be used to support the inclusion of physician wellness initiatives in post-pandemic recovery planning. Prevention and treatment support can help to enhance physician wellness, career satisfaction and retention and ultimately improve the delivery of safe patient care.

Mental health has decreased during the pandemic among respondents.

In terms of overall mental health, fewer physicians are showing signs of "flourishing" mental health when compared with 2017; most appear to have slipped into "moderate" levels of mental health (at least in the aggregate) but some have fallen into "languishing" mental health. This is not surprising given the context: six in 10 respondents rate their mental health as being worse now than before the pandemic.

The most dramatic shift is in the near doubling of burnout.

The most striking finding of note from the 2021 NPHS is the increase in the rate of burnout among respondents. Overall burnout captured in this report is a condition consisting of two dimensions: emotional exhaustion and depersonalization. Over half of respondents are experiencing burnout, a *significant increase of 1.7 times* or 22 percentage points since 2017.

Other psychological factors that have seen notable and alarming increases include rates for positive screening for depression and recent suicidal ideation. Half of respondents screen positive for depression, an increase of 1.4 times or 13 percentage points compared with 2017. And recent suicidal ideation (in the past 12 months) is reported by 14% of respondents, an increase of 1.5 times or five percentage points since 2017.

[19] Grimm CA. *Hospitals reported that the COVID-19 pandemic has significantly strained health care delivery.* 2021. Results of a National Pulse Survey February 22–26, 2021.

[20] Data for the study were collected between Jan. 15, 2021, and July 27, 2021.
Moir M, Barua B. *Waiting your turn wait times for health care in Canada, 2021 report.* Fraser Institute.

While medical residents are more likely to experience burnout, screen positive for depression and report recent suicidal ideation in the pre-pandemic and current contexts, practising physicians have seen larger percentage increases compared with pre-pandemic (2017) levels. In addition to occupational-related issues, personal factors such as social isolation along with continued uncertainty about the future and increased family obligations for some physicians have been additional stressors brought on by the pandemic.

Likelihood to reduce clinical work hours in the coming two years is higher among those with poor wellness outcomes.

A significant proportion of respondents (half) are thinking of reducing or modifying their clinical work hours in the next 24 months. Those who are more likely to be burned out, "languishing" in mental health, screen positive for depression, have moderate/severe anxiety and score low on professional fulfillment report greater a likelihood of reducing their clinical hours. While a growing shortage of physicians was certainly an issue pre-pandemic, the cost of increased burnout in the form of early retirements and reduced clinical hours due to the pandemic may be substantial in the coming years. Considering this, wellness should be considered as a pillar of future health human resource planning.

High administrative workload and lower satisfaction with work–life integration may be related to low professional fulfillment.

Overall, a majority of respondents score low on the Professional Fulfillment Index, which consists of sentiments around contentment, satisfaction and meaningfulness of work. Respondents who are low on professional fulfillment are significantly more likely to experience burnout and significantly less likely to be flourishing in their mental health, suggesting it may be a contributing factor to poor wellness outcomes.

Low professional fulfillment is probably related to a heavier workload, fatigue and a lack of work–life integration, rapidly changing policies and processes, and a shortage of human resources, all of which have been exacerbated by the pandemic. Moreover, those who score low on professional fulfillment more frequently report a likelihood of reducing their clinical work hours in the next 24 months (1.4 times more likely compared with those who score high on professional fulfillment).

The results from this study indicate that EMRs are probably contributing to longer work hours. While EMRs have been almost universally adopted by physicians,[21] they present a key pain point that adds to work frustration, increases financial costs[22] and interferes with personal life as many respondents in this study report spending moderate or excessive amounts of time on the EMR at home. Current EMR systems are plagued by issues around coordination and interoperability, which add to administrative tasks and reduce time spent with patients, which may lead to greater feelings of ineffectiveness and lower professional fulfillment.

[21] Persaud N. A national electronic health record for primary care. *CMAJ.* 2019;191(2):E28–E29. https://doi.org/10.1503/cmaj.181647

[22] Owens B. Family doctors call for guaranteed access to EMR data for research and quality improvement. *CMAJ.* 2018;190(2): E60–E61. https://doi.org/10.1503/cmaj.109-5543

There is a relatively high level of psychological safety but there is room for improvement.

Psychological safety leads to healthier teams and workplaces and is defined as "a shared belief held by members of a team that the team is safe for interpersonal risk taking."[23] While many respondents score high on psychological safety, over four in 10 score moderate on the scale, suggesting there is room for improvement in this area. Those who are not burned out and those with higher levels of mental health are more likely to experience higher psychological safety, suggesting that a positive workplace culture may play a protective role against negative wellness outcomes. Similarly, those who do not experience psychological safety are much more likely to experience depression and anxiety.

There is culture shift toward prioritizing wellness.

A silver lining to the findings: COVID-19 has shone a light on the importance of mental health and well-being, and it appears that a culture shift is underway among physicians. Younger physicians (e.g., medical residents and those under 35 years of age) report prioritizing their personal wellness and seeking help to support their well-being, possibly an indication of the fading stigma associated with seeking mental health support.

At least in the aggregate, some of those who are at risk of psychological distress, who could benefit from wellness supports (e.g., women and younger physicians) are accessing them. These findings echo a separate cohort study carried out among Ontario physicians, wherein the researchers found that the COVID-19 pandemic was an impetus for greater use of mental health services among physicians.[24] This is also in line with results from research conducted among the general population showing that younger Canadians are more likely to talk about mental health and to seek out mental health resources compared with older generations.[25]

Nevertheless, there are still significant barriers to overcome in terms of increasing access, overcoming stigma and emphasizing the need to seek out wellness supports. For some physicians, stigma and shame (among men and older people), or a belief that things aren't serious enough to necessitate seeking help (among women), may be preventing them from seeking out help. Confidentiality is also often cited as a reason why many physicians don't access supports. This is particularly the case among younger doctors and those practising in small town/rural areas and isolated/remote areas, who also worry about potential harm to their career.

[23] Edmondson A. Psychological safety and learning behavior in work teams. Admin Sci Q, 1999;44(2):350–383. https://doi.org/10.2307/2666999

[24] Myran DT, Cantor N, Rhodes E, et al. Physician health care visits for mental health and substance use during the COVID-19 pandemic in Ontario, Canada. JAMA Netw Open, 2022;5(1):e2143160. https://doi.org/10.1001/jamanetworkopen.2021.43160

[25] Ipsos. Feb. 28, 2022. Mental illness now considered by more Canadians as a disability. https://www.ipsos.com/en-ca/mental-illness-considered-by-more-canadians-as-disability. Ipsos. March 4, 2021. Six in ten Canadians (60%) currently experiencing mental health issues, but more than half (54%) haven't sought treatment. https://www.ipsos.com/en-ca/news-polls/six-in-ten-canadians-currently-experiencing-mental-health-issues-but-more-than-half-havent-sought-treatment

Greater at-risk subgroups

IMPORTANCE OF INTERSECTIONALITY

It is important to note that not all physicians have experienced the pandemic in the same way. This year's NPHS results reveal several higher at-risk subgroups who experience more negative wellness outcomes. These subgroups include medical residents; those under 35 years of age; those identifying as women; those with 6–10 years in practice; caregivers of a child and/or parent in the home; those living with disabilities; and those working in small town/rural or isolated/remote areas. According to intersectional theories, individuals hold multiple identities that interlock to shape their experiences, and intersectional identities can magnify or protect against work-related stress among physicians.[26] Physicians do not exist as members of only one of these categories; as such, greater attention needs to be paid to the interaction effect of membership in several of these at-risk groups (e.g., identifying as a woman, being under 35 years of age, *and* being a caregiver for a child at home).

MEDICAL RESIDENTS

Medical residents experience poorer wellness outcomes in general compared with practising physicians, and this was the case even before the pandemic.[27] Coming out of school, medical residents face steep learning curves, have growing responsibilities and work more intense hours in the first years of their medical training.[28] Other issues arising from the pandemic have further compounded their experiences, including adjustment to virtual learning, missing out on in-person clinical experiences and worries over possible gaps in their medical knowledge.[29]

In a call to re-examine medical education in Canada, a commentary piece in *CMAJ* acknowledges that medical residents have been limited to working at one site in some parts of the country, have had reduced exposure to elective procedures and surgeries and may have received fewer learning opportunities than in the past.[30] As such, it is not surprising that medical residents report being less fulfilled professionally and are more likely to feel physically exhausted and have a sense of dread about their job.

It is reasonable to posit that the COVID-19 pandemic will leave an indelible mark on this generation of physicians, if not future ones. It will be critical to understand the experiences of this cohort that trained during the pandemic to better support them in their journey towards wellness.

WOMEN PHYSICIANS

Women physicians are also an at-risk group who score significantly lower on several psychological measures, which is consistent with findings from the 2017 NPHS. Although further reports will delve deeper, women tend to sit at the intersection of several subgroups who experience lower well-being outcomes. For instance, women physicians are more likely to be younger, more likely to be caregivers of either a child or parent at home, and relatedly also more likely to be in the earlier stages of their career (note that they make up two-thirds of the sample of general practitioners). The cumulative effect of these intersections has meant that women physicians are disproportionately experiencing burnout. Women are more likely to report being burned out, and they show

[26] Crenshaw K. Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. University of Chicago Legal Forum, 2015;1989(1). https://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8

[27] Canadian Medical Association. CMA National Physician Health Survey – A National Snapshot. 2018.

[28] Sturman N, Tan Z, Turner J. A steep learning curve": junior doctor perspectives on the transition from medical student to the health-care workplace. BMC Med Educ, 2017;17(1):92. https://doi.org/10.1186/s12909-017-0931-2

[29] Servin-Rojas M, Olivas-Martinez A, Dithurbide-Hernandez M, et al. Impact of the COVID-19 pandemic on the clinical training of last year medical students in Mexico: A cross-sectional nationwide study. BMC Med Educ. 2022;22(1):24. https://doi.org/10.1186/s12909-021-03085-w

[30] McCarthy C, Carayannopoulo, K, Walton JM. COVID-19 and changes to postgraduate medical education in Canada. CMAJ, 2020;192(35);E1018–E1020. https://doi.org/10.1503/cmaj.200882

the highest percentage-point increase on this indicator from 2017 when compared with men (+26 vs. +14 percentage points among men). In addition, they are more likely than men to report the following:

- having “severe” or “moderate” anxiety
- having diminished mental health during the pandemic
- feeling fatigued at work/school on a regular basis
- being dissatisfied with work–life integration and efficiency and resources of their department
- their primary work area being chaotic
- the time spent on EMR at home being too high
- experiencing bullying, harassment and/or microaggressions “frequently” in the workplace

“SANDWICH” GENERATION

Physicians in the sandwich generation, practising six to 10 years and between the ages of 35 and 54 years, tend to experience the worst wellness outcomes compared with those who have been practising a greater number of years and those who are older. Although they are not as new to the medical profession as medical residents or those who have been practising for five years or less, they are still more likely to report wellness challenges compared with physicians with over twenty years of experience. By virtue of where they are in their personal lives, they tend to be parents and/or caregivers, which could contribute to poor wellness outcomes. As such, this in-between generation faces the challenges of being slightly more experienced professionally, and therefore possibly having more professional responsibilities, while simultaneously being a caregiver for younger child(ren) at home and juggling multiple duties.

Understandably, those who have been practising between six and 10 years have shown the largest decreases in “flourishing” mental health and social well-being from 2017. In fact, this group has shown some of the largest changes (when compared with physicians with fewer or more years in practice) on the following measures:

- more likely to report burnout
- more likely to have “severe” or "moderate” anxiety
- more likely to screen positive for depression
- more likely to indicate having had thoughts of suicide (lifetime)

CAREGIVERS

Not all at-risk groups are related purely to socio-demographic factors such as gender, age or career stage. Those who are caregivers, be it of a child(ren) and/or of a parent, are significantly more likely to report worse psychological outcomes across all key metrics compared with those without caregiving responsibilities. They are significantly less likely to be “flourishing” in mental health and more likely to be burned out, to rate their mental health “worse” than before the pandemic, to score positive for depression and to report having moderate or severe anxiety. While this group experiences greater responsibilities and burdens, the pandemic has made their experience even more challenging when combined with other work-related issues. It is not surprising, then, that caregivers report lower levels of professional fulfilment.

Demographically, caregivers skew women (52%), those aged 35 to 54 (74%–75%) and those who have been practising six to 10 years (72%).

LIVING WITH A DISABILITY

Another at-risk group identified in the data are those who indicate having a disability, comprising roughly 10% of the respondents. Physicians living with disabilities, specifically those with mental health-related disabilities and those who are neurodivergent, experience worse outcomes across all measures of mental health and wellness compared with those without disabilities. Respondents reporting living with a disability in mental health and/or neurodevelopment conditions tend to skew women, medical residents and those under 54 years old (younger respondents and women may be more likely to report).

Respondents living with a disability are significantly more likely to be "languishing" in their mental health, to be burned out, to screen positive for depression, to report having moderate or severe anxiety and to report having had thoughts of suicide (recent in past 12 months and lifetime). In addition, those with disabilities are more likely to score lower on professional fulfilment, psychological safety and social support. They also report feeling less supported by their colleagues and are more likely to say they have experienced bullying, harassment or microaggressions at least once a month or more often.

PRACTISING IN A SMALL TOWN/RURAL AREA OR ISOLATED/REMOTE COMMUNITY

Those living in small town/rural areas and isolated/remote communities are also an at-risk group. Their geographic location and the size of the community in which they practise may mean that even in the best of circumstances they lack some of the social connections and wellness supports that physicians practising in urban areas may tap into more easily. With limited staff in these areas, it may also be difficult to take any time off to prioritize their wellness. With the pandemic exacerbating an already-precarious situation wherein physicians were not adequately supported in their roles, it is no surprise that those living in small town/rural or isolated/remote areas are seeing worse outcomes compared to physicians in urban/suburban settings.

What are the next steps?

This report has outlined the main findings from the 2021 NPHS and has focused on highlighting basic, descriptive findings about Canadian physicians' overall well-being.

In addition to the general findings, this report has uncovered some important areas for future analysis. Additional areas of research that will be explored in forthcoming reports include:

- **Deep dives within selected socio-demographic subgroups** to further explore the experiences of being medical professionals in the time of COVID-19.
- **Comparing the results of the 2021 NPHS with the results of an online survey for employed Canadians,** which was administered concurrently, allowing us to examine if some of the trends observed in this report also apply to the Canadian working population or if they are specific to physicians.
- **Regression analyses** will be carried out to identify the behavioural, occupational and cultural predictors of psychological outcomes. This includes not only looking into the risk factors that lead to poor outcomes but also examining protective factors that support physicians' well-being.

In raising the issue about the current state of physician wellness, these data can be used to educate, advocate and build the case for additional wellness resources in training and practice environments. The data can also be used to help inform the development of new wellness initiatives, including targeted programs for the at-risk subgroups identified in this report.

Appendix A. Methodology details and study limitations

Summary profile of respondents by career stage and type of physician

	Practising physicians	Medical residents	General practitioners/ Family physicians	Medical specialists	Surgical specialists	Other/ Admin
GENDER IDENTITY	Women (59%)	Skews women (70%)	Highest skew to women (67%)	Skews women (56%)	Equally split: women (48%)/ men (49%)	Skews women (53%)
AGE	45–64 years old (52%)	<44 years old (99%)	Younger, average age is 49 years old; most likely to be <44 years old (39%)	Average age is 51 years old	Average age is 52 years old	Average age is 54 years old; more likely to be 65+ (19%)
REGION	BC (20%), Prairies (25%), East (14%), Small town/rural (20%)	QC (31%) Urban/ suburban (76%)	QC (16%) Urban/suburb (62%) Small town/rural (30%)	ON (27%) Urban/ suburb (79%)	Urban/ suburb (74%)	ON (30%) Urban/ suburb (74%)
ETHNIC RACIAL IDENTITY	Identify as white (77%)	Identify as white (79%)	Identify as white (78%)	Identify as white (75%)	More likely to select white only (80%)	More likely to select white only (78%)
PRIMARY WORK SETTING	Community hospital, private office/clinic (40%)	Academic health centre (75%)	Private office/ clinic (72%)	Community hospital (27%), academic health centre (45%)	Community hospital (40%), private office/clinic (23%), academic health centre (33%)	Community hospital (26%), academic health centre (38%), administrative office or corporate office (8%)
FEE STRUCTURE	–	–	Fee-for-service, sessional, blended; only group with capitation	Salary, sessional, blended, other	Fee-for-service, salary	Salary, sessional, blended, other

Table 53. Profile of physicians by stage of career and by type of physician.

Considerations on weighting data

The sample of physicians was not weighted. A comparison of the sample of respondents with CMA profile data shows there are differences in gender and region (see Table 54). As a part of the initial analysis, the data were weighted to determine how outcomes might be affected by the weighting. It was found that there were no major differences in outcomes when comparing the weighted and unweighted datasets. The decision was, therefore, made to leave the data unweighted to minimize the interaction of the weighting of a variable with the weighting of another variable.

Weighting of the data by random iterative method (RIM) would have produced a weighting efficiency of 76.5%, with a minimum respondent weight of 0.00 and a maximum respondent weight of 1.98.

	Counts	Unweighted percent	Weighting scheme
GENDER			
Men	1486	38%	55%
Women	2334	60%	45%
Other	12	0.3%	–
Prefer not to answer	32	1%	–
REGION			
Atlantic	525	14%	7%
Quebec	586	15%	23%
Ontario	1004	26%	36%
Prairies	963	25%	19%
BC and Territories	775	20%	14%
Prefer not to answer	11	0.3%	–

Table 54. Sample counts, unweighted proportions vs. weighting proportions.

Study limitations

As with any research, the execution of this study involved methodological decisions that have an impact on the representativeness of the findings. The main limitations of the study are as follows:

- This study was carried out by means of an **open online survey link** for broader participation beyond CMA's membership, meaning that any physician, resident or medical student who came across communications promoting the survey could access the open link. Internal measures were implemented to minimize the possibility that a participant could take a survey multiple times, such as screening out based on IP addresses and pattern matching to eliminate duplicate responses. Standard practices were also used to assess any potentially inconsistent response patterns.
- The **average time to complete the survey** was 30 minutes, which may have limited participation to those who would want to take or have the time to complete a survey of this length. That said, the survey obtained a large sample of completes, indicating the topic of the survey was relevant to its target population.

- This study also asked **sensitive questions** around issues such as drug use and suicidal ideation. Possible concerns around confidentiality of responses may have affected self-reporting of thoughts and behaviours. The CMA mitigated this risk through the study's approach, for example, identifying information was NOT collected, and a third party separate from the CMA mounted and analyzed the data.
- All research methodologies have their benefits and drawbacks. Both the CMA and Ipsos have considered the best way to balance representativeness, inclusiveness, convenience and time/budget considerations for this study. Nonetheless, **these limitations do not diminish the overall research findings** regarding the current state of physician wellness in Canada.

Appendix B. Statistical testing

Section 1. Psychological factors

Mental Health Continuum Short Form - Mental Health (MHC-SF Index created from question 64)

	Pearson chi-square value	df	*p*-value
Gender (flourishing)	12.611	2	0.002
Age (flourishing)	83.677	4	0.000
Years in practice (flourishing)	129.363	8	0.000
Age (languishing)	83.677	4	0.000

Mental Health Continuum Short Form - Well-being (MHC-SF Index created from question 64)

	Pearson chi-square value	df	*p*-value
Age (emotional well-being)	24.746	2	0.000
Years in practice (emotional well-being)	39.378	4	0.000
Age (social well-being)	61.968	2	0.000
Years in practice (social well-being)	92.198	4	0.000
Career stage (psychological well-being)	4.879	1	0.027
Gender (psychological well-being)	6.965	1	0.008
Age (psychological well-being)	54.777	2	0.000
Years in practice (psychological well-being)	76.758	4	0.000

Burnout among physicians (MBI 2-item Burnout)

	Pearson chi-square value	df	*p*-value
Career stage	4.703	1	0.030
Gender	84.707	1	0.000
Age	178.259	2	0.000
Area of practice	43.798	3	0.000
Years in practice	234.735	4	0.000
Community size	11.818	2	0.003

General Anxiety Disorder 7-Item Scale (rated moderate + severe)

	Pearson chi-square value	df	*p*-value
Career stage	15.007	1	0.000
Gender	30.882	1	0.000
Age	106.460	2	0.000
Years in practice	118.631	4	0.000

Depression screening (PHQ-2 Depression)

	Pearson chi-square value	df	*p*-value
Gender	17.897	1	0.000
Age	43.374	2	0.000
Years in practice	56.373	4	0.000
Community size	18.238	2	0.000

Suicidal ideation – lifetime (question 47)

	Pearson chi-square value	df	*p*-value
Gender	16.893	1	0.000
Age	17.532	2	0.000
Community size	20.390	2	0.000

Recent suicidal ideation (question 48)

	Pearson chi-square value	df	*p*-value
Career stage	10.111	1	0.001
Age	42.447	2	0.000
Years in practice	59.803	4	0.000

Section 2. Impact of COVID-19

Rating of mental health compared with before the pandemic (question 54)

	Pearson chi-square value	df	*p*-value
Career stage	8.293	1	0.004
Gender	54.117	1	0.000
Age	101.083	2	0.000
Years in practice	124.376	4	0.000

Frequency of feeling moral distress (question 56)

	Pearson chi-square value	df	*p*-value
Career stage	9.402	1	0.002
Gender	11.450	1	0.001
Age	69.486	2	0.000
Years in practice	57.938	4	0.000

Likelihood of reducing/modifying clinical work hours (question 57)

	Pearson chi-square value	df	*p*-value
Career stage	163.534	2	0.000
Age	161.426	4	0.000
Years in practice	92.705	8	0.000

Section 3. Behavioural factors and social support

Frequency of feeling fatigued at work/school (question 35)

	Pearson chi-square value	df	*p*-value
Career stage	41.469	1	0.000
Gender	123.306	1	0.000
Age	230.141	2	0.000
Area of practice	34.156	3	0.000
Years in practice	232.389	4	0.000
Community size	13.006	2	0.001

Frequency of feeling one gets optimal sleep (question 37)

	Pearson chi-square value	df	*p*-value
Area of practice	27.031	1	0.000
Gender	27.935	1	0.000
Age	137.450	2	0.000
Years in practice	144.981	4	0.000

Multidimensional Scale of Perceived Social Support (MSPSS)

	Pearson chi-square value	df	*p*-value
Age	25.237	4	0.000

Have a regular primary care physician (question 30)

	Pearson chi-square value	df	*p*-value
Career stage	45.475	1	0.000
Gender	4.156	1	0.041
Age	80.969	2	0.000
Years in practice	38.298	4	0.000
Community size	19.479	2	0.000

Wellness support offerings at current workplace – selected at least one support (question 40)

	Pearson chi-square value	df	*p*-value
Career stage	60.902	1	0.000
Age	16.825	2	0.000
Area of practice	59.048	3	0.000
Community size	13.485	2	0.001

Professional Consequences Index (selected one of three items in question 60)

	Pearson chi-square value	df	*p*-value
Gender	12.491	1	0.000
Area of practice	15.691	3	0.001

Wellness supports accessed in past five years (question 58)

	Pearson chi-square value	df	*p*-value
Career stage	12.014	1	0.001
Gender	137.511	1	0.000
Age	104.077	2	0.000
Years in practice	100.326	4	0.000

Section 4. Occupational factors

Satisfaction with current job or training position (question 43)

	Pearson chi-square value	df	*p*-value
Career stage	4.196	1	0.041
Gender	54.825	1	0.000
Age	59.295	2	0.000
Area of practice	24.464	3	0.000
Years in practice	72.237	4	0.000

My professional values are well aligned with those of my department or academic leaders (question 43)

	Pearson chi-square value	df	*p*-value
Career stage	6.949	1	0.008
Gender	0.805	0.703	0.921
Age	36.089	2	0.000
Years in practice	31.229	4	0.000
Community size	14.121	2	0.001

I feel a great deal of stress because of my job or training position (question 43)

	Pearson chi-square value	df	*p*-value
Career stage	14.885	1	0.000
Gender	111.810	1	0.000
Age	215.415	2	0.000
Area of practice	23.830	3	0.000
Years in practice	252.577	4	0.000

Control of workload (question 45)

	Pearson chi-square value	df	*p*-value
Area of practice	63.397	2	0.000
Gender	48.398	1	0.000
Age	63.397	2	0.000
Years in practice	76.678	4	0.000

Work–life integration (question 45aa)

	Pearson chi-square value	df	*p*-value
Career stage	4.337	1	0.037
Gender	58.861	1	0.000
Age	119.978	2	0.000
Area of practice	17.510	3	0.001
Years in practice	161.916	4	0.000

Efficiency and resources (question 45aa)

	Pearson chi-square value	df	*p*-value
Career stage		1	0.004
Gender	68.303	1	0.000
Age	110.362	2	0.000
Years in practice	127.089	4	0.000
Community size	34.642	2	0.000

Time spent on EMR at home (question 45a)

	Pearson chi-square value	df	*p*-value
Gender	56.483	2	0.000
Area of practice	164.078	6	0.000
Years in practice	42.132	8	0.000

Atmosphere in primary work area (question 45b)

	Pearson chi-square value	df	*p*-value
Gender	26.667	1	0.000
Age	58.005	2	0.000
Area of practice	65.411	3	0.000
Years in practice	66.135	4	0.000
Community size	22.794	2	0.000

Professional Fulfillment Index (Dichotomous Index)

	Pearson chi-square value	df	*p*-value
Career stage	12.005	1	0.001
Gender	53.28	1	0.000
Age	99.899	2	0.000
Area of practice	29.702	3	0.000
Years in practice	126.428	4	0.000
Community size	13.858	2	0.001

Collegiality at Work Index (based on items in question 24)

	Pearson chi-square value	df	*p*-value
Career stage	0.468	1	0.494
Gender	25.912	1	0.000
Age	26.370	2	0.000
Area of practice	30.005	3	0.000
Years in practice	32.724	4	0.000

Experienced intimidation, bullying, harassment, microaggressions in workplace (question 25)

	Pearson chi-square value	df	*p*-value
Career stage	14.229	3	0.003
Gender	147.245	3	0.000
Age	136.266	6	0.000
Years in practice	177.688	12	0.000

Involved in a college complaint or lawsuit (question 29)

	Pearson chi-square value	df	*p*-value
Gender	108.606	1	0.000
Area of practice	62.495	3	0.000
Years in practice	412.592	4	0.000
Age	582.307	2	0.000

SUBGROUP ANALYSES

Living with a disability

ITEMS WITH CHI-SQUARE TESTING	Pearson chi-square value	df	p-value
Mental health (flourishing/languishing)	50.884	2	0.000
Overall burnout	33.362	1	0.000
Depression	95.142	1	0.000
Anxiety	74.326	1	0.000
Suicidal (lifetime)	173.208	1	0.000
Professional fulfillment	19.204	1	0.000
Psychological support	43.674	2	0.000
MSPSS	39.840	2	0.000
Bullying/harassment/microaggressions	44.320	3	0.000
Collegiality index	26.456	1	0.000

Parent or caregiver

ITEMS WITH CHI-SQUARE TESTING	Pearson chi-square value	df	p-value
Mental health (flourishing/languishing)	32.630	6	0.000
Self-reported mental health worse than before COVID-19	85.464	3	0.000
Overall burnout	65.330	3	0.000
Depression	28.737	3	0.000
Anxiety	31.146	3	0.000
Professional fulfillment	37.733	3	0.000

Appendix C. Survey instrument

* Please note that through the development process and prior to survey opening, some questions were removed after the survey was scripted. In order to avoid breaks in the skip logic of the digital survey, we've opted to simply remove the associated questions from the appendix while leaving the Q# in their original order.

Introduction

CMA NATIONAL PHYSICIAN HEALTH SURVEY

Thank you for participating in the 2021 National Physician Health Survey. Your feedback will help the Canadian Medical Association (CMA) generate an up-to-date national data set on the health and wellness of Canadian practising physicians, medical residents and medical students.

Over the past two years, the medical profession has faced unprecedented levels of change, uncertainty, stress and strain. By sharing your experiences and highlighting the factors affecting your practice, daily interactions, lifestyle and mental health, you will help the CMA and other stakeholders identify the individual and system-level changes needed to better support health workers, create a healthier medical culture and guide a post-pandemic recovery.

Survey details

Please complete the survey by Nov. 15, 2021. It should take you less than 20 minutes; your time is greatly appreciated.

Please note that an "open" survey link is being used so the CMA can distribute the survey more widely and reach as many physicians as possible. This means you must complete the survey in one sitting.

Privacy

The information you share will remain strictly confidential and anonymous. You are under no obligation to participate in the survey and if you choose to participate, you are not required to answer every question. By completing the survey, you consent to your feedback being used as part of this study. See below for privacy policies.

Research ethics

This survey has received ethical approval from the University of Ottawa Research Ethics Board. If you have any questions about the ethical conduct of this study, please contact ethics@uottawa.ca.

Results

Overall findings from the survey will be shared publicly in the summer of 2022. Aggregated results will be posted on the CMA website and will be used by the CMA, researchers, educators, and health care organizations to inform physician health and wellness initiatives.

The CMA has engaged Ipsos, a third-party research firm, to collect and analyze the data. The information you share will remain strictly confidential and anonymous and will be used for research purposes only. All results will be communicated in aggregate (grouped) format. You are under no obligation to participate in the survey.

Before completing the survey, please read the following Ipsos and CMA privacy policies and click to accept.

- Ipsos privacy policy [HYPERLINK]
- I have read and acknowledge Ipsos' privacy policy
- CMA privacy policy [HYPERLINK]

I have read and acknowledge the CMA's privacy policy

[RESPONDENT MUST SELECT BOTH TO CONTINUE WITH SURVEY]

[SHOW NEXT SCREEN]

Will you be using a screen reader or assistive technology (e.g. Jaws, ZoomText or Dragon) to complete the survey?

- Yes [IF YES, RESPONDENT WILL RECEIVE GRID TYPE QUESTIONS AND NOT PROGRESSIVE GRIDS. SEE INSTRUCTIONS THROUGHOUT SURVEY]
- No

SECTION 1. YOU AND YOUR PRACTICE

Q1. What is your career stage?

- Medical student
- Medical resident
- Practising physician
- Retired (not eligible) [THANK AND TERMINATE]

[TERMINATE MESSAGE: Thank you for your interest in participating in the 2021 CMA National Physician Health Survey. This survey is being conducted among practising physicians.

[IF PRACTISING PHYSICIANS OR MEDICAL RESIDENT IN Q1, ASK Q2; ELSE SKIP TO Q3]

Q2. Are you an international medical graduate?

- Yes
- No

Q3. Do you identify as…?

- Male
- Female
- Neither applies to me. I identify as (please specify):
- Prefer not to answer

Q5. To which age group do you belong?

- <25
- 25 – 34
- 35 – 44
- 45 – 54
- 55 – 64
- 65 – 74
- 75 years or older
- Prefer not to answer

Q6. Please indicate your primary province or territory of practice/work/school:

- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Quebec
- New Brunswick
- Nova Scotia
- Prince Edward Island
- Newfoundland & Labrador
- Northwest Territories
- Yukon
- Nunavut
- Prefer not to answer

Q7. Which option best describes the main area in which you currently practice/work/are doing your residency?

[LIST TYPE QUESTION]

- Administrative position
- Anatomical pathology
- Anesthesiology
- Cardiac surgery
- Dermatology
- Diagnostic radiology
- Emergency medicine
- Family medicine, general practice
- General pathology
- General surgery
- Hematological pathology
- Internal medicine
- Medical genetics and genomics
- Medical microbiology
- Neurology
- Neuropathology
- Neurosurgery
- Nuclear medicine
- Obstetrics and gynecology
- Ophthalmology
- Orthopedic surgery
- Otolaryngology-head and neck surgery
- Pediatrics
- Physical medicine and rehabilitation
- Plastic surgery
- Psychiatry
- Public health and preventive medicine
- Radiation oncology
- Urology
- Vascular surgery
- Other (please specify):
- Prefer not to answer
- Not applicable

[IF PRACTISING PHYSICIANS IN Q1, ASK Q8; ELSE SKIP TO INSTRUCTIONS BEFORE Q9]

Q8. For how many years have you been practising medicine?

- 5 or less years
- 6 to 10 years
- 11 to 15 years
- 16 to 20 years
- 21 to 25 years
- 26 to 30 years
- 31 years or more
- Prefer not to answer

[IF MEDICAL STUDENTS IN Q1, ASK Q9; ELSE SKIP TO INSTRUCTIONS BEFORE Q10]

Q9. Please indicate your current status:

- 1st year medical student
- 2nd year medical student
- 3rd year medical student
- 4th year medical student
- Other (please specify):
- Prefer not to answer

[IF MEDICAL RESIDENTS IN Q1, ASK Q10; ELSE SKIP TO Q11]

Q10. Please indicate your current status:

- PGY-1
- PGY-2
- PGY-3
- PGY-4
- PGY-5
- PGY -6 or greater
- Other (please specify):
- Prefer not to answer

Q11. Do you consider yourself a person living with a disability, impairment, or long-term condition related to any of the following? (select all that apply)

- Hearing
- Speech
- Physical or mobility
- Mental health condition
- Neurodevelopment disorders (ADHD, autism, dyspraxia, Tourette syndrome, others)
- Chronic or long-term condition (diabetes, multiple sclerosis, heart conditions, epilepsy, chronic pain, others)
- Other (please specify)
- No, I do not have a disability, impairment, or long-term condition
- Prefer not to answer

Q12. Do you identify as Indigenous?

- First Nations (North American Indian)
- Métis
- Inuk (Inuit)
- Other (please specify):
- No, I do not identify as Indigenous
- Prefer not to answer

Q13. How would you describe yourself? (select all that apply)
[MULTI-SELECT]

- White
- South Asian (East Indian, Pakistani, Sri Lankan, etc.)
- Chinese
- Black or African American
- Filipino
- Latin American
- Arab
- Southeast Asian (Vietnamese, Cambodian, Laotian, Thai, etc.)
- West Asian (Iranian, Afghan, etc.)
- Korean
- Japanese
- Mixed race
- Other (please specify): [NOT EXCLUSIVE]
- Prefer not to answer

Q14. Do you have dependents for whom you are the primary caregiver? (select all that apply)

- Yes, I have a child/children under 18 years old of age
- Yes, I provide care for a parent, family member or friend who has a long-term physical health or mental health issues
- No [EXCLUSIVE]
- Deleted

[IF MEDICAL STUDENT IN Q1, SKIP TO Q20a]

Q16. With respect to your main patient care/ practice setting, which of the following best describes the geographic population PRIMARILY served by you in your practice/residency?

- Urban/suburban
- Small town/rural
- Geographically isolated, remote
- Cannot identify a primary geographic population
- Prefer not to answer

Q17. Which of the following best describe(s) your primary work/ residency setting?

- Community hospital
- Private office or clinic
- Academic health centre
- Administrative office or corporate office
- Other (please specify):
- Prefer not to answer

Q18. Please indicate the predominant means by which you are paid for your professional services:

- Fee-for-service
- Capitation
- Salary
- Sessional/per diem/hourly
- Blended
- Other

[IF BLENDED IN Q18, ASK Q18A; ELSE SKIP TO Q20]

Q18a. Please specify your predominant model.

- Fee-for-service
- Capitation
- Salary
- Sessional/per diem/hourly
- Other

SECTION 2. YOUR DAILY WORK AND INTERACTIONS

[DO NOT ASK IF Q1 = MEDICAL STUDENT]

Q20. Please indicate how many hours in a typical week you usually spend on the following tasks:
Note: For any task(s) that you do not perform in a typical week, please ENTER "0". Please provide your best estimate.

- [CHANGE TO 168 HOURS AND PROVIDE A (DYANMIC) SUM TOTAL AS A FOURTH **BOX** UNDER ALL THREE OF THE CATEGORIES. IF ADDS UP TO >168 HRS, SHOW ERROR MESSAGE "The total number of hours exceeds 168 hours in a week, please review your responses". ALLOW TO GO TO NEXT QUESTION REGARDLESS OF RESPONSE. IF LEAVE ANY CATEGORY EMPTY SHOW ERROR MESSAGE "Please enter a number. If none, enter "0"."]
- PATIENT CARE: Including direct patient care, indirect patient care, and on-call work hours
- [NUMERIC 0 TO 168] hours per week
- ADMINISTRATIVE TASKS: Including electronic documentation time, email, prescriptions, ordering tests, etc.
- [NUMERIC 0 TO 168] hours per week
- OTHER DUTIES/RESPONSIBILITIES: Including teaching, committee work, research, leadership role, etc.
- [NUMERIC 0 TO 168] hours per week
- TOTAL HOURS PER WEEK: [SUM TOTAL]
- [ASK IF Q1=MEDICAL STUDENT; IF Q1= CODES 2 OR 3, GO TO Q23]

Q20a. Please indicate how many hours in a typical week you usually spend on the following tasks:
Note: For any task(s) that you do not perform in a typical week, please ENTER "0". Please provide your best estimate.

- COURSE WORK/CLERKSHIP: Including class, reading, studying, clinical work, etc. [NUMERIC 0 TO 168] hours per week
- OTHER DUTIES/RESPONSIBILITIES: Including volunteering, additional work outside of medicine, committee work, research, leadership role, etc. [NUMERIC 0 TO 168] hours per week
- TOTAL HOURS PER WEEK: [SUM TOTAL]

[ASK ALL]

Q23. Please indicate how strongly you agree or disagree with the following statements:
Note: When you respond to each statement, the question will automatically move forward to the next statement. When it no longer moves forward, please click the "Next" button.

[PROGRESSIVE GRID. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW]

- If I make a mistake in this team, it is held against me.
- Members of this team are able to bring up problems and tough issues (including colleagues, nurses, admin).
- People on this team sometimes reject others for being different (including colleagues, nurses, admin).
- It is safe to take a risk in this team.
- It is difficult to ask other members of this team for help (including colleagues, nurses, admin).
- No one on this team would deliberately act in a way that undermines my efforts (including colleagues, nurses, admin).
- Working with members of this team, my unique skills and talents are valued and used.

[SCALE. LEFT TO RIGHT]

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree
- Not applicable

Q24. To what extent do you agree with the following statements?
Note: When you respond to each statement, the question will automatically move forward to the next statement. When it no longer moves forward, please click the "Next" button.

[PROGRESSIVE GRID. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW]

- In general, I find my colleagues to be supportive
- People treat each other with respect in my work group
- A spirit of cooperation and teamwork exists in my work group
- Disputes or conflicts are resolved fairly in my work group

[SCALE. LEFT TO RIGHT]

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree
- Not applicable

Q25. Have you ever personally experienced intimidation, bullying, harassment and/or microaggressions in the workplace or in a training environment?

- Everyday
- A few times a week
- Once a week
- A few times a month
- Once a month or less
- A few times a year
- Never

[IF MEDICAL STUDENT IN Q1, SKIP TO Q30]

Q29. Have you been involved in a college complaint or lawsuit? (Select all that apply)
[MULTI-SELECT]

- Yes, in the past year
- Yes, two to three years ago
- Yes, four to five years ago
- Yes, more than five years ago
- Never [EXCLUSIVE]

SECTION 3. YOUR HEALTH AND LIFESTYLE

Q30. Do you have a regular primary care physician (i.e., registered)?

- Yes
- No

Q35. How often do you feel fatigued at work/school?

- Never
- Rarely
- Sometimes
- Often
- Always

Q37. How often do you feel you are getting optimal sleep?

- Never
- Rarely
- Sometimes
- Often
- Always

Q38. What self-care activities do you do to support your well-being in your personal life, outside of work (excluding household duties / chores / responsibilities)?
[RANDOMIZE]

- Physical activity
- Healthy eating
- Optimal sleep
- Spiritual practices (prayer, worship, etc.)
- Mindfulness or meditation
- Mindful breathing (e.g., box breathing)
- Building resilience
- Peer support
- Self-compassion exercises
- Practising gratitude (e.g., journaling)
- Music
- Stretching
- Gardening
- Cooking or baking
- Dance
- Art, such as painting or crafting
- Volunteering
- Reading
- Spending time with family and/or friends
- Other (please specify) [ANCHOR]
- None of the above [EXCLUSIVE]

Q39. Which, if any, of the following barriers prevent you from maintaining a healthy lifestyle (e.g., being physically active, eating healthily, getting adequate sleep)? (Check all that apply.)
[RANDOMIZE]

- Shiftwork (e.g., inadequate recovery periods between shifts)
- Scheduling (e.g., long work hours)
- Heavy workload and/or stressful work environment
- No post-call day
- Psychological distress
- Other priorities (e.g., children)
- My workplace or training environment doesn't support these behaviours (e.g., minimal healthy food choices, lack of access to physical activity facilities)
- Lack of time
- Maintaining a healthy lifestyle is not a priority for me
- Other (please specify): [ANCHOR]
- No barriers, I am able to maintain a healthy lifestyle [EXCLUSIVE]

Q40. Which of the following does your current workplace offer to support your wellness (if any)?
[RANDOMIZE]

- Daycare services
- Nutritious food options
- Access to exercise facilities and/or activities
- Access to a primary care physician
- Access to psychological supports and/or peer support program
- Back-up call, when I need time off for urgent life matters
- Other wellness-related activities and/or incentives (please specify):
- None of the above

SECTION 4. YOUR MENTAL HEALTH

Q41. Please indicate how often you have the following feelings about your work or training environment:
Note: When you respond to each statement, the question will automatically move forward to the next statement. When it no longer moves forward, please click the "Next" button.

[PROGRESSIVE GRID. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW]]

- I feel burned out from my work or training environment
- I have become more callous towards people since I took this job or started this training

[SCALE. LEFT TO RIGHT]

- Everyday
- A few times a week
- Once a week
- A few times a month
- Once a month or less
- A few times a year
- Never

Q42. How often have you been bothered by the following over the past two (2) weeks?
Note: When you respond to each item, the question will automatically move forward to the next item. When it no longer moves forward, please click the "Next" button.

[PROGRESSIVE GRID. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW]

- Feeling nervous, anxious, or on edge
- Not being able to stop or control worrying
- Worrying too much about different things
- Trouble relaxing
- Being so restless that it's hard to sit still
- Becoming easily annoyed or irritable
- Feeling afraid as if something awful might happen

[SCALE. LEFT TO RIGHT]

- Nearly every day

- More than half the days
- Several days
- Not at all

Q43. To what extent do you agree or disagree with the following statements?
Note: When you respond to each statement, the question will automatically move forward to the next statement. When it no longer moves forward, please click the "Next" button.

[ROWS. PROGRESSIVE. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW]]

- Overall, I am satisfied with my current job or training position.
- My professional values are well aligned with those of my department or academic leaders
- I feel a great deal of stress because of my job or training position
- The electronic medical record (EMR) adds to the frustration of my day

[SCALE. LEFT TO RIGHT]

- Agree strongly
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree
- Not applicable

Q44. Using your own definition of "burnout", please select one of the following statements below:

- (5) I enjoy my work. I have no symptoms of burnout.
- (4) I am under stress, and I don't always have as much energy as I did in the past, but I don't feel burned out.
- (3) I am definitely burning out and have one or more symptoms of burnout, (e.g., emotional exhaustion).
- (2) The symptoms of burnout that I am experiencing won't go away. I think about work frustrations a lot.
- I feel completely burned out. I am at the point where I may need to seek help.

Q45. How would you rate the following?
Note: When you respond to each statement, the question will automatically move forward to the next statement. When it no longer moves forward, please click the "Next" button.

[ROWS. PROGRESSIVE. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW]

- My control over my workload is…
- The degree to which my care team works efficiently together is
- Sufficiency of time for documentation is

[SCALE. COLUMNS. LEFT TO RIGHT]

- Poor
- Marginal
- Satisfactory
- Good
- Optimal
- Not applicable

Q45a. Please complete the following statement:
The amount of time I spend on the electronic medical record (EMR) at home is…

- Excessive
- Moderately high
- Satisfactory
- Modest
- Minimal/none
- Not applicable

Q45b. Which number best describes the atmosphere in your primary work area?

- 5-Calm
- 4
- 3-Busy, but reasonable
- 2
- 1-Hectic, chaotic

Q45aa. Please rate your degree of satisfaction with each of the following dimensions of your workplace.
Note: When you respond to each item, the question will automatically move forward to the next item. When it no longer moves forward, please click the "Next" button.

[RANDOMIZE. PROGRESSIVE GRID. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW]]

- Work-life integration (i.e., meeting personal and professional obligations)
- Efficiency and resources (e.g., use of scribes, availability of support staff, efficiency/use of EHR, appointment system, and ordering systems)

[SCALE. LEFT TO RIGHT]

- Very dissatisfied
- Dissatisfied
- Satisfied
- Very satisfied
- Not applicable

Q46. During the past 12 months:
Note: When you respond to each item, the question will automatically move forward to the next items. When it no longer moves forward, please click the "Next" button. There are 14 statements in total.

[GRID. ROWS. CHANGE TO PROGRESSIVE GRID. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW]

- Was there ever a time lasting two weeks or more when you lost interest or pleasure in most things like hobbies, and/or work activities that usually give you pleasure?
- Was there ever a time when you felt down, depressed, or hopeless for two or more weeks in a row?

[COLUMNS]

- Yes
- No

[ON OWN PAGE]

Q47_intro. The next few questions may be deemed sensitive. These questions ask about substance use and suicidal ideation. The CMA and Ipsos are collecting such data in order to understand the prevalence of these behaviours and feelings among physicians.
A "Prefer not to answer" option will be available for you to select, if you choose not to answer a specific question.

Participation is completely voluntary and you may withdraw your consent at any time. Your answers from this survey will be combined with the answers from all other participants for reporting purposes, and your personal data will be held for no longer than 12 months.

- Do you accept the collection of sensitive data on suicidal ideation and substance use?
- Yes, I accept [CONTINUE]
- No, I do not accept [SKIP Q47-49 AND GO TO Q50]

Q47. Have you had thoughts of suicide? (select all that apply):

- Yes, before medical school
- Yes, during medical school
- Yes, during residency
- Yes, during medical practice
- No, I have never had thoughts of suicide [EXCLUSIVE]

Note: Should you have experienced any psychological or emotional discomfort during this survey, please contact your Provincial Physician Health Program or the CMA Wellness Support Line which offers free, confidential, 24/7 bilingual counselling and mental health supports to physicians, medical learners and their immediate families.

[IF NO IN Q47, SKIP TO Q49]

Q48. Have you had thoughts of suicide in the last 12 months?

- Yes
- No

Q49. In the past year, how many times have you used the following substances for non-medical reasons?
Note: When you respond to each item, the question will automatically move forward to the next item. When it no longer moves forward, please click the "Next" button.

[GRID. ROWS. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW]

- Alcohol (for men, five or more drinks in a day; for women, four or more drinks in a day) [SHOW AS HOVER OVER: A drink is one can/bottle of beer or wine cooler, one glass of wine, one cocktail, or one shot of liquor]
- Stimulants (unauthorized, e.g., Ritalin, Dexedrine, Adderall, Vyvanse)
- Tobacco products
- Cannabis (recreational)
- Other (e.g., narcotics, benzodiazepine, cocaine, mushrooms)
- Opioids (unauthorized)

[SCALE]

- Never
- Once or twice
- Monthly
- Weekly
- Daily or almost daily

Q50. How true do you feel the following statements are about you at work or school during the past two weeks?
Note: When you respond to each item, the question will automatically move forward to the next item. When it no longer moves forward, please click the "Next" button.

[PROGRESSIVE GRID. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW]

- I feel happy at work or school
- I feel worthwhile at work or school
- My work is satisfying to me
- I feel in control when dealing with difficult problems at work or school
- My work is meaningful to me
- I'm contributing professionally (e.g., patient care, research, and leadership) in the ways I value most

[SCALE. LEFT TO RIGHT]

- Not at all true
- Somewhat true
- Moderately true
- Very true
- Completely true

Q53a. How often do you feel supported by your social network?

- Always
- Very often
- Sometimes
- Rarely
- Never
- Not applicable

Q53b. Where is most of your support coming from? (select all that apply)
[MULTI-SELECT]

- Family
- Friends
- Colleagues
- Significant other
- Religious or spiritual community
- Other (please specify): [ANCHOR]
- None of the above [EXCLUSIVE]

Q54. Compared with before the COVID-19 pandemic, how would you rate your mental health now?

- Much better
- Somewhat better
- About the same
- Slightly worse
- Much worse

Q55. What do you believe has contributed negatively to your mental health during the pandemic? (select all that apply)

[RANDOMIZE.MULTI-SELECT]

- Longer time with social restrictions/social isolation
- Continued uncertainty about the future
- Concerns about vaccine rollout
- Increased workload and/or lack of work-life integration
- Family issues and obligations
- Financial insecurity
- Long waitlists
- Challenges acquiring personal protective equipment (PPE)
- Interpersonal conflict
- Concerns about long-term care
- Lack of peer support
- Physical health struggles
- Adjustment to virtual care
- Adjustment to virtual learning
- College complaint or lawsuit
- Rapidly changing policies/processes
- Lack of human resources
- Decreased workload
- Other (please specify): [ANCHOR]
- None of the above [EXCLUSIVE]

Q56. Since the onset of the COVID-19 pandemic, how often have you felt morally distressed?
Moral distress is defined as psychological distress that results from events that go against one's values and moral beliefs. It occurs when one feels unable to take what they believe to be an ethically appropriate or right course of action because of institutionalized obstacles.

- Never
- Rarely
- Sometimes
- Very often
- Always

Q57. How likely is it that you will reduce or modify your clinical work hours in the next 24 months?

- Very unlikely
- Unlikely
- Not sure
- Likely
- Very likely

Q58. In the last five years, have you accessed any of the following wellness supports (including mental health and crisis supports)? (select all that apply)
[RANDOMIZE. MULTIPUNCH]

- Provincial Physician Health Program (PHP)
- Primary care physician
- Mentorship or coaching
- Employee Assistance Program (EAP)
- Other mental health professional (psychiatrist, psychologist, licensed counsellor, etc.) [ALWAYS SHOW AFTER EAP PROGRAM]
- CMA Wellness Support Line
- CMA Wellness Connection
- Local peer support program (i.e., not the Wellness Connection)
- Other (please specify) [ANCHOR]
- None of the above [EXCLUSIVE]

Q60. What do you think are the main reasons some physicians may have for NOT seeking wellness supports? (select up to three reasons)

[RANDOMIZE]

- Risk of losing medical licence and ability to practise
- Other professional consequences (fewer career advancement opportunities, denied insurance, etc.)
- Not aware of the services available
- Professional supports already in place
- Confidentiality
- No time
- Ashamed to seek help
- Concerns about quality of care
- Service not required
- Believing situation is not severe enough
- Other (please specify) [ANCHOR]

Q61. Do you have any additional comments to share related to your wellness?

[OPEN TEXT BOX]

- No further comments
- Q62_intro. Thank you. This concludes the main part of the survey. The CMA would like to offer physicians the opportunity to complete a few optional questions that would allow for more detailed analysis into the health and wellness of physicians. These optional questions would take approximately four (4) minutes to complete.
- Would you like to continue with these optional questions?
- Yes, I would like to continue.
- No, thank you. I would like to stop the survey now.

[IF YES, CONTINUE. IF NO, SKIP TO FINAL PARAGRAPH]

Q62. How often do you have the following feelings about your work or training program?
Note: When you respond to each statement, the question will automatically move forward to the next statement. When it no longer moves forward, please click the "Next" button. There are 22 statements in total.

[PROGRESSIVE GRID. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW)]

- I feel emotionally drained from my work or training program
- I feel used up at the end of the workday or school day
- I feel fatigued when I get up in the morning and have to face another day on the job or at school
- I feel like I'm at the end of my rope
- I feel frustrated by my job or training program
- I feel I'm working too hard on my job or training program
- Working with people directly puts too much stress on me
- I feel burned out from my work or training program
- Working with people all day is really a strain for me
- I feel I treat some patients as if they were impersonal objects
- I have become more callous towards people since I took this job or started this training program
- I worry that this job or training program is hardening me emotionally
- I don't really care what happens to some patients
- I feel patients blame me for some of their problems
- I can easily understand how my patients feel about things
- I deal very effectively with the problems of my patients
- I feel I am positively influencing other people's lives through my work or training program
- I feel very energetic
- I can easily create a relaxed atmosphere with my patients
- I feel exhilarated after working closely with my patients
- I feel I have accomplished many worthwhile things in this job or training program
- In my work or training program, I deal with emotional problems very calmly

[SCALE. LEFT TO RIGHT]

- Everyday
- A few times a week
- Once a week
- A few times a month
- Once a month or less
- A few times a year
- Never
- Not applicable

Q63. To what degree have you experienced the following?
During the past two weeks I have felt…

Note: When you respond to each statement, the question will automatically move forward to the next statement. When it no longer moves forward, please click the “Next” button. There are 4 statements in total.

[PROGRESSIVE GRID. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW)]

- A sense of dread when I think about work I have to do
- Physically exhausted at work or school
- Lacking in enthusiasm at work or school
- Emotionally exhausted at work or school

[SCALE. LEFT TO RIGHT]

- Not at all
- Very little
- Moderately
- A lot
- Extremely

Q63b. During the past two weeks my job has contributed to me feeling...

- Note: When you respond to each statement, the question will automatically move forward to the next statement. When it no longer moves forward, please click the “Next” button. There are 6 statements in total.

[PROGRESSIVE GRID. RANDOMIZE]

- Less empathetic with my patients
- Less empathetic with my colleagues
- Less sensitive to others' feelings/emotions
- Less interested in talking with my patients
- Less connected with my patients
- Less connected with my colleagues

[SCALE. LEFT TO RIGHT]

- Not at all
- Very little
- Moderately
- A lot
- Extremely

Q64. How often in the past month did you feel…?
Note: When you respond to each item, the question will automatically move forward to the next items. When it no longer moves forward, please click the "Next" button. There are 14 statements in total.

[PROGRESSIVE GRID. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW)]

- Happy
- Interested in life
- Satisfied with your life
- That you had something important to contribute to society
- That you belonged to a community (like a social group, your neighbourhood, your city, your school)
- That our society is becoming a better place for people like you
- That people are basically good
- That the way our society works makes sense to you
- That you liked most parts of your personality
- Good at managing the responsibilities of your daily life
- That you had warm and trusting relationships with others
- That you had experiences that challenged you to grow and become a better person
- Confident to think or express your own ideas and opinions
- That your life has a sense of direction or meaning to it

[SCALE. LEFT TO RIGHT]

- Everyday
- Almost everyday
- About two or three times a week
- About once a week
- Once or twice
- Never

Q65. Read each statement carefully and indicate how you feel.
Note: When you respond to each statement, the question will automatically move forward to the next statement. When it no longer moves forward, please click the "Next" button. There are 12 statements in total.

This is the final question of the optional portion of the survey.

[PROGRESSIVE GRID. RANDOMIZE. IF YES IN Q.VIS, SHOW GRID QUESTION (SINGLE ANSWER PER ROW)]

- There is a special person who is around when I am in need.
- There is a special person with whom I can share joys and sorrows.
- My family really tries to help me.
- I get the emotional help and support I need from my family.
- I have a special person who is a real source of comfort to me.
- My friends really try to help me.
- I can count on my friends when things go wrong.
- I can talk about my problems with my family.
- I have friends with whom I can share my joys and sorrows.
- There is a special person who cares about my feelings.

- My family is willing to help me make decisions.
- I can talk about my problems with my friends.

[SCALE. LEFT TO RIGHT]

- Very strongly disagree
- Strongly disagree
- Mildly disagree
- Neutral
- Mildly agree
- Strongly agree
- Very strongly agree

[FINAL PARAGRAPH]

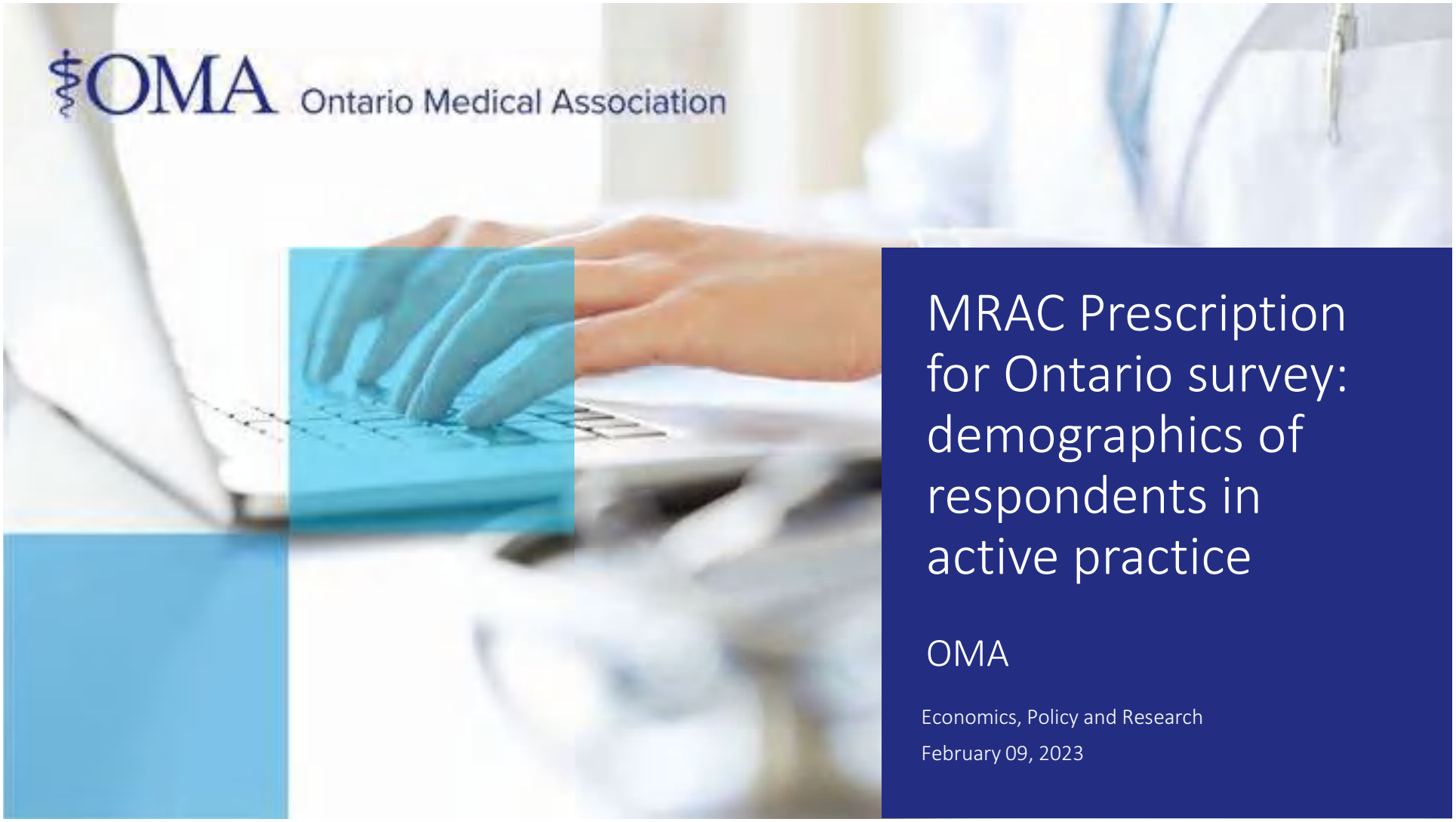
Thank you for taking the time to complete this survey. Should you have experienced any psychological or emotional discomfort during this survey, please contact your Provincial Physician Health Program or the CMA Wellness Support Line, which offers free, confidential, 24/7 bilingual counselling and mental health supports to physicians, medical learners and their immediate families.

ASSOCIATION MÉDICALE CANADIENNE

CANADIAN MEDICAL ASSOCIATION

Ipsos

TAB 19



MRAC Prescription for Ontario survey: demographics of respondents in active practice

OMA

Economics, Policy and Research

February 09, 2023

Contents

Overview

- The 2022 OMA Prescription for Ontario Survey
  - Administered to hear members' views on the Doctors' 5-Point Plan for Better Health Care
- In-Field from Dec. 5th, 2022, through Jan. 31st, 2023
- Distributed to 40,867 members
  - 2,353 opened the survey
  - 1,677 (4.1%) participated in the survey
  - 1,483 (3.6%) completed the survey
  - 10:29 median time to complete

Study Demographics

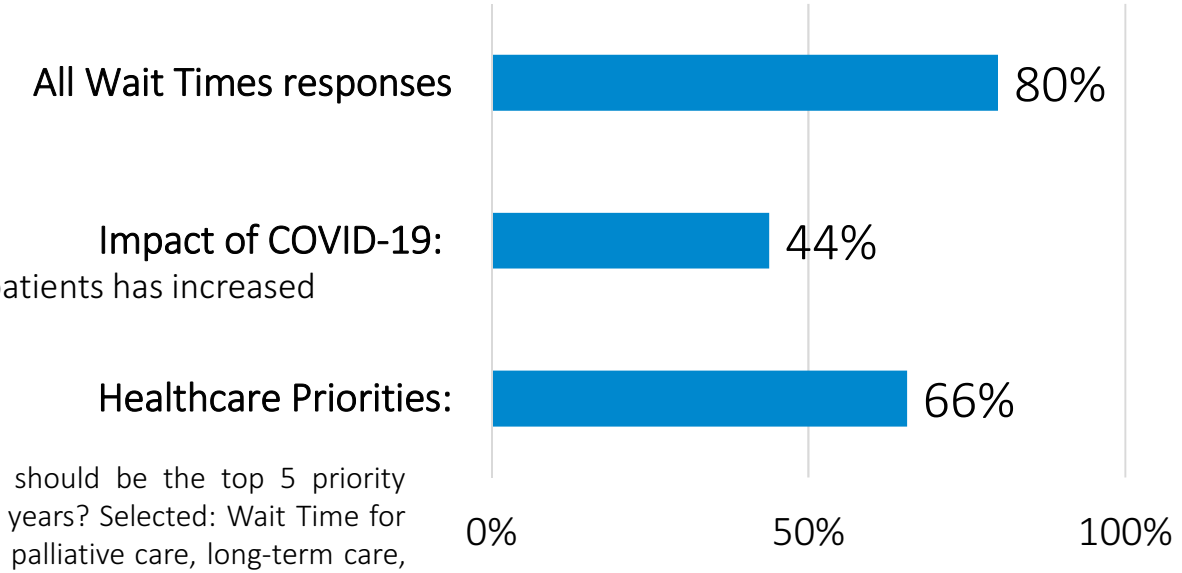
	Active Practice	All Respondents
Gender identity:		
• Female	633	718
• Male	590	713
• Non-Binary / Other	1	1
• Undisclosed	49	56
Assembly:		
• General & Family Practice	764	885
• Medical Specialties	329	383
• Surgical Specialties	157	195
• Diagnostic Specialties	21	27
• Academic (Students-in-training)	2	8

	Active Practice	All Respondents
Age Group:		
• Under 45 years old	388	423
• 45 to 64 years old	682	737
• 65 years old	203	328
Ontario Region:		
• North	85	96
• Central	262	291
• Greater Toronto Area	471	536
• East	219	270
• West	234	279
• Outside Ontario	2	16

Demographics for selected questions from respondents in active practice

Wait Times

Respondents who selected a response related to wait times



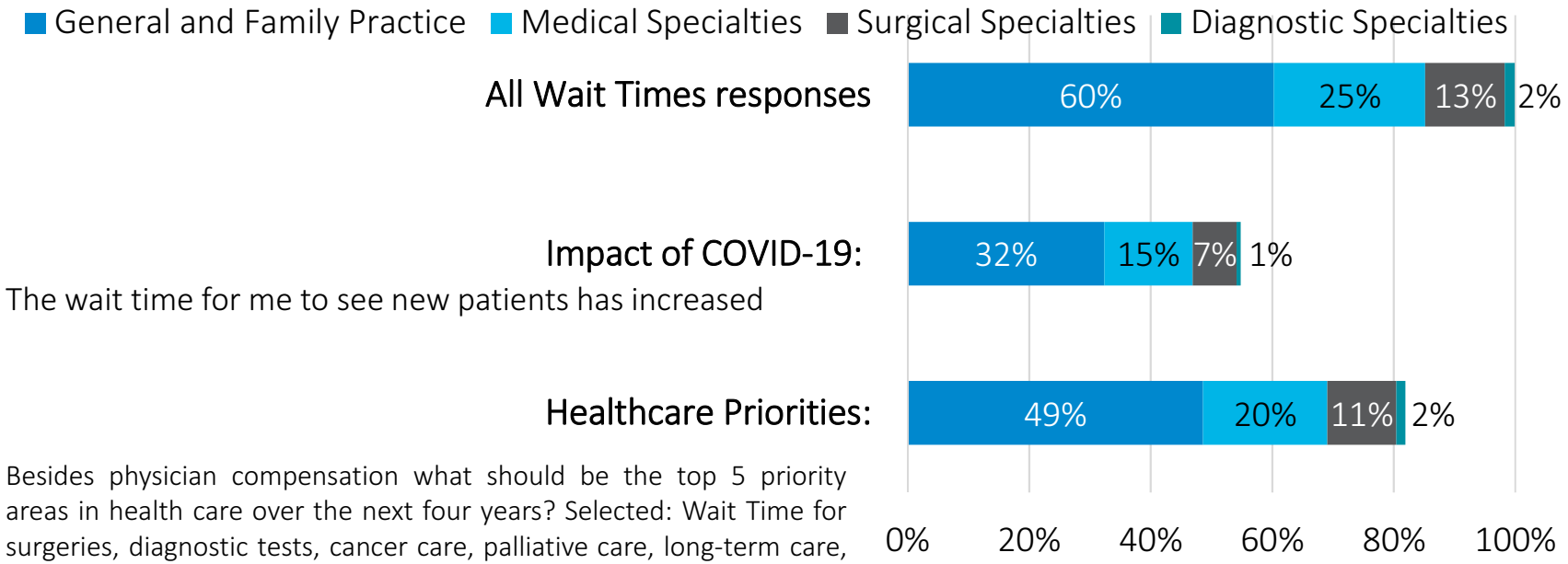
The wait time for me to see new patients has increased

Besides physician compensation what should be the top 5 priority areas in health care over the next four years? Selected: Wait Time for surgeries, diagnostic tests, cancer care, palliative care, long-term care, or emergency room care

N=1,310

Wait Times by Assembly

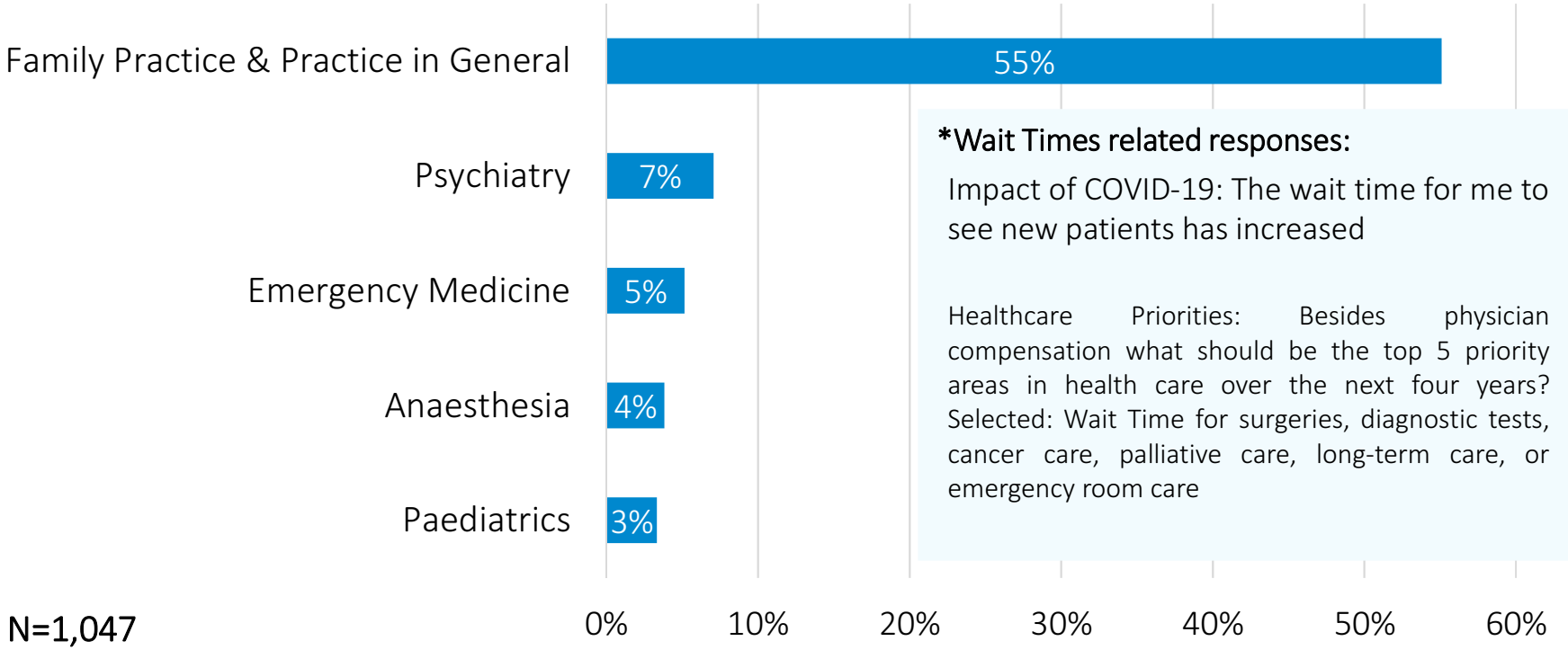
Respondents who selected a response related to wait times



N=1,047

Wait Times by Specialty (Top Five)

Respondents who selected a *response related to wait times



***Wait Times related responses:**

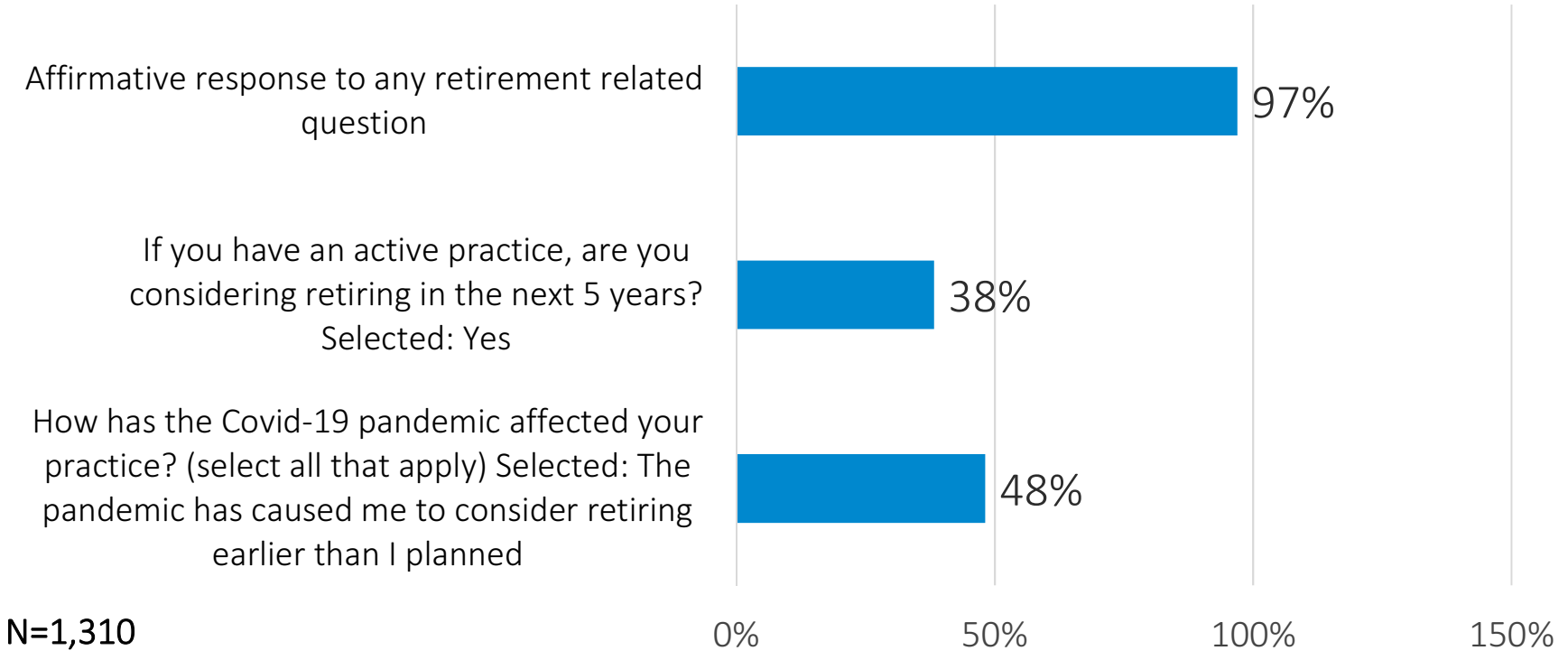
Impact of COVID-19: The wait time for me to see new patients has increased

Healthcare Priorities: Besides physician compensation what should be the top 5 priority areas in health care over the next four years? Selected: Wait Time for surgeries, diagnostic tests, cancer care, palliative care, long-term care, or emergency room care

N=1,047

Retirement

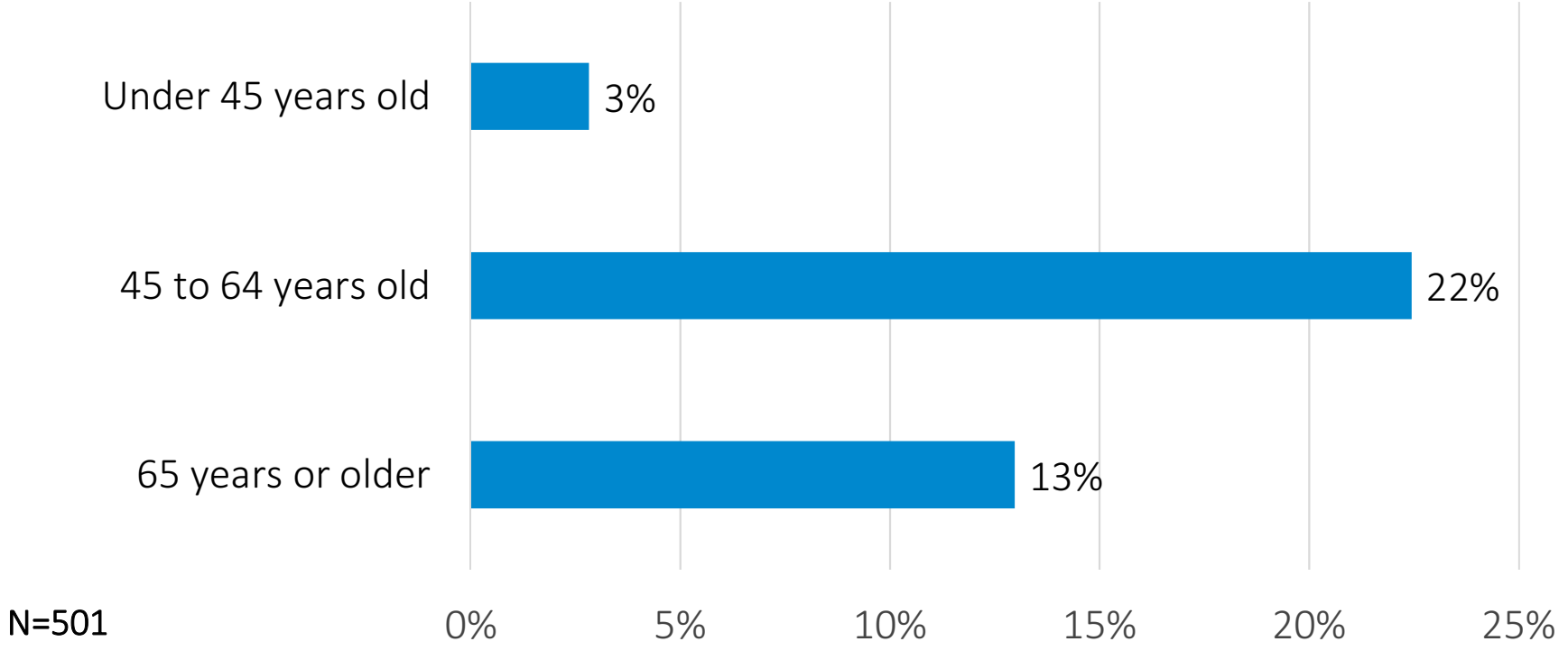
Respondents who selected a response related to retirement



N=1,310

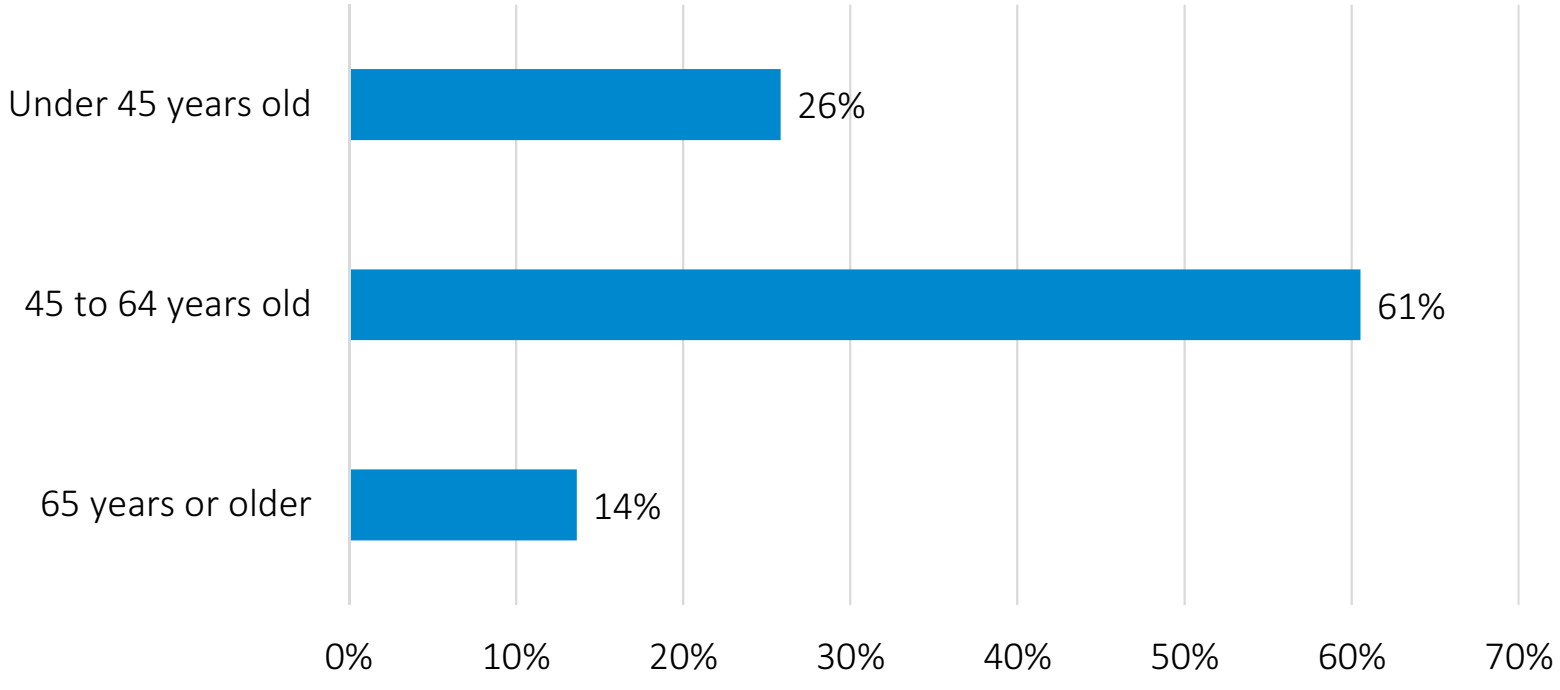
Considering Retirement in Five Years

38% respondents who are considering retiring in the next five years



Considering Early Retirement

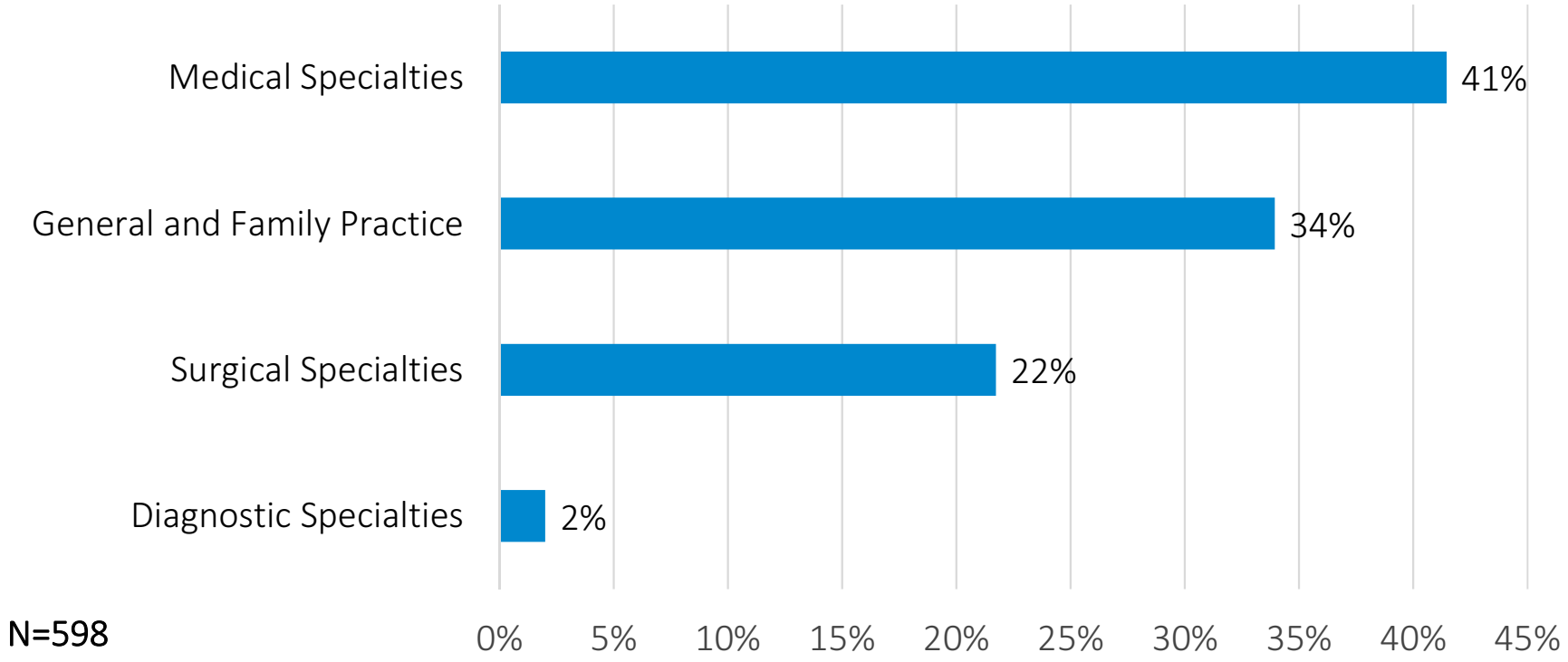
48% respondents say that the pandemic has caused them to consider retiring earlier than planned



N=631

Accepting New Patients

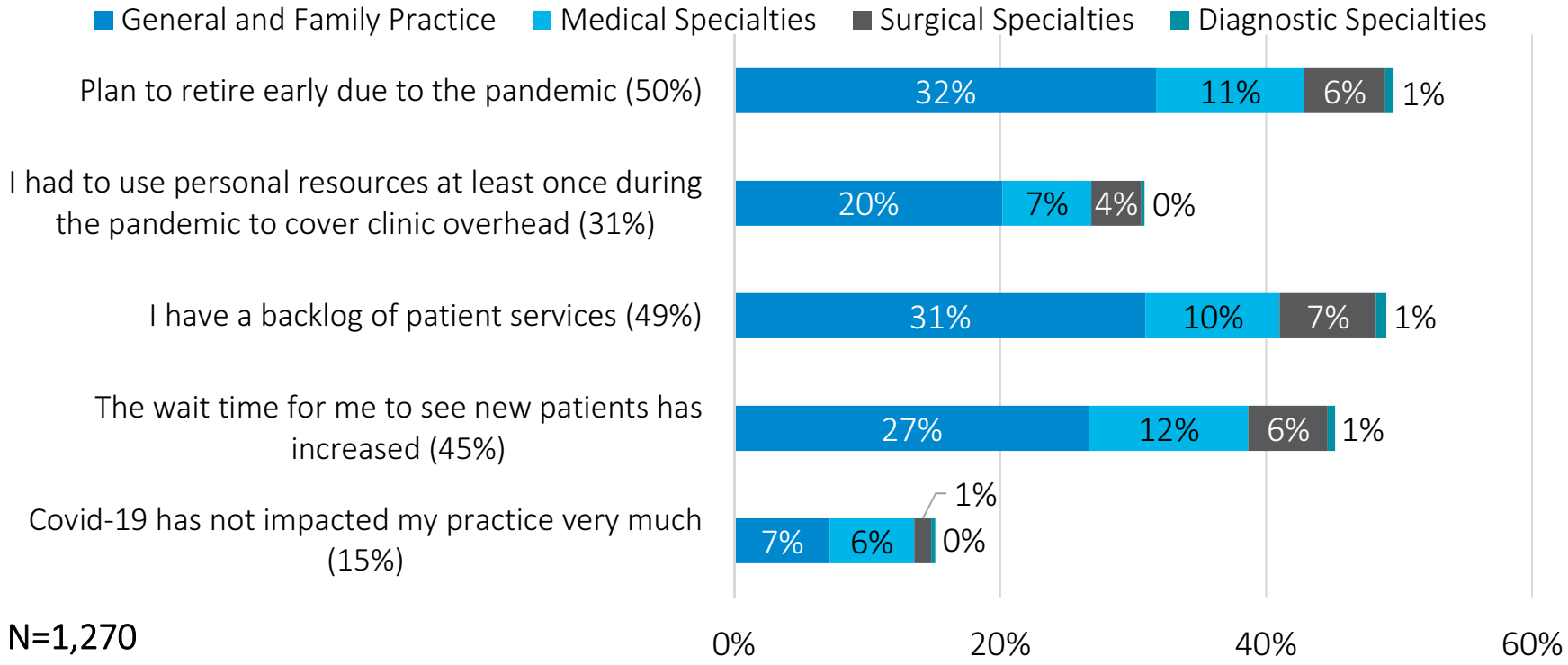
47% respondents are accepting new patients: GPs 34% and Specialists 66%



N=598

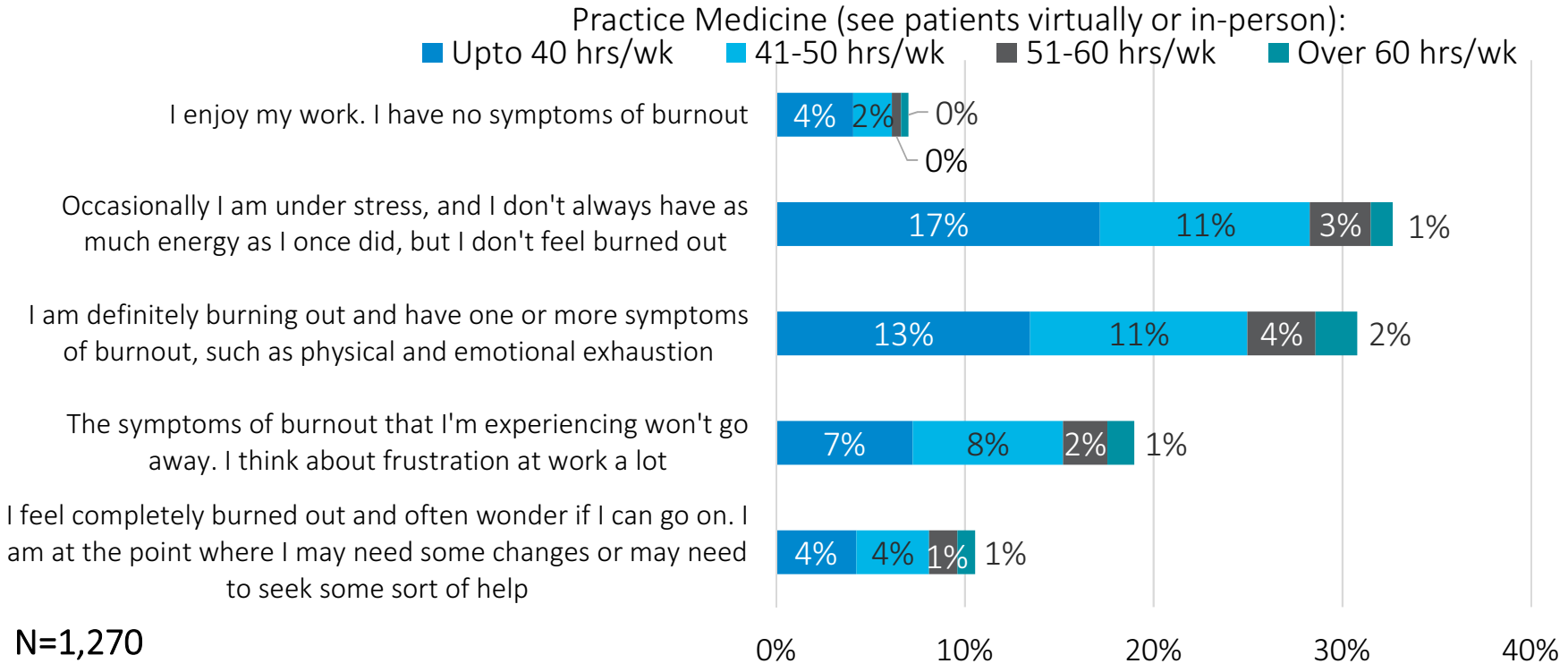
Impact of COVID-19 by Assembly

How has the COVID-19 pandemic affected your practice? (select all that apply)



Burnout related to Hours of Practice

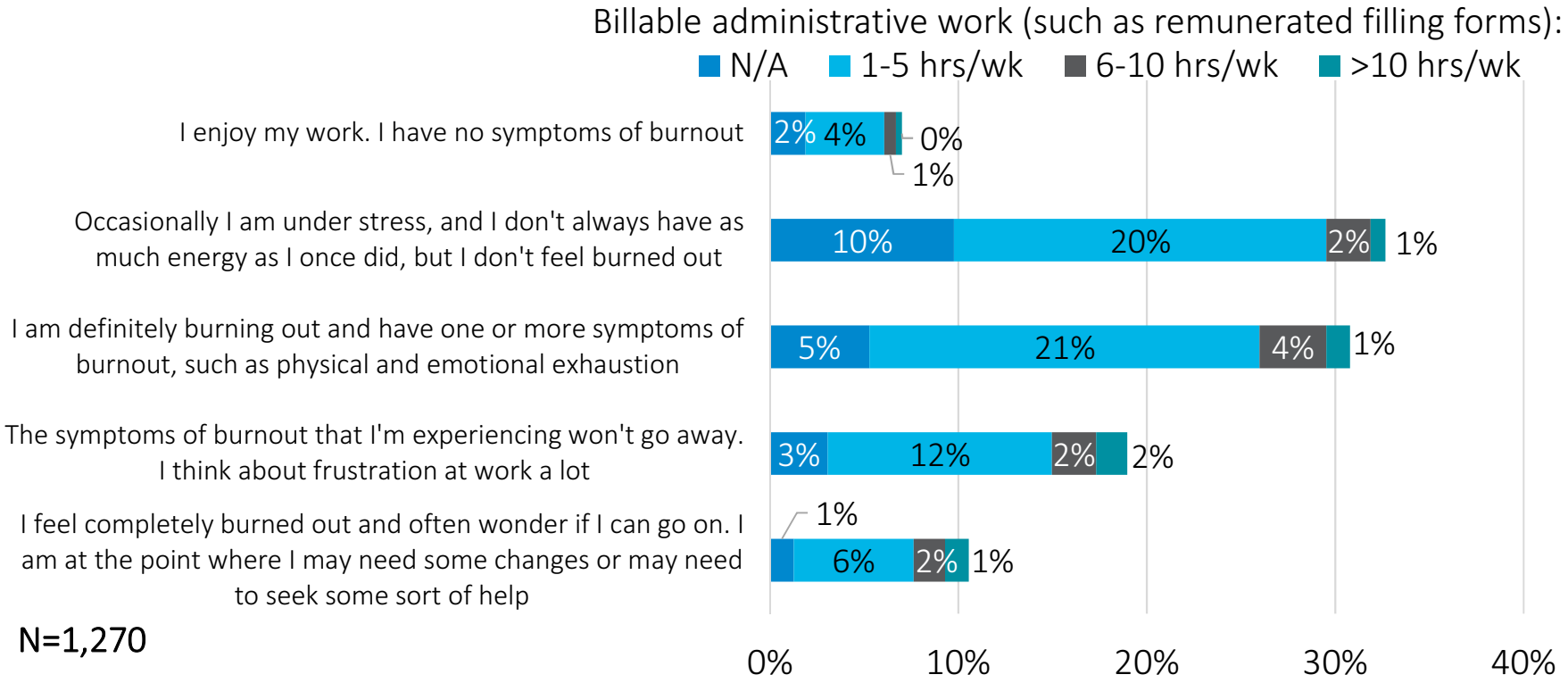
Based on your definition of burnout, how would you rate your level of burnout?



N=1,270

Burnout related to Billable Work

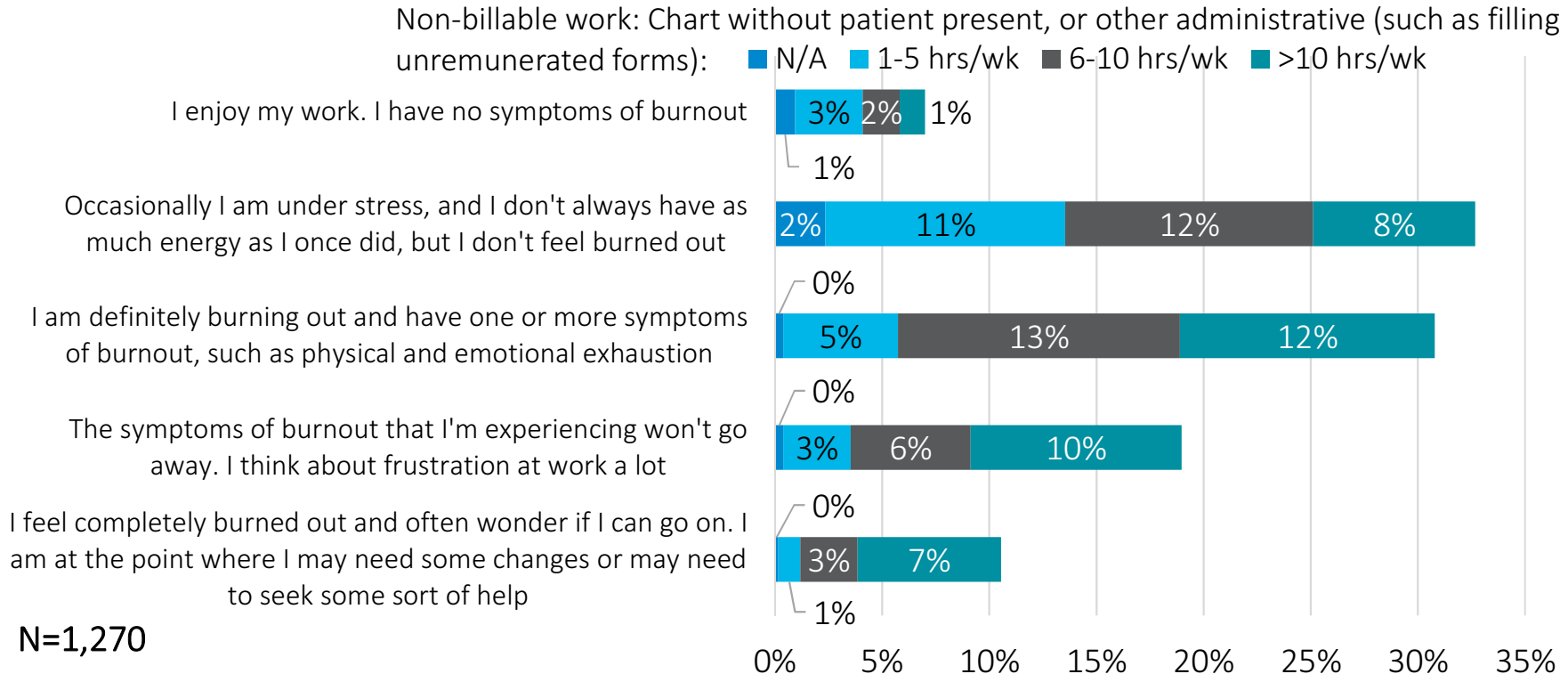
Based on your definition of burnout, how would you rate your level of burnout?



N=1,270

Burnout related to Non-Billable Work

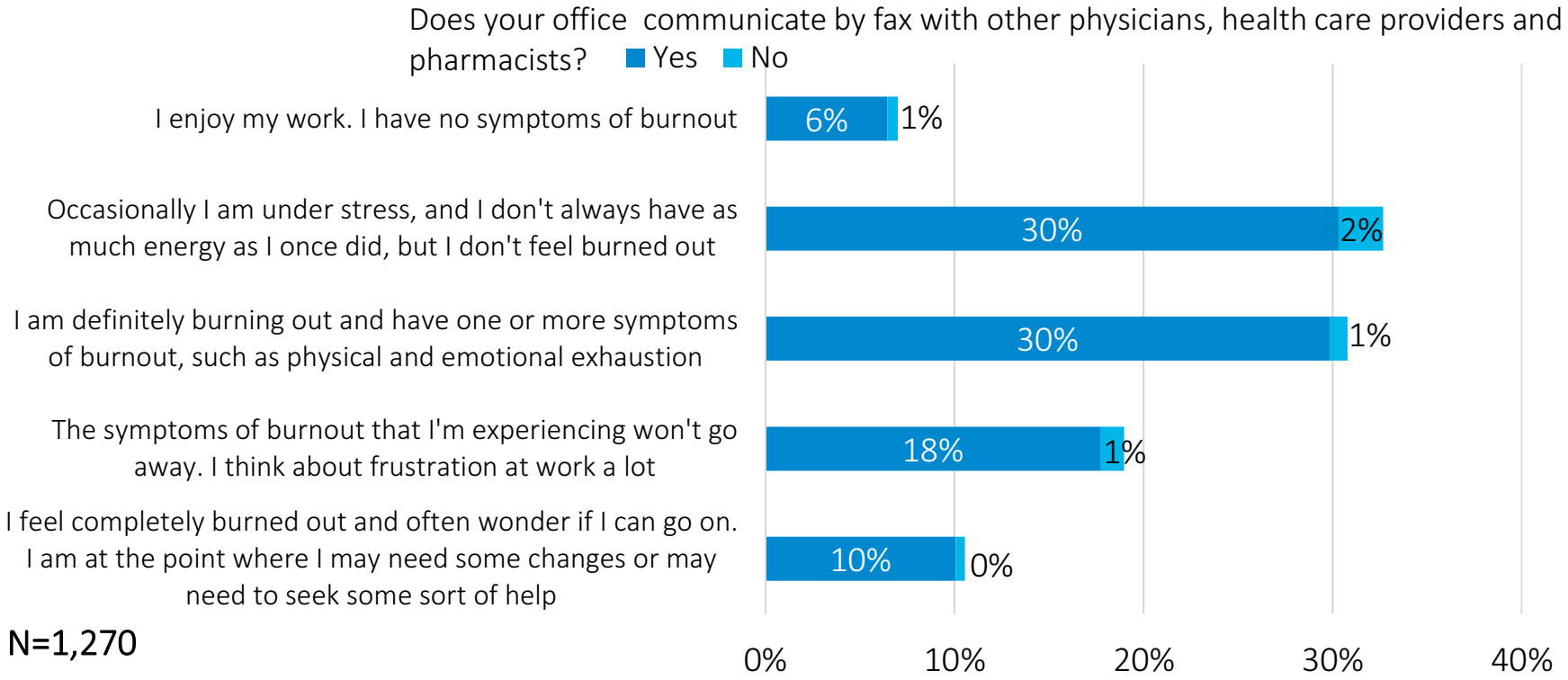
Based on your definition of burnout, how would you rate your level of burnout?



N=1,270

Burnout related to Faxed Communication

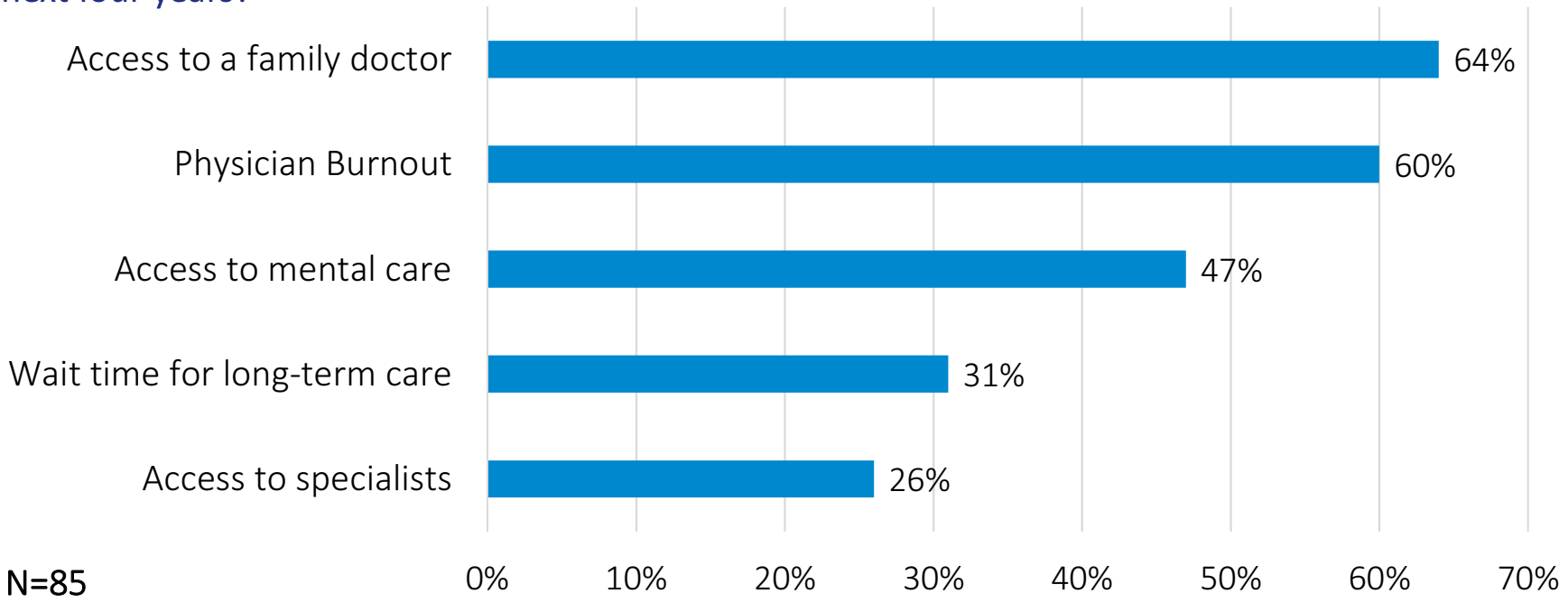
Based on your definition of burnout, how would you rate your level of burnout?



N=1,270

Top Five Priorities for North Ontario

In addition to physician compensation, what should be the top priority areas in health care over the next four years?

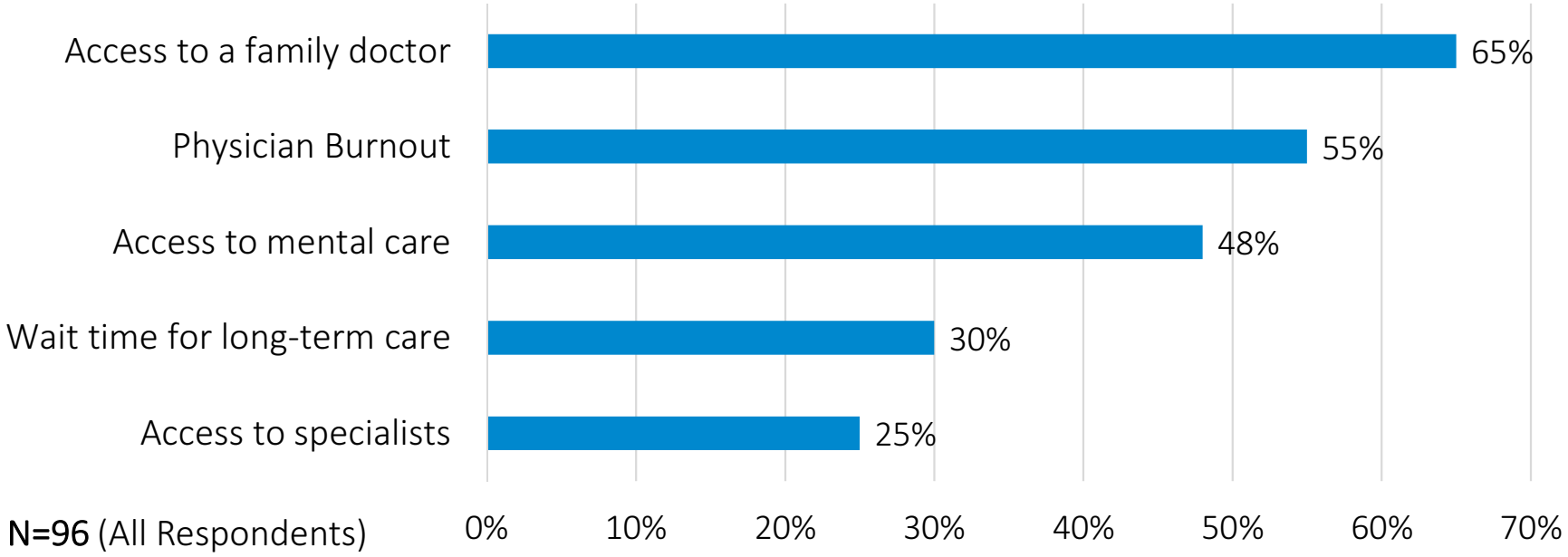


N=85

Demographics for all respondents

Top Five Priorities for North Ontario

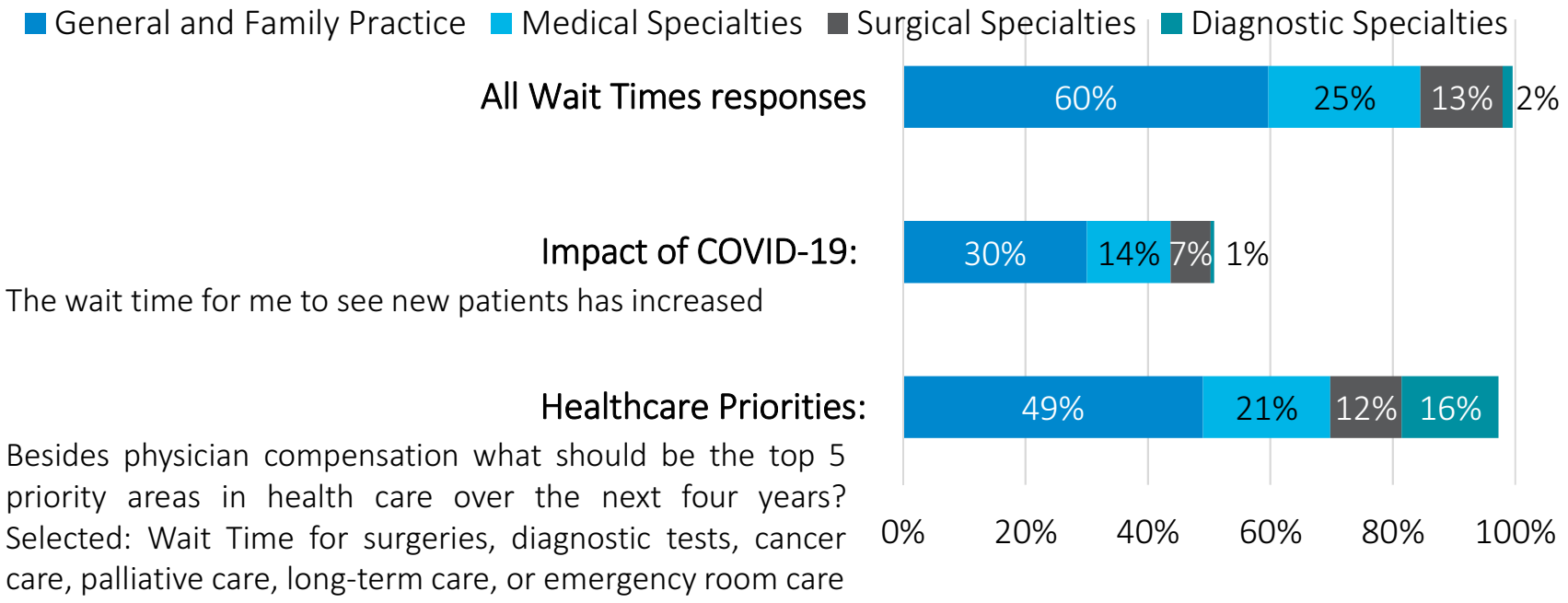
In addition to physician compensation, what should be the top priority areas in health care over the next four years?



N=96 (All Respondents)

Wait Times by Assembly

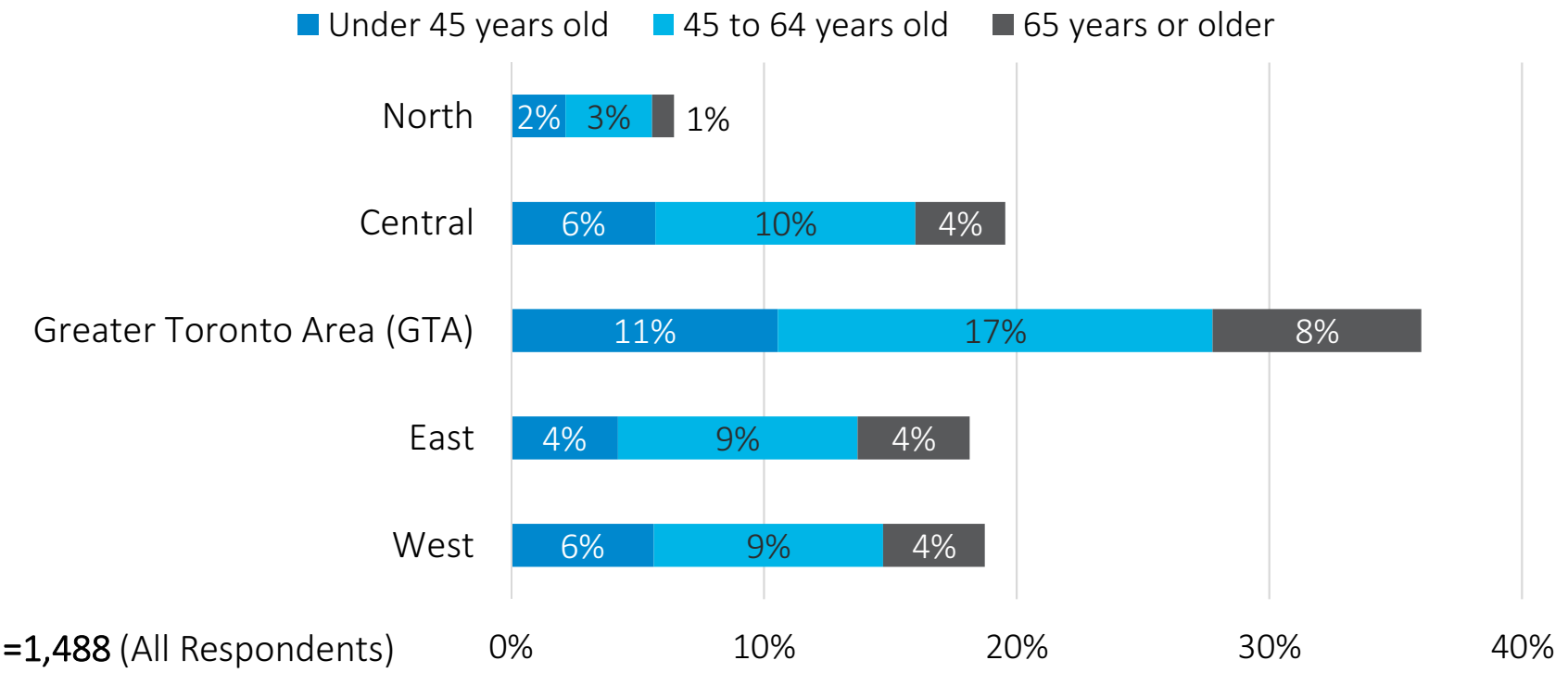
Respondents who selected a response related to wait times



N=1,208

Ontario Regions by Age Groups

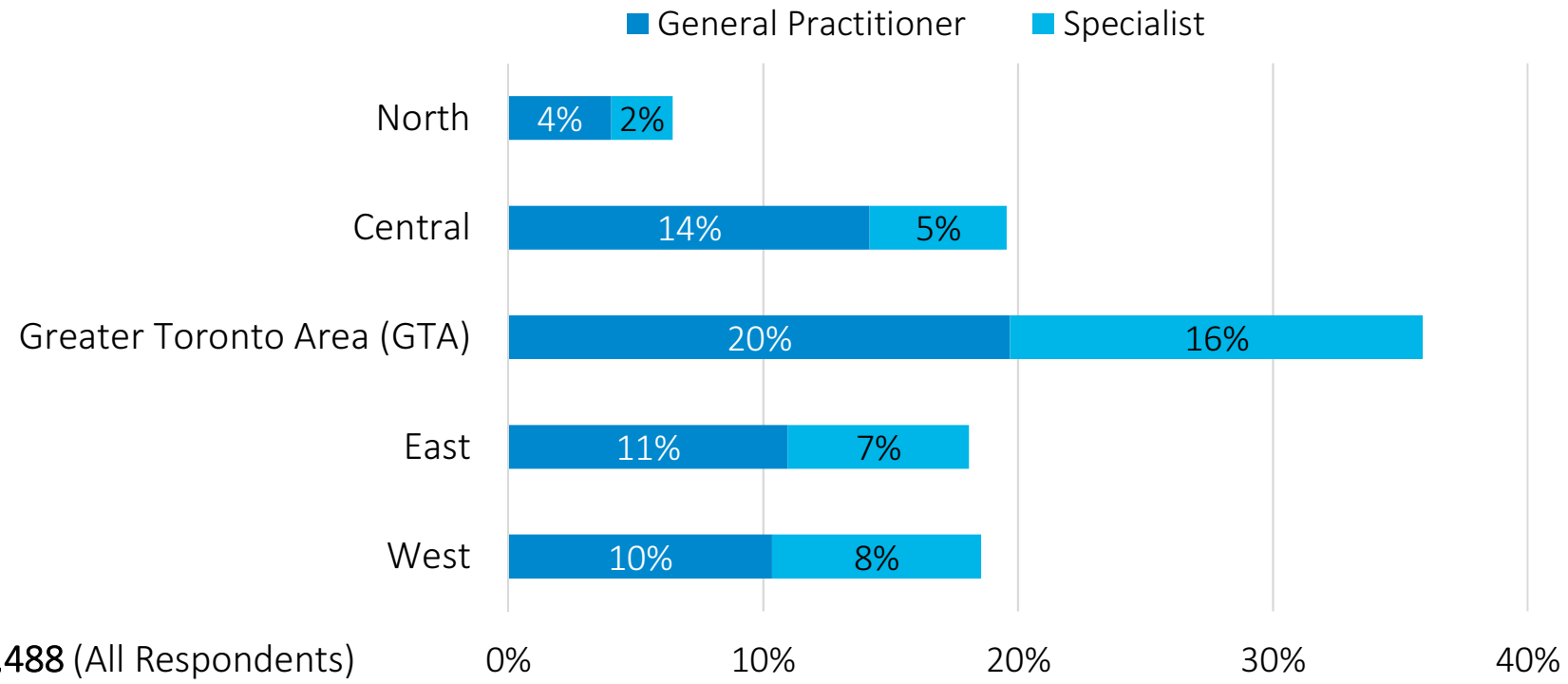
In which Ontario region is your Primary Practice located?



N=1,488 (All Respondents)

Ontario Regions by Type of Practice

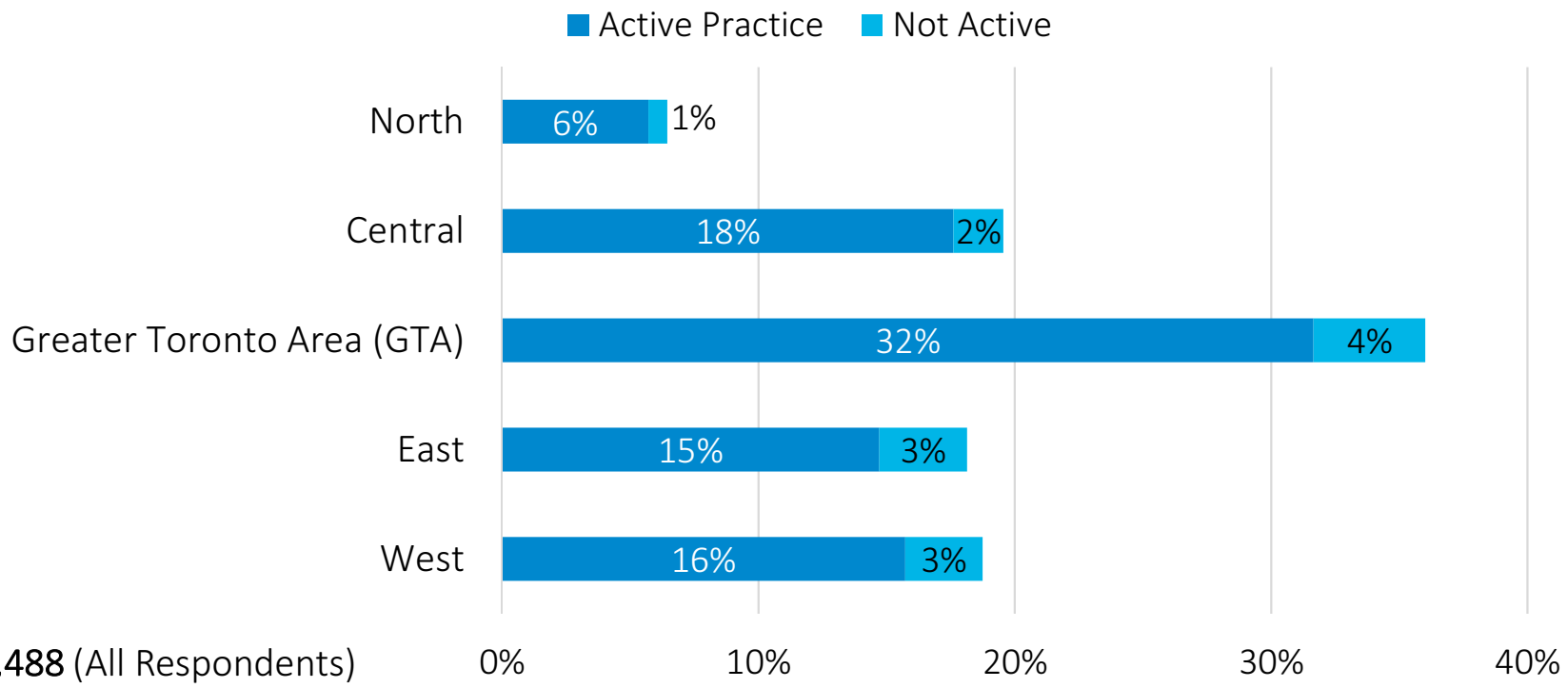
In which Ontario region is your Primary Practice located?



N=1,488 (All Respondents)

Ontario Regions by Active Practice

In which Ontario region is your Primary Practice located?



N=1,488 (All Respondents)

MRAC Prescription for Ontario survey:

summary of open-text responses

Overview

- In addition to checkbox questions, participants were asked to provide an open-text response to:
  1. "In addition to physician compensation, what should be the top priority areas in health care over the next four years?"
     - 262 responses
  2. "Are there any topics or solutions you believe should be prioritized by government that have not been included in the survey?"
     - 774 responses

- From question 1, they could select up to five from the following key areas including
  - Wait times; Quality of care; Access to specialists; Access to mental health and addictions care; Expanding virtual care and electronic medical records; Affordability of drugs; Social determinants of health; Pandemics; Burnout; and "Greening" of healthcare; or ** **"other"**
  - ****If "other" was selected, they were asked to provide an open-text response to elaborate**

- We evaluated these two open-text questions, identifying key themes and sub-categories

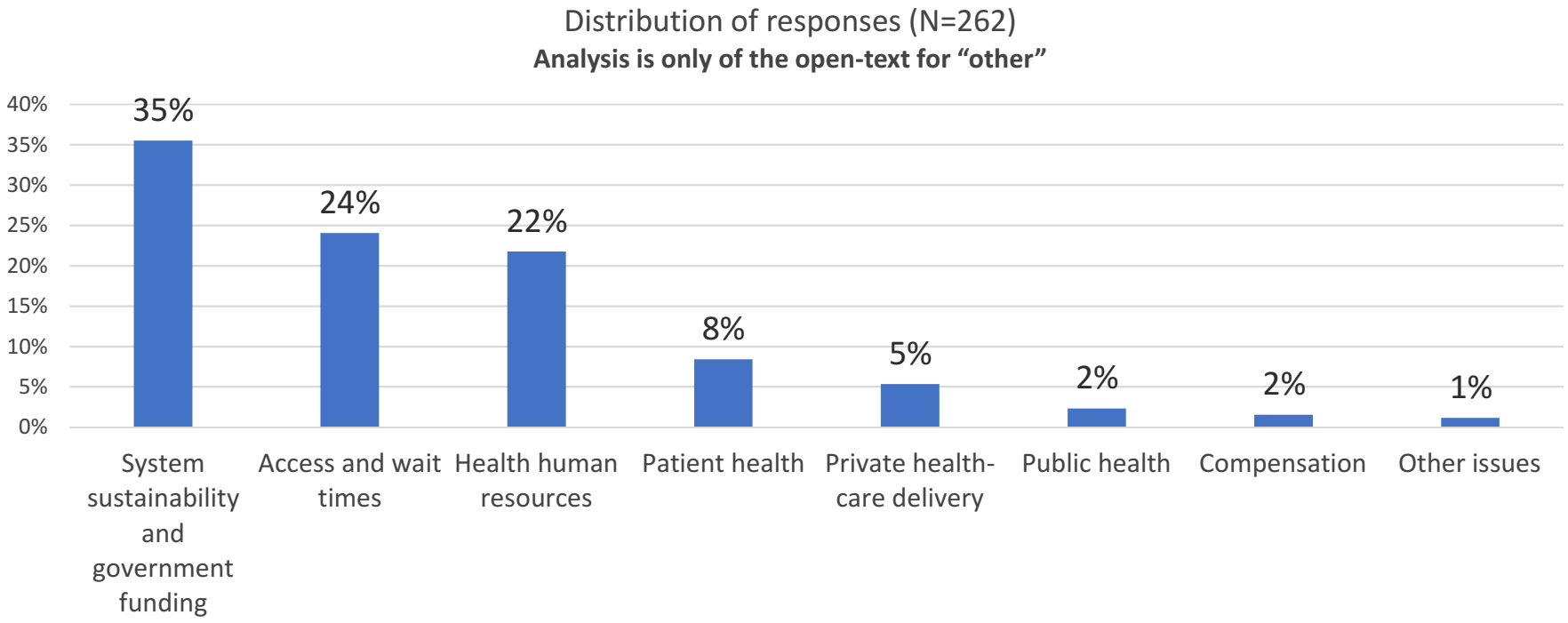
Key themes based on open-text responses

Eight themes with sub-categories (bulleted)

1. Access, including wait times
   - Access to primary care and GPs; wait times to specialists; mental health and addictions; wait times for surgeries, cancer and diagnostics; ER wait times
2. Health human resources
   - Physician burnout; administrative burden and forms; more nurses and allied health professionals; too little/much scope of practice expansion
3. Patient health
   - Social determinants of health including poverty and homelessness; preventative care
4. System sustainability / Government funding
   - More funding for hospital beds; new technologies & drugs; home care and long-term care
5. Public health
   - Pandemic preparedness; healthcare education
6. More private health-care delivery
7. Other issues
   - Climate change & the environment
8. Physician compensation

"In addition to physician compensation, what should be the top priority areas in health care over the next four years?"

"In addition to physician compensation, what should be the top priority areas in health care over the next four years?"



Examples of open-text responses

** NB : some examples were edited for typos **

System sustainability / Government funding

1. *"Exploring models outside of government monopoly on healthcare."*

2. *"Working with provincial and hopefully federal government to guide health care system reform (national strategy for priorities / outcomes, ? requires shift to national EMR)."*

3. *"Pushing forward on funding hospices and palliative care units, 1000 more beds needed. Target to areas of greatest ALC need."*

4. *"funding NPs/other physician extenders / allied health professionals to work alongside physicians but can be paid for the skills they have and the work that they do and are utilizing their full scope of training and practice."*

5. *"Financial support to urgent care/walk-in doctors to allow doctors who already have skills to perform such skills such as suturing, wound care, management of acute conditions etc. so fewer patients need to go to the E.R."*

Access, including wait times

1. *"expanded access to home care."*
2. *"Access to chronic pain management services."*
3. *"Virtual care access for shared specialist practices."*
4. *"Wait time is long and this affects family practice offices super busy with dealing with resending referrals addressing patient complains about wait time double referral sending to 2-3 specialist to see who sees first and cancel the rest later!!"*
5. *"TIMELY patient access to FHO/FHT model teams for care and navigators for the vulnerable to facilitate access/registration. "*

Health human resources

1. *"patient expectations are unrealistic in the current system and needs addressing which cause physician burnout."*

2. *"Specifically address digital burnout. Fund an organization (OntarioMD comes to mind) to focus on issues of technology burden to physicians."*

3. *"Family physician shortage/crisis (current doctors leaving practice, med students and residents not going into clinic practice)."*

4. *"Dire shortage of family doctors. Remove barriers to IMGs, it will prevent poorer solutions like pharmacists and NPs increased scope creep."*

5. *"Training more doctors and nurses!!!"*

Patient health

1. *"Preventative Medicine/ Healthy lifestyle adoption/education."*

2. *"prioritizing preventative care through better pre/postnatal care and support."*

3. *"Prevention strategies at early age …access to healthy food, exercise…"*

4. *"Health promotion including exercise, healthy eating, weight loss. Lifestyle medicine. Stop pouring money into scientifically untested vaccines."*

5. *"healthy lifestyles to prevent chronic illness."*

Private health-care delivery

1. *"private health care to unburden our broken system."*

2. *"hybrid health care funding public and private."*

3. *"Only one thing should be discussed...a parallel private Healthcare system. Thinking that we can solve this mess with anything but is a waste of time and money. It's time for Canada to step out of this antiquated system."*

4. *"Allow private health care."*

5. *"Having a mature discussion about private health care/patient co-pay, like every other responsible, developed, industrialized jurisdiction on Earth."*

Public health

1. *"Education for Canadians and Ontarians about patient responsibility and appropriate use of health care."*
2. *"acknowledge the excessive costs and the damage done by Public Health Covid protocols and shift to helping people be healthier."*
3. *"Sustained funding for Public Health which prevents disease."*
4. *"Education. Everyone talks about demand. But a good chunk of the problem is uneducated people using the "free services" for things no one used to go to the doctor for. Start teaching in primary school basic heath care. What to do if you have a cough, fever, etc. otherwise we are chasing our tails."*
5. *"Patient education to reduce demands for unnecessary testing/investigations/feelings of entitlement (I want an MRI, I want imaging results TODAY so I came to ER, etc)."*

Compensation

1. *"The OMA should be focused on physician compensation first and foremost. Always."*

2. *"Raising compensation in order to encourage physicians to defer retirement."*

3. *"I would like government to have equal financial support for "in hospital" and "out of hospital" specialists. I pay a huge overhead in my office, while pediatricians in hospital pay nothing. I cannot get any pediatricians to join my Community office because they don't want to pay overhead."*

4. *"Family physician payment and retention."*

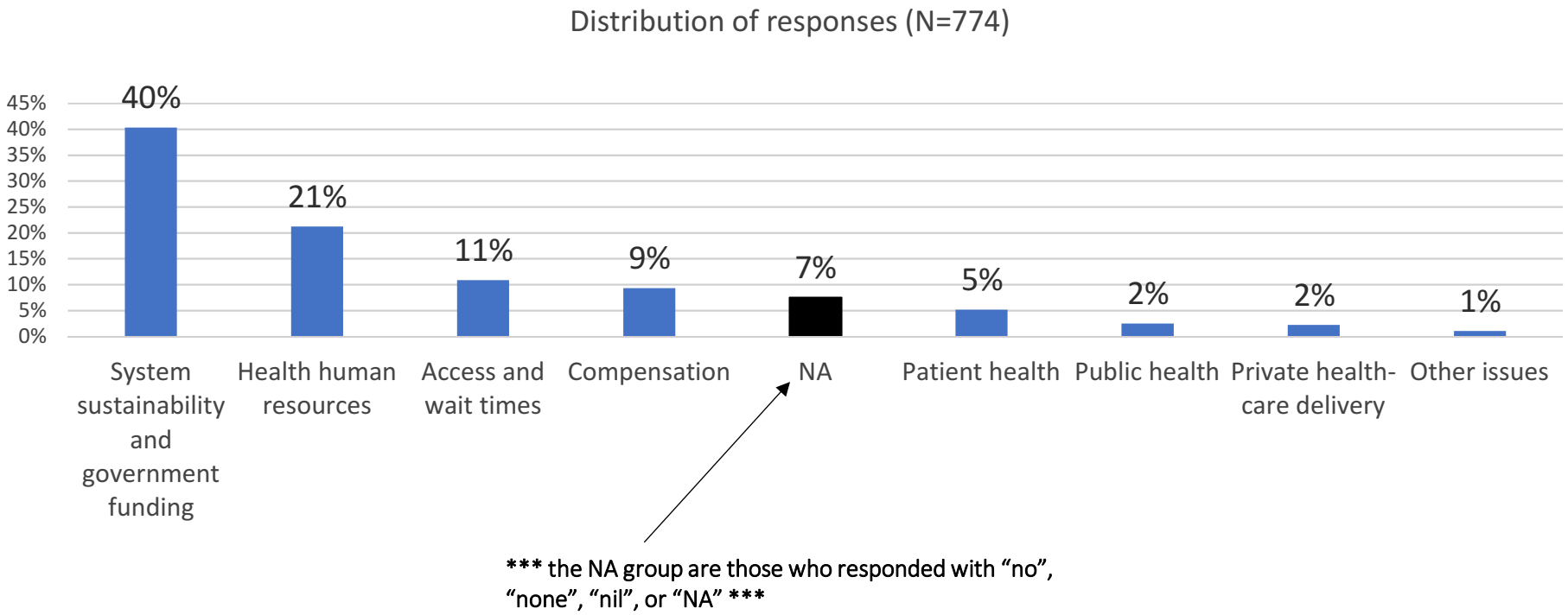
5. *"Retaining family physicians by revamping payment models, increasing pay, and providing staff and administrative support."*

Other issues

1. *"No doubt the issues above are important and pressing, but there would always be important and pressing issues and in the meantime, we don't seem to pay attention to and underlying issue, which will create irreversible damage and cost billions - the climate crisis."*
2. *"Physician-led advocacy opposing fossil fuels and the climate crisis as the single greatest health crisis we face."*
3. *"Lifestyle and environmental medicine and getting to the root of the problem vs just treating symptoms."*
4. *"Why are identity politics and environmentalism on this list? How exactly do these enable the delivery of the IOM's six domains of quality healthcare?? Laughable!"*

“Are there any topics or solutions you believe should be prioritized by government that have not been included in the survey?”

"Are there any topics or solutions you believe should be prioritized by government that have not been included in the survey?"



Example open-text responses

** NB: some examples were edited for typos **

System sustainability/Government funding

1. *"Having 1 central EMR for the whole province."*
2. *"Preserving autonomy in medical decisions. Accountability for public health officials and government/health system managers. An inquiry into management of the Covid pandemic responses. A moratorium on unproven "health care reform" programs."*
3. *"Too much money allocated for health care is wasted on administration costs vs clinical resources. A study on waste should be a priority. What is the most appropriate ratio of health care dollars and the administration costs vs monies available for clinical care like staffing , beds and home care. I see a lot of waste related to digitizing, consultants and administration salaries. Layering continues to be a common problem. A study comparing the efficiency of different models of care would help."*
4. *"*There's not enough emphasis on why the current "system" is driving family physicians away. The inefficiencies, duplications and difficulty getting access to care people need are really undermining. Maybe you are trying to capture this by the term "burnout", but burnout is a symptom of the underlying issues."
5. "Move funding away from preventative care and screening for asymptomatic *disease back into urgent medical care. Asymptomatic health screening can be done by non physicians."*

Health human resources

1. *"Anesthesiologist shortage. Every hospital needs more. Can't care for surgical backlog without more. Many retired early."*

2. *"reduce paperwork burden"*

3. *"providing adequate staffing at hospitals such that they work far more efficiently and effectively"*

4. *"To address shortages you need more skilled bodies, increase med school enrollment, create more PA schools, train more nurses (bring back the 2 year diploma programme) meds schools only admit 1 out of 10 applicants and they are all likely qualified, we don't graduate enough docs now, it is only going to get worse, Make a national licensure and create a better process for international graduates."*

5. *"The massive administrative workload on GPS and offloading of work. I will retire early and likely reduce practice. We are all burnt out!!! "*

Access, including wait times

1. *"Long term care access is poor and funding is inadequate. There is nothing done to improve that so far despite the pandemic showdown. There is need for adequate funding for family physician graduates to encourage them to start practice"*

2. *"Streamline access to primary care / diagnostics and imaging OUTSIDE ER in stand alone centres staffed by primary care providers for non-life threatening problems. Virtual care is not effective and increases visits to ER."*

3. *"Increasing virtual care for those without a doctor."*

4. *"improvement in the delivery of psychotherapy for this in need."*

5. *"Improving access to family physicians needs to be a pillar."*

Compensation

1. *"Long Term Care services and compensation for providers. This is a field that receives a lot of lip service. Physicians are poorly compensated and neglected in ministry guidelines."*

2. *"Restore respect for physicians and all health care workers which should include appropriate compensation in line with the times."*

3. *"I strongly believe that compensation for family physicians INCLUDING in FHO models must increase in order to retain current physicians and attract new ones. We are doing exponentially more work now than even 5 years ago, managing complex patients single handedly, as access to specialists is very limited. Overhead costs are only increasing. FHO physicians with large roster sizes are paid well, but I would argue that the care they provide is much less thorough than those of us who manage smaller roster sizes. Young patients are also requiring significantly more resources (pregnancy, significant number of mental health visits, well child visits etc) and I do not feel we are compensated appropriately for this. Capitation payments should be improved for younger patients who can be equally as complex as older patients, and capitation models should not only reward physicians with large practice sizes since most new physicians are choosing to have smaller practices and provide more thorough and timely care. An overall increase in fee for service amounts is well overdue."*

4. *"Family physicians need to be treated with more respect. We are not clinical clerks at the disposal of specialists- following up on their reports, renewing their prescriptions arranging tests etc. we need to be better supported with funding for overhead and higher pay. All payment models should be equitable- Fee for service family docs have the absolute worst remuneration."*

Patient health

1. *"Impact of improving preventive strategies for chronic disease esp MSK/OA all linked to important co-morbidities. Decompensation of cases blocks ER, overcrowds IP beds, overloads chronic care resources....Role for empowered MSK APPs in community and FHT in managerial role."*

2. *"Physio and occupational resources to keep elderly people healthy. Better post operative rehab care for frail and deconditioned patients or patients with long complex hospital stays."*

3. *"Chronic pain management is n endemic that is not being addressed."*

4. *"Preventative care"*

5. *"Results for diagnostic tests are taking too long (paps) and that is affecting patient care."*

Public health

1. *"Public education to manage patient expectations so that they don't inappropriately use resources."*

2. *"Have local politicians engage the physician groups individually, to help better guide policy and understand with a boots on the ground approach what needs to be done."*

3. *"Preserving autonomy in medical decisions. Accountability for public health officials and government/health system managers. An inquiry into management of the Covid pandemic responses. A moratorium on unproven "health care reform" programs."*

4. *"Stop this ridiculous Covid obsession and get back to reality."*

5. *"Educate patients to keep scheduled appts. As a specialist, I could see pts 25 to 50% sooner if pts gave us notice when they were not going to show up; we could move up pts on the waiting list to those vacated appts, but there is a high rate of "no shows"."*

Private health-care delivery

1. *"Patient self pay options need to be a thing. This perception and enforcement of "free" healthcare is the main issue. Let patients pay for services. Add a co-pay. Allow private clinics. It's the only way."*

2. *"We need a private option."*

3. *"I think you have completely missed the main problem. Our strictly private health care system is failing, and we need to move to the successful hybrid European models."*

4. *"Allow access to private health care and private medical insurance like all the other OEDC countries."*

5. *"Explore private health care models."*

Other issues

1. *"CLIMATE CHANGE."*

2. *"Centering the climate crisis through the health lens as the single greatest public health crisis we face in order to prioritize urgent, large scale and multi-faceted mitigation policies combating the climate crisis as a health priority."*

3. *"Climate change - the greatest threat to public health in the 21st century. The OMA should be leading the charge to educate the public on this imminent danger, and pushing the government to act, before it is too late."*

4. *"reducing climate footprint of heath care."*

5. *"YES! The prescription does not address the climate crisis. The IPCC report has given us until the end of the decade to prevent irreversible damage, which will affect human health in multiple direct and indirect ways. As doctors who understand the role of prevention and the importance of being proactive as opposed to reactive, many doctors believe the climate crisis should have been one of the 5 pillars."*

OMA Ontario Medical Association

Thank you.

oma.org

TAB 20

time spent in emergency departments

Provincial

On average, patients waited

2 Hours

On average, patients spent

3.2 Hours

73%

of patients finished their emergency visit within target time of 4 hours

On average, patients spent

4.6 Hours

89%

of patients finished their emergency visit within target time of 8 hours

On average, patients spent

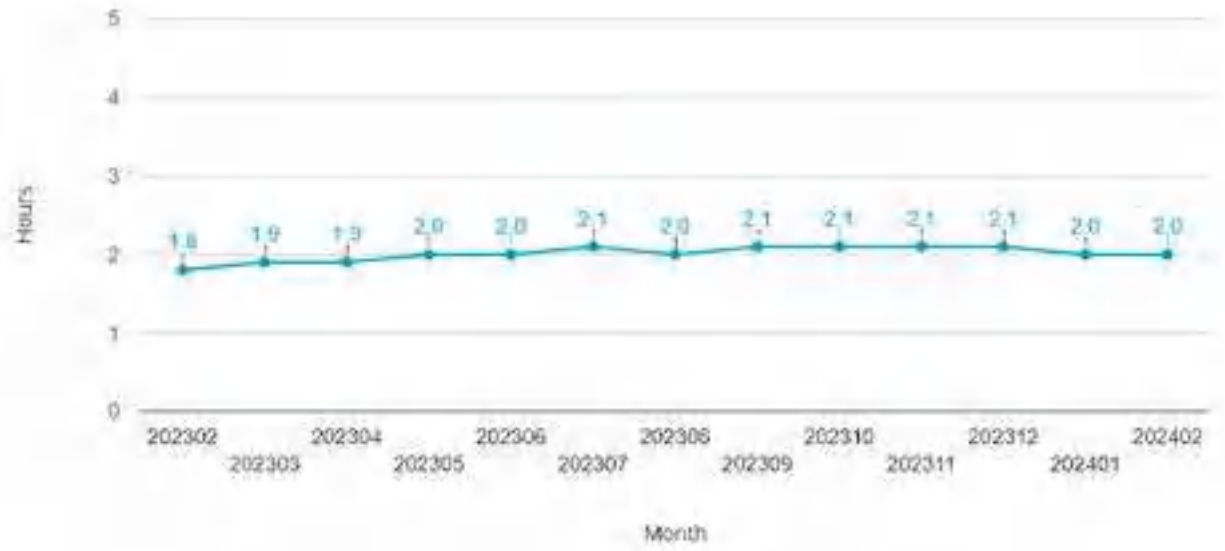
20.5 Hours

26%

of patients admitted to hospital from emergency within target time of 8 hours

Average time all patients waited for first assessment by a doctor in emergency, in Ontario, 202302 to 202402

First assessment by a doctor
Average Time



Average time all patients waited for first assessment by a doctor in emergency, in Ontario, 202302 to 202402

First assessment by a doctor
Average Time

Quarter	Ontario (Hours)
202302	1.8
202303	1.9
202304	1.9
202305	2
202306	2
202307	2.1
202308	2
202309	2.1
202310	2.1
202311	2.1
202312	2.1
202401	2
202402	2

Compare results across hospitals for the indicator selected:
First assessment by a doctor

Hospital name	Average (Hours)
Ontario	2
South Bruce Grey Health Centre - Durham	0.6
Southlake Regional Health Centre	0.7
South Bruce Grey Health Centre - Chesley	0.7
Huron Perth Healthcare Alliance : Clinton Public Hospital	0.8
Mackenzie Health - Richmond Hill	0.8
William Osler Health System - Etobicoke General	0.8
South Bruce Grey Health Centre - Walkerton	0.9
Dryden Regional Health Centre	0.9
Grey Bruce Health Services - Lions Head	0.9
Niagara Health System - Port Colborne Site	1
Huron Perth Healthcare Alliance : Seaforth Community Hospital	1
Grey Bruce Health Services - Wiarton Site	1
Sensenbrenner Hospital	1
Niagara Health System - Fort Erie Douglas	1
Scarborough Health Network - Birchmount	1.1
Unity Health Toronto - St. Joseph's	1.1
Grey Bruce Health Services - Meaford Site	1.1
Trillium Health Partners - Queensway Health Centre	1.1
William Osler Health System - Peel Memorial Center	1.1
Mackenzie Health - Cortellucci Vaughan Hospital	1.1
St. Joseph's Health Care System Hamilton - Charlton Campus	1.2
Mackenzie Health - Vaughan Site	1.2
Quinte Healthcare Corporation - Picton	1.2
Scarborough Health Network - Centenary	1.2
Oak Valley Health - Markham Stouffville Hospital	1.2
St. Marys Memorial Hospital	1.3
Kingston Health Sciences Centre - Hotel Dieu	1.3
Grey Bruce Health Services - Markdale Site	1.3
Hanover And District Hospital	1.3

TECHNICAL INFORMATION

Data source: National Ambulatory Care Reporting System (NACRS), Canadian Institute for Health Information (CIHI) provided by Cancer Care Ontario (CCO). For more information, please visit the Indicator Library for the technical description of Wait Time to First Assessment in Emergency indicator (average time and volume) and Length of Stay in Emergency indicators (average time, volume, and percentage within target).

http://indicatorlibrary.hqontario.ca/Indicator/Detailed/Average-time-PIA/EN
http://indicatorlibrary.hqontario.ca/Indicator/Detailed/Volume-PIA/EN
http://indicatorlibrary.hqontario.ca/Indicator/Summary/Average-LOS-ED/EN
http://indicatorlibrary.hqontario.ca/Indicator/Detailed/Volume-ED/EN
http://indicatorlibrary.hqontario.ca/Indicator/Detailed/Percentage-within-target-ED/EN

TAB 21

Unprecedented and Worsening:
Ontario's Local Hospital Closures 2023

December 5, 2023

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Ontario Health Coalition
Protecting public healthcare for all.

Introduction & Summary of Findings

In Ontario, vital hospital services, such as emergency departments, maternity and obstetrics, outpatient laboratories and intensive care units, have been subject to repeated closures in the last three years. These closures are unprecedented and they are worsening. The duration of closures is getting longer. Multiple towns across regions are closing vital services at the same time. Public notice is often last minute. Remote communities in the north are experiencing long term closures of vital services such as labour and delivery and outpatient laboratories, and repeated emergency department closures or threats of closures. Rural communities across mid-Ontario and the south are particularly hard hit, but we are also seeing closures of vital services in the largest cities of the province. Emergency departments in particular are being repeatedly closed down in the daytime, overnight, on weekends, or for days to weeks. The rates of closure are staggering.

- The Toronto Star reported that emergency departments in the province closed 158 times from February 2022 to February 2023, [1] and Dr. David Savage documented 848 emergency department closures in 2022. [2]
- In 2023, Dr. Savage found that there have been 498 emergency department closures up until August 31 alone.
- To date, at November 24, 2023, there have been at least 868 emergency department closures so far this year.

To ascertain the scale and scope of the closures, this report adds to that body of tracking and analysis of the trends. In 2023, the Ontario Health Coalition has recorded:

- 868 temporary or permanent emergency department closures (one is permanent);
- 316 urgent care centre closures;
- two outpatient laboratory closures;
- eleven obstetrics unit closures;
- one ICU closure, and;
- one labour and delivery unit closure (long-term).

In total, there have been 1,199 closures of vital health care services from January 1 to November 24. In other words, these services in Ontario have either temporarily or permanently closed in 1,199 instances this year so far.[3] Consequently, 30,155 hours of care (equivalent to 3.44 years) have been lost to local communities this year so far.[4]

As not all closures -- particularly those that do not take place in emergency departments -- are reported in local news outlets, on social media, or on hospital websites, the total number of Ontario hospital closures in 2023 is most likely higher than the 1,199 recorded by the Ontario Health Coalition.

A growing number of local hospitals are at risk of permanently losing services. The local emergency department in Chesley has been closing evenings, overnight and on weekends since December 5, 2022. Clinton's emergency department has been closed from 6 p.m. to 8 a.m. since December 2019.

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[1] The Toronto Star did not include partial closures of emergency departments, reduced bed capacity in emergency departments, or urgent care centre closures.

[2] Dr. Savage records a closure when an emergency department closes then reopens or permanently closes.

[3] The Ontario Health Coalition has followed Dr. Savage's method of recording hospital closures when a facility closes then reopens or permanently closes.

[4] The calculations for number of hours of care lost are based on the facilities' normal opening hours. Emergency departments, obstetrics units, ICUs, and labour and delivery units are assumed to be normally open 24 hours a day and seven days a week. Urgent care centres and laboratories have varying hours.

The town of Durham in Western Ontario (as distinct from the region of Durham in the Greater Toronto Area) has had at least 51 emergency department closures in 2023 to date.[5] Seaforth has had 17 temporary emergency department closures this year, Walkerton has had twenty, and Wingham has had 31. The Fort Erie and Port Colborne urgent care centres permanently closed overnight on July 5, and the Minden hospital's emergency department permanently closed on June 1.

Causes & Impacts of Closures

It is indisputable that these closures are endangering the health of Ontario residents. There is no excess hospital capacity in Ontario. Ontario has well-documented levels of hospital overcrowding and consequential emergency department backups that are extreme by any measure and by all standards, national and international. The hospitals to which patients must drive -- or to which they must somehow find transportation when their local hospital services are closed – are already overburdened and understaffed. In the North, the distances between hospitals that are experiencing service closures are huge: some that have had services closed are an hour to four hours away from the next open service. In the counties of Midwestern Ontario – Perth, Huron, Wellington, Dufferin, Bruce and Grey – we are seeing multiple hospital emergency departments closed at the same time. Some emergency departments are closing with little to no notice, such as the extension of the Chesley emergency department's weekend closure from November 17-20 which was announced at 6:45 a.m. on the day the closure began. While hospitals experiencing closures may provide a list of nearby emergency departments, patients are being told to confirm on their own (while they are in medical crisis and seeking care) that the facilities on the list are not also closed.

The immediate cause of the closures is staff shortages including nurse, health professional and physician shortages. Staffing shortages that were emerging prior to the pandemic have grown over the last three years into the worst crisis anyone has seen. The staffing crisis has been compounded by public policy choices that have actively undermined staffing efforts, including wage suppression legislation (Bill 124), privatization of staffing through for-profit staffing agencies, the government's decision to end emergency COVID funding for locums and other funding, and extremely short-term funding arrangements announced after short staffing has become critical.

There has also been an unprecedented failure of leadership. The provincial government has not stepped in and set a standard of expectation that these vital services remain open. In communities with amalgamated hospitals, there are legitimate concerns that hospital leaders centred in the larger sites have always wanted to close down the smaller sites or centralize more services. Historically, in the case of vital services such as emergency departments, the Health Minister has intervened to stop such attempts. However, in response to the permanent closure of the Minden hospital emergency department, in existence since 1956, the Minister said it is a local decision. The failure of the provincial government to take responsibility for planning, recruiting and retaining needed health care staff, dealing with crises and setting standards for access to the most urgent of health care services is at odds with the approach of Ontario's governments dating back at least forty years.

Provincial government decisions to cut or curtail public hospital funding have also contributed to the crisis. Long term policies of underfunding hospitals in order to downsize them meant that Ontario had no surge capacity left by the beginning of the pandemic. Ontario has the fewest hospital beds per person left of any province in Canada and funds hospitals at the lowest rate in the country. Despite promises to end hallway medicine and not to cut public services, when the current government was elected it imposed a new round of austerity and real-dollar cuts to public hospitals.

[5] These closures are listed in the tracking section below, with references.

While the government provided extra funding during the early years of the pandemic, it cancelled COVID funding in the most recent budget, imposing austerity again. This year, hospital funding in Ontario is increasing by only 0.5%[6] while health care inflation increased by 5.65%[7], a real-dollar cut, forcing hospitals to downsize their services and continuing downward pressure on wages for staff that are already in crisis-levels of short supply. At the same time, the provincial government has vastly increased funding for for-profit clinics[8] and hospitals, and for for-profit staffing agencies.

The staffing crisis has become a vicious cycle in which staffing shortages and the reliance on for-profit staffing agencies create a worsening staffing crisis. It is not possible to attract staff to hospitals that are under threat of closure. Impossible workloads contribute to staff leaving, as do requirements to work all the least desirable shifts while agency workers can choose to work only days. Intended to be a temporary stopgap, the reliance on staffing agencies has become long-term as the provincial government continues to cut real-dollar funding to already underfunded local hospitals. There can be no solution to the staffing crisis without retaining and attracting back staff into the regular workforce of our public hospitals. However, the provincial government is instead making public policy choices to impose budget austerity on public hospitals while funding private staffing agencies, not taking leadership, attempting to impose further wage suppression, and providing only short-term and belated emergency funding.

The High Cost of For-Profit Staffing Agencies: Local Examples

In attempts to alleviate the staffing crisis, hospitals have turned to for-profit staffing agencies that drain funding out of the public health care system and into the private sector. For nurses, agencies are costing up to three times more than hiring staff nurses. At the same time, the provincial government continues to try to impose wage caps on nurses and health professionals who are employees of public hospitals by pursuing a court challenge to try to reinstate Bill 124 and funding hospitals at less than the rate of inflation, let alone population growth and utilization.

Some local examples of the costs and consequences of for-profit privatization and casualization of staff:

The Perth and Smiths Falls District Hospital spent $2.8 million on for-profit nursing agencies in 2022, citing the high cost as "the price that we're paying to keep services open". However, relying on agency staff did not allow the hospital to avoid declaring a Code Orange to mitigate staff capacity on September 28 due to high patient volumes, cancelling some elective surgeries.

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[6] Total budgeted funding for hospitals in the 2023/4 Ontario government Estimates (i.e., including all four line-items cited above) was $23,773,093,800, while it was $23,657,635,000 in 2022/23. This is an increase of $115,458,800 or 0.488%. The Estimates can be found here: https://www.ontario.ca/page/expenditure-estimates.

[7] Statistics Canada reports that health care inflation is 5.6 percent (measured as per the most recent figures available covering the time period of September 2022 – September 2023). Source: Statistics Canada. Table 18-10-0004-08 Consumer Price Index, monthly, percentage change, not seasonally adjusted, Canada, provinces, Whitehorse and Yellowknife — Health and personal care

[8] In contrast, so called "Independent Health Facilities" (i.e. private, for-profit surgical and diagnostic facilities) are budgeted to get a 212% increase from last year's Budget Estimates. It is a boom for private profits, even as the government implements austerity for public hospitals. As shown in the 2022/3 and 2023/4 Estimate charts, IHF budgeted funding increased from $38,693,100 to $120,693,100. That is an increase of exactly $82 million – or 211.92%. In dollar terms, they budgeted almost as much of an increase to the tiny IHF sector ($82 M) as they did for the entire hospital sector ($115.5 M).

South Bruce Grey Health Centre's emergency departments in Chesley, Durham, and Walkerton have closed hundreds of times this year. They have also resorted to for-profit nursing agencies to reduce closures. The Chesley emergency department turned to agency nurses to reopen after closing for eight consecutive weeks beginning on October 6, 2022, though the department is still indefinitely closed overnight and on weekends. South Bruce Grey Health Centre stated that the Chesley emergency department would indefinitely implement these closures, "as no significant improvements are anticipated in the provincial health human resources situation in the near future". However, the cost of employing an agency nurse can be three times higher (or more) than that of staff nurses, so the hospital corporation was pushed into deficit. In October, the province funded South Bruce Grey Health Centre to hire nurses from for-profit agencies with the goal of reducing the staff shortage. While the hospital corporation continues to state that this strategy is meant to facilitate short-term improvements, the details of long-term solutions remain vague. Thus, this supposedly temporary fix continues to remove taxpayer dollars from public hospitals and into private, for-profit agencies, increasing the strain on the underfunded public health care system.

Glengarry Memorial Hospital faces a similar challenge and has implemented the same strategy. According to the Toronto Star, the hospital experienced the most emergency department closures in Ontario last year, closing thirty-eight times due to staff shortages. Hiring agency nurses has allowed it to avoid closures since October 2022, but like South Bruce Grey Health Centre, this costly short-term solution pushed the hospital into a projected deficit of $3.5 million.[9]

The province's lack of comprehensive long-term solutions for the staffing crisis is also displayed in its two-time belated, ad hoc extension of funding for physician locums, doctors who are temporarily employed at premiums to fill in staffing gaps. In 2021, locum funding under the COVID-19 Temporary Summer Locum Program Expansion (CTSLPE) was announced to allow hospitals in rural areas to attract locums with competitive wages and relieve the pressure of the physician shortage that was exacerbated by the COVID-19 pandemic. The CTSLPE, which was expanded in the summer of 2022, was then extended to March 31, 2023. However, the provincial government did not initially extend the CTSLPE beyond March 31, 2023, effectively cutting off this source of funding.

On May 24, 2023, the CEOs of Lake of the Woods District Hospital and Geraldton District Hospital in northwestern Ontario voiced their concerns about how the decrease in locum funding worsened the staffing crisis, could force emergency departments to close, and was pushing hospital budgets into deficit. The province subsequently renewed the CTSLPE until September 30. The renewal was announced belatedly, on June 1, after the Thessalon emergency department had already closed three times in May.

As the CTSLPE's expiration date approached, the health care sector in northern Ontario once again warned of the results of cutting locum funding. On August 21, Dr. Anjali Oberai and Dr. Maurianne Reade warned of likely emergency department closures. Tim Vine, the president and CEO of Northshore Health Network, also shared that the Thessalon site at Northshore Health Network was only staffed by locums and did not have any contracted past the end of the CTSLPE. Vine had previously asked the Blind River Town Council for support in addressing the physician shortage in June, and the council had sent a motion to Queen's Park. The provincial government then extended the CTSLPE on September 20. The temporary extension until March 31, 2024 was again announced after those working in health care spoke up publicly of the dangers of locum cuts.

[9] The provincial government increased Glengarry Memorial Hospital's funding by $3.66 million (which covers the extra cost for agency staffing) and gave a one-time allocation of $757,000 in September, but other hospitals remain in a tenuous financial position.

Finally, creating new hospitals and expanding existing ones does not address the limiting factor of chronic staff shortages. For example, the Mindemoya Hospital's emergency department faced numerous closures just three to four months after its expansion was completed in July due to physician shortages that were already warned of when the department opened. Fortunately, the closures were cancelled. However, funding a "'state-of-the-art facility'" clearly does not resolve the lack of physician and locum capacity, the effects of which are more dangerous to those living in rural areas such as Mindemoya where the next closest emergency department is forty kilometres away in Little Current.

Hospital Service Closures Tracking by Region

The following list of hospital closures is up to date as of November 24, 2023.[10]

Northeastern Ontario

Public Health Ontario. Health Services Locator Map. https://www.publichealthontario.ca/data-and-analysis/commonly-used-products/maps/health-services-locator

Hearst

On June 23, the Hôpital Notre-Dame Hospital indefinitely closed its labour and delivery unit because the facility was unable to hire an obstetrician. As of November 24, three thousand, seven hundred and twenty hours of care have been lost this year due to this closure. It is well over an hour in good weather without road construction to Kapuskasing's Sensenbrenner Hospital, the nearest hospital with a labour and delivery unit.

Kirkland Lake

After a shortage of medical laboratory technologists prompted the outpatient laboratory in Kirkland Lake to close for twelve months, [11] Blanche River Health reopened it on June 12 with opening hours of 8:30 AM to 12:00 PM on weekdays. This has resulted in the loss of 388 hours of care in 2023. It is

[10] Note: an overnight closure on Jan 1-2 indicates that an overnight closure occurred on January 1 and another one occurred on January 2. E.g., the emergency department closed from 5 PM on Jan 1 to 7 AM on Jan 2 and then closed from 5 PM on Jan 2 to 7 AM on Jan 3.

[11] This closure of the outpatient laboratory in Kirkland Lake was counted as one closure, as it was continuously closed for twelve months.

more than an hour drive in good weather with no road construction to the next hospital in Matheson and more than 40 minutes to Englehart's hospital.

Mindemoya

There are two emergency departments on Manitoulin Island. In September, severe physician shortages led the hospital to warn that while the Little Current emergency department would remain open, the Mindemoya emergency department would need to close down for several days in October. In June, the Ford government had temporarily extended the COVID-19 Temporary Summer Locum Program Expansion. This locum funding was cancelled in the provincial budget in March and then temporarily extended, but the extension was set to expire at the end of September. It was later temporarily extended again until the end of March 2024, granting at least a short-term reprieve to the hospitals on Manitoulin Island and along the North Channel of Lake Huron that were all facing imminent emergency department closures. Three days before the first planned closure on October 9, the hospital announced that Mindemoya's emergency department would stay open after all.

Thessalon

The emergency department at North Shore Health Network's Thessalon site has closed three times this year so far due to physician shortages. The closures took place from May 24-26 and all day on May 29 and May 31. In good weather with no road construction it is more than 40 minutes to the nearest hospital in Blind River and more than an hour to the hospital in Sault Ste. Marie.

Wawa

On August 31 and September 4, the laboratory at Lady Dunn Health Centre was closed to outpatients. September 4 was Labour Day and the lab is regularly closed for statutory holidays. However, Thursday, August 31 was a closure that was not on the long weekend. There is no other outpatient laboratory service in Wawa and it is more than two hours to Sault Ste. Marie.

Northwestern Ontario

Public Health Ontario. Health Services Locator Map. https://www.publichealthontario.ca/data-and-analysis/commonly-used-products/maps/health-services-locator

Red Lake

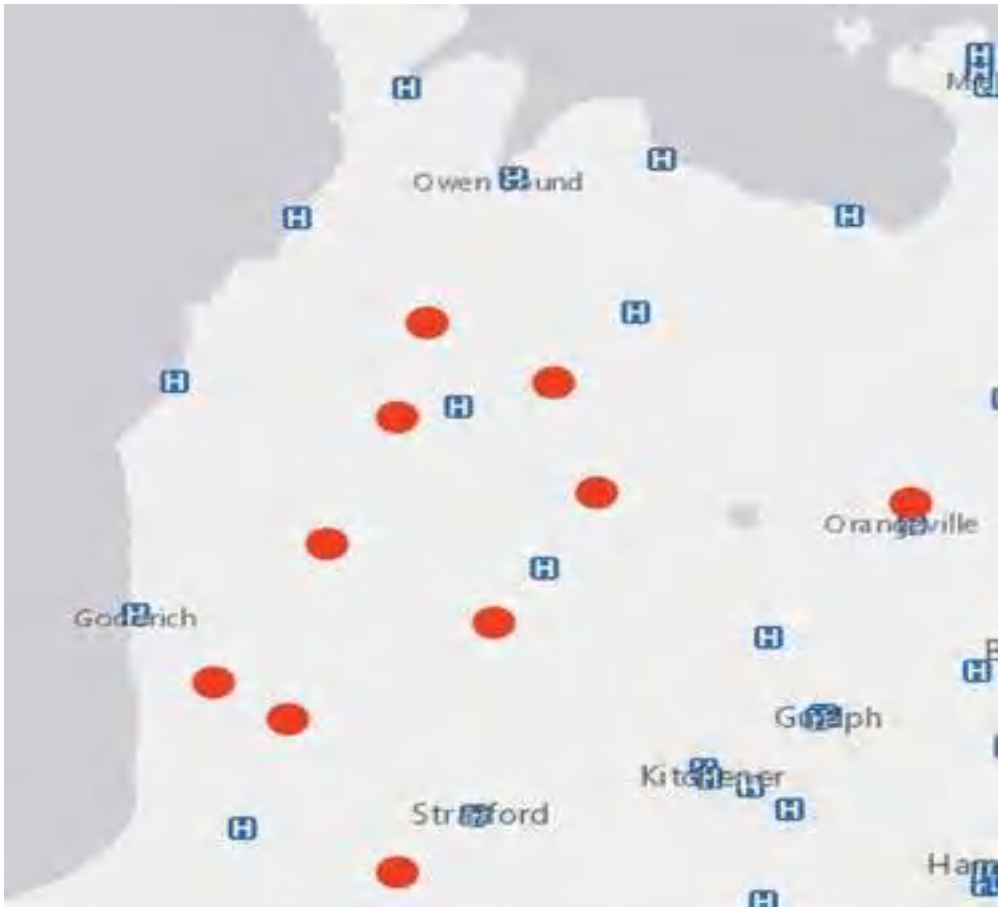
At the beginning of August, the Red Lake Family Health Team announced that its Saturday morning urgent care clinic would close because the number of physicians funded to work in Red Lake was cut from seven to six. There have been sixteen Saturday morning closures as of November 24. The health team also cautioned that the Red Lake Margaret Cochenour Memorial Hospital's emergency department could close again because of the increased pressure caused by the decision to cut staff. It takes at least three-and-a-half hours to drive from Red Lake to Kenora in good weather with no road construction.

Simcoe County, Central Ontario & Near North

Alliston

Stevenson Memorial Hospital closed its obstetrics unit from August 7 to 9 due to a physician shortage. In March, the hospital announced that they would lay off thirteen nurses who were hired to staff eight ICU and surge beds due to funding cuts.

Grey-Bruce, Huron, Dufferin, Perth & Wellington Counties



Public Health Ontario. Health Services Locator Map. https://www.publichealthontario.ca/data-and-analysis/commonly-used-products/maps/health-services-locator

Chesley

Beginning on December 5, 2022, the emergency department at the Chesley hospital has been closed on weekends and overnight from 5 PM to 7 AM. These indefinite changes along with the additional closures below amount to 196 closures from January 1 to November 24. Many of the following

closures coincide with indefinitely implemented overnight and weekend closures, extending the hours that the emergency department is closed.

The Chesley hospital's emergency department closed on the following dates this summer due to staffing shortages: June 20, July 7, July 11-12, July 21, August 9-10, August 14, August 16, August 25, and August 30.

The emergency department closed again at 5 PM on August 31 and was scheduled to resume services at 7 AM on September 6, almost a full week later. However, the reopening date was first pushed back to September 25 and then again to October 2.

The emergency department closed again on October 16, October 17, October 30, November 3, and November 6.

Most recently, the emergency department began its weekend closures early with last-minute notices on the morning of November 17 and November 24.

Clinton

Clinton Public Hospital's emergency department has not operated overnight from 6 PM to 8 AM since December 2, 2019 as a result of staff shortages. Consequently, 324 closures, including the following ones, have occurred from January 1 to November 24.

The emergency department at Clinton Public Hospital closed on June 4, June 18, and July 16 due to staff shortages.

On July 30, three stabbing teenaged victims were driven twenty kilometres to Alexandra Marine and General Hospital after finding upon arrival that their local emergency department at Clinton Public Hospital closed at 6 PM.

Durham

The ongoing staffing crisis prompted the Durham Hospital's emergency department to close fifty-one times in 2023 as of November 24, 2023. The South Bruce Grey Health Centre announced a series of overnight closures this summer. They began on June 24 and proceeded to occur on June 29-July 1, July 2 (the department closed for twenty-four hours on this day), July 3, July 5, July 8, July 9, July 12-16, and July 17.

The emergency department then closed from 5 PM on July 21 to 7 AM on July 24 and from 5 PM on July 28 to 7 AM on July 31. These two multi-day closures were followed by an overnight one on August 1. For over forty-eight hours, emergency department services halted from 5 PM on August 4 to 7 PM on August 6. Then, an all-day closure took place from 5 AM to 7 PM on August 8.

Overnight emergency department closures at Durham Hospital continued on August 11-14, August 19-20, August 23, August 25, August 30, September 1, and September 3. The emergency department closed for twelve hours on September 7 and overnight on September 9-10 and September 12.

For over twenty-four hours, the emergency department shut its doors from 5 PM on September 15 to 7 PM on September 16. More overnight closures persisted on September 17-19, September 22-23, September 28-30, October 7, October 8, October 13, November 2, November 6-8, and November 18.

Listowel
A staff shortage prompted the emergency department at Listowel Memorial Hospital to close from 11 AM to 7 PM on January 8.

Mount Forest
The emergency department at Louise Marshall Hospital has closed six times in 2023 so far, beginning with overnight closures due to staffing shortages on July 6, July 20, and September 9. It then closed for two days in a row from 5 AM on September 16 to 7 AM on September 18. Another overnight closure occurred on September 30 and again, most recently, November 18.

Orangeville
Headwaters Health Care Centre closed its obstetrics unit from 3:30 PM on July 7 to 7:30 AM on July 8 due to a staffing shortage.

Seaforth
The emergency department at Seaforth Community Hospital has faced temporary closures caused by staffing shortages seventeen times in 2023 so far. Overnight closures occurred on January 28, January 29, February 1-5, April 27, May 16, May 23, and May 25. The emergency department closed for over twenty-four hours on June 3. June 9, June 14, June 27, July 27, and August 15.

St. Marys
The St. Marys Memorial Hospital's emergency department closed overnight on May 27, July 15, and August 11 due to staffing shortages. Most recently, more overnight closures took place on November 3 and November 17.

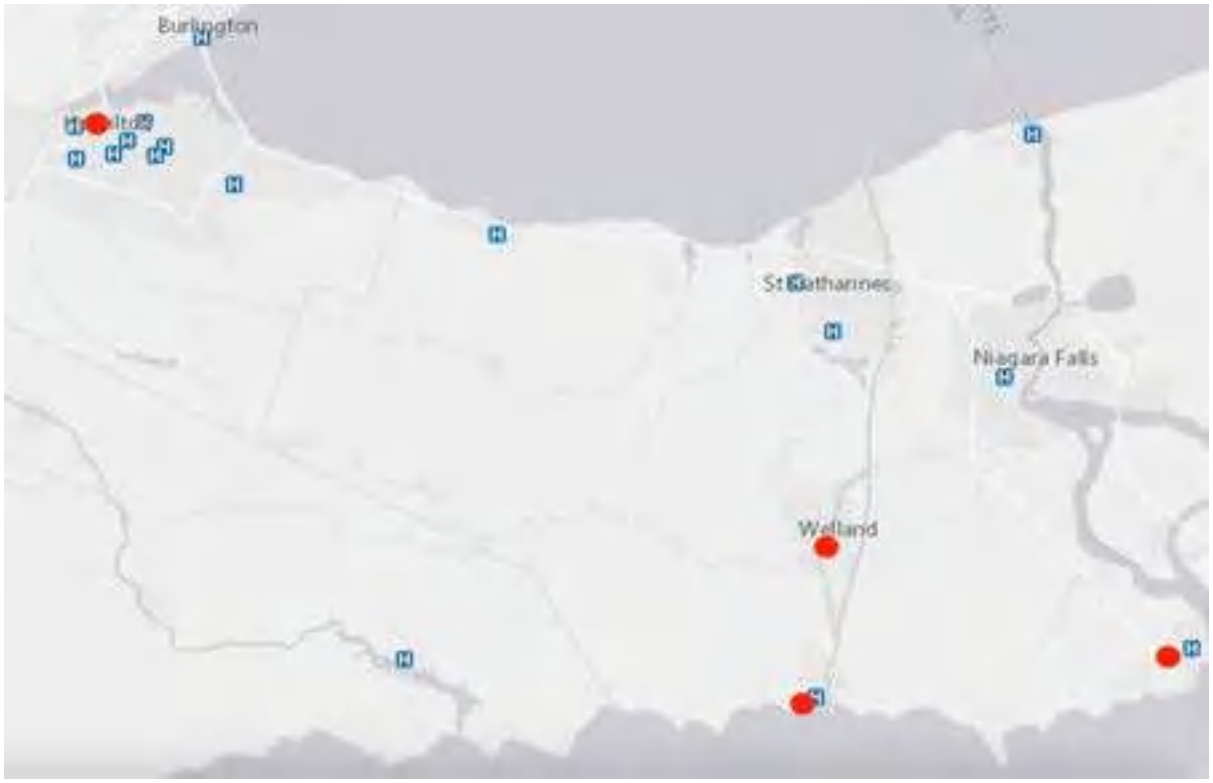
Walkerton
Repeated overnight closures caused by staff shortages have occurred at Walkerton Emergency Department twenty times this year thus far. They took place on July 14, July 22, July 30, August 11, August 18, August 23, August 26-28, August 31, September 5, September 14-17, September 22-25, and October 22.

Wingham
The Wingham and District Hospital emergency department has experienced thirty-one overnight closures due to staffing shortages, with the first one in 2023 occurring on February 18. They continued on March 18 and April 8, and an all-day closure took place from 5 AM to 7 PM on April 15.

Closures prompted by staffing shortages occurred particularly often in the summer months this year, with emergency department services at the Wingham and District Hospital halting overnight on May 5, May 13, May 18, and May 20-22. A twenty-six-hour closure took place from 6 AM on June 2 to 8 AM on June 3, followed by more overnight closures on June 9-11, June 18, June 24-25, July 7, and July 10. The emergency department then closed from 5 AM to 7 PM on July 15 and for another twenty-six hours from 5 AM on July 16 to 7 AM on July 17. Next, two overnight closures on July 23 and July 27 and an all-day pause of emergency department services from 5 AM to 7 PM on July 30 took place. This series of summer closures ended with overnight closures on August 3-6.

About one month later, emergency department closures at Wingham and District Hospital resumed overnight on September 1, from 5 PM on September 2 to 7 AM on September 4, and then overnight again on September 8, September 9, September 10, and September 11.

Hamilton/Niagara



Public Health Ontario. Health Services Locator Map. https://www.publichealthontario.ca/data-and-analysis/commonly-used-products/maps/health-services-locator

Fort Erie

On July 5, the Fort Erie urgent care centre permanently stopped services overnight, with new opening hours from 10 AM to 10 PM daily. The urgent care centre was created in 2009 to replace the Fort Erie emergency department which closed permanently in the same year. However, Niagara Health plans to permanently close this urgent care centre.

Hamilton

Due to staff shortages, the urgent care centre at Hamilton Health Sciences closed temporarily on January 1.

On July 14, Hamilton General Hospital was forced to close one-third of its level-three ICU beds -- those that require the most intense care -- due to a lack of critical care nurses. As a result, the hospital diverted new patients who came from outside of Hamilton and delayed surgeries. The diversion of patients temporarily stopped on July 15 before continuing until July 19. Hamilton Health Sciences reported that other hospitals in Ontario were also diverting patients requiring level-three ICU beds.

Port Colborne

Like the Fort Erie urgent care centre, the Port Colborne urgent care centre permanently stopped services overnight on July 5, with new opening hours from 10 AM to 10 PM daily. It was created in 2009 to replace the Port Colborne emergency department which closed permanently in the same year. However, Niagara Health plans to permanently close this urgent care centre.

Welland
On February 27, citing a shortage of anesthesiologists, Niagara Health's Welland site began closing to emergency cases overnight from 4 PM to 8 AM and on weekends. These closures force patients who enter the emergency department requiring emergency surgeries to be redirected to other hospitals and discourages ambulances from transporting patients to the Welland site. The seemingly permanent nature of these closures appears to align with Niagara Health's plan to close the acute inpatient care services at the Welland site and replace it with an ambulatory facility in 2028 instead. As of November 24, 2023, the Welland operating room has closed to emergency cases 194 times for the overnight and weekend closures, for a total loss of 4,928 hours of care.

East/Southeast, including Haliburton

Public Health Ontario. Health Services Locator Map. https://www.publichealthontario.ca/data-and-analysis/commonly-used-products/maps/health-services-locator

Almonte
The emergency department at Almonte General Hospital has closed four times overnight this year so far due to staffing shortages on March 11, May 18, July 7, and July 15.

Arnprior
Arnprior Regional Health's emergency department closed overnight on May 19 and May 29 because of staff shortages.

Campbellford
The emergency department at Campbellford Memorial Hospital closed overnight on August 25 due to a shortage of nurses.

Carleton Place
The Carleton Place and District Memorial Hospital's emergency department has closed eleven times overnight so far this year due to staffing shortages on January 1, March 17, April 28, June 4, June 10, June 23-24, July 3, July 6, July 14, and July 22.

Hawkesbury
The emergency department at Hawkesbury and District General Hospital experienced a multi-day closure from 6 PM on December 30, 2022 to 8 AM on January 3, 2023 due to a shortage of nurses and high patient volume. This resulted in the loss of fifty-six hours of care in 2023.[12]

Kawartha Lakes
In March, the obstetrics unit at Ross Memorial Hospital redirected patients to other hospitals for nine days in total. The hospital stated that the unit redirects patients "for a variety of reasons including, but not limited to, staffing".

Kingston
On June 1, the Children's Outpatient Urgent Care Clinic at Hotel Dieu Hospital began rationing care. The hospital announced the clinic would be closed to new patients after a total of forty-five patients had been admitted (or another threshold amount depending on staffing) due to a shortage of pediatricians. Within the first week, the clinic had already closed thirty minutes early twice.

Hotel Dieu Hospital, which does not have an emergency department anymore, began closing its urgent care centre early on weekends on August 26 due to physician shortages. The original opening hours, 8 AM to 8 PM, were reduced to 8 AM to 4 PM. As of November 24, 2023, the hours have been reduced for a total of twenty-five days and 100 hours of care have been lost.

Minden
The emergency department at the Minden hospital was permanently shuttered on June 1. This closure has resulted in the loss of 4248 operating hours as of November 24.

To provide care to those who could not receive it due to the permanent closure of the local emergency department, an urgent care clinic was launched in Minden on June 30 and initially operated on weekends. However, it is not meant to treat medical emergencies and is not staffed with physicians. The clinic began opening daily on September 30 and has had to recently refuse patients due to high patient volumes and insufficient staff capacity.

[12] Fifty-six hours of care were lost from 12 AM on January 1, 2023 to 8 AM on January 3, 2023, assuming the emergency department would have operated 24/7 had it not closed.

TAB 22

RESEARCH

Trends in prevalence of chronic disease and multimorbidity in Ontario, Canada

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ABSTRACT

BACKGROUND: New case-mix tools from the Canadian Institute for Health Information offer a novel way of exploring the prevalence of chronic disease and multimorbidity using diagnostic data. We took a comprehensive approach to determine whether the prevalence of chronic disease and multimorbidity has been rising in Ontario, Canada.

METHODS: In this observational study, we applied case-mix methodology to a population-based cohort. We used 10 years of patient-level data (fiscal years 2008/09 to 2017/18) from multiple care settings to compute the rolling 5-year prevalence of 85 chronic diseases and multimorbidity (i.e., the co-occurrence of 2 or more diagnoses). Diseases were further classified based on type and severity. We report both crude and age- and sex-standardized trends.

RESULTS: The number of patients with chronic disease increased by 11.0% over the 10-year study period to 9.8 million in 2017/18, and the number with multimorbidity increased 12.2% to 6.5 million. Overall increases from 2008/09 to 2017/18 in the crude prevalence of chronic conditions and multimorbidity were driven by population aging. After adjustments for age and sex, the prevalence of patients with ≥ 1 chronic conditions decreased from 70.2% to 69.1%, and the prevalence of multimorbidity decreased from 47.1% to 45.6%. This downward trend was concentrated in minor and moderate diseases, whereas the prevalence of many major chronic diseases rose, along with instances of extreme multimorbidity (≥ 8 conditions). Age- and sex-standardized resource intensity weights, which reflect relative expected costs associated with patient diagnostic profiles, increased 4.6%.

INTERPRETATION: Evidence of an upward trend in the prevalence of chronic disease was mixed. However, the change in case mix toward more serious conditions, along with increasing patient resource intensity weights overall, may portend a future need for population health management and increased health system spending above that predicted by population aging.

Multimorbidity exists when a patient is diagnosed with 2 or more chronic diseases. Patients with multimorbidity present challenges for physicians managing their care and, as the proportion of these patients in the population increases, for health care system planning. The prevalence of multimorbidity and chronic disease has been strongly associated with primary care use, specialist consultations, number and intensity of inpatient hospital admissions and other types of care.[1–7] Among beneficiaries of fee-for-service Medicare in the United States, expenditures for those with 4 or more chronic diseases were reported to be 66 times higher than for those with none.[8] One study found that most health spending growth (77.6%) in the US between 1987 and 2011 could be attributed to patients with 4 or more diseases.[9]

Several recent studies have estimated the prevalence of chronic disease and multimorbidity in Canada.[3,10–13] Rates of multimorbidity ranged from 10% to 25%, owing to differences in classification systems used to identify chronic disease, including the choice of conditions, and variations in study population. Lack of standardization in measures of chronic disease prevalence and multimorbidity has hampered the evaluation of trends over time and across settings.

Ontario provides an ideal setting to evaluate trends in the prevalence of chronic disease because patients have access to a comprehensive set of publicly funded services. The Canadian Institute for Health Information (CIHI) has created a system that maps patient diagnosis data from all health care settings to a set of 226 clinically meaningful health conditions, covering the full spectrum of acute and chronic morbidity (Jeffrey Hatcher, Canadian Institute for Health Information, Ottawa: personal communication, 2017). CIHI's system has been independently compared with the Johns Hopkins ACG System; CIHI's system was deemed to be more specific and less sensitive in classifying diagnoses, making it more conservative in identifying health

conditions (S. Cheng, ICES, unpublished data, 2016). The purpose of this study was to evaluate trends in the prevalence of chronic disease and multimorbidity in Ontario using CIHI's comprehensive disease classification system.

Methods

Study design and data sources

We evaluated population trends in the prevalence of chronic disease, multimorbidity and overall patient resource intensity in Ontario, Canada, from fiscal years 2008/09 to 2017/18. We obtained individual-level health care data from the Ontario Ministry of Health and we used CIHI's Population Grouping Methodology (version 1.1) software under a licence agreement.

We used the Registered Persons Database (RPDB) to assess eligibility for inclusion in the study population. We then linked the study population to the following Ontario health care administrative databases at the individual level, using unique encrypted identifiers: CIHI's Discharge Abstract Database (DAD), which contains records from hospital discharges; CIHI's National Ambulatory Care Reporting System (NACRS), which includes data from day surgeries, outpatient and community-based clinics and emergency departments; and the Ontario Health Insurance Plan (OHIP) claims database, which consists of physician billing records. Each data source contains diagnostic information that is used by CIHI's Population Grouping Methodology.

Study population

Beginning with people listed in the RPDB, we limited the study population to those who were eligible for OHIP coverage in 1 or more of the fiscal years (FYs), from 2008/09 (FY 2008) to 2017/18 (FY 2017). We excluded people older than 105 years at the end of a given fiscal year. Individuals were required to have had at least 1 health system contact within the previous 5 fiscal years, except for children younger than 2 years. These provisions limited the likelihood of including patients who had moved out of province or died during the study period without their change in status being recorded in the RPDB. Births, deaths and attritions were permitted across years (Appendix 1, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.201473/tab-related-content). We were unable to link between 0.2% (FY 2008) and 0.3% (FY 2017) of patients with DAD records, and about 0.02% of those with NACRS records, to a valid RPDB record; we linked nearly 100% of patients in the OHIP database.

Because we excluded people with no health care contacts in the previous 5 years from our analysis, the study population did not represent the full population of Ontario, particularly for young adults. At the same time, it is possible that we failed to exclude some unrecorded deaths and other exits, such that some groups may have been overrepresented, particularly older adults. To address these issues, we scaled our analysis to the actual population of Ontario by age group and sex using Census data from Statistics Canada; all prevalence statistics refer to the population of Ontario.[14]

Outcomes

CIHI's case-mix methodology translates diagnostic data into 226 clinically meaningful health condition codes. At the patient level, health condition codes are grouped into 164 health profile group branches, which map onto 16 clinical categories based on condition type and seriousness. We treated individual health conditions as chronic if the corresponding health profile group defined them as falling into 1 of the 7 following CIHI clinical categories: major chronic, moderate chronic, minor chronic, major mental health, other mental health, major cancer and other cancer. For reporting purposes, we combined both cancer categories in a single category: any cancer. Patients could have conditions in multiple categories. Using CIHI's methodology, we applied system overrides to avoid double counting chronic conditions that are part of the same disease pathway. Using this process, we identified a total of 85 unique chronic health conditions (Appendix 2, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.201473/tab-related-content).[15] We applied CIHI's tagging rules, which require a confirmatory diagnosis for conditions reported in physician billing data, to minimize false-positive results.

We tracked the prevalence of chronic diseases and multimorbidity by fiscal year, 2008 through 2017, using diagnoses recorded during a rolling 5-year lookback window. For example, conditions flagged as prevalent in FY 2008 were those identified from Apr. 1, 2004, through Mar. 31, 2009. We reported the 5-year prevalence (v. 1- or 2-year prevalence) to reduce false-negative results (i.e., unobserved chronic diseases) for patients receiving sporadic care. We expected this to increase the sensitivity of the model, consistent with other studies identifying chronic conditions from administrative data in Ontario.[10] We did not look back further as previous research has found decreasing returns with each additional year of lookback.[16,17]

We also used the CIHI methodology to produce resource intensity weights (RIWs), based on each patient's complete health condition code profile. An RIW is an indicator of relative expected resource use, calculated in the concurrent period using a 5-year lookback. A concurrent RIW of 1.5, for example, shows that a patient's expected resource use in that period is 1.5 times greater than for an average patient. The risk model, which is part of the CIHI case-mix methodology (Appendix 3, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.201473/tab-related-content), has been validated for use in Ontario.[15,18]

Statistical analysis

We counted the number of chronic diseases recorded during the 5-year lookback period to determine the percentage of individuals with 1, 2 and 3 or more chronic conditions. Condition severity categories (major, moderate, minor) provide context for the types of diseases driving overall trends. We report time trends both as crude and age- and sex-standardized rates. Crude rates were meant to measure the overall change in observed chronic disease caseload, and standardized rates accounted for aging of the population. We weighted age- and sex-standardized estimates to match the age group and sex characteristics of the 2017 Census population of Ontario. Controlling for the changing population structure allowed for a more meaningful comparison of trends over time.

We tested all trends over the study period for statistical significance by performing Student *t* tests on linear slope coefficients. We conducted sensitivity analysis using different age restrictions, data source restrictions, lookback periods and an alternative chronic disease classification system that included only those conditions that have been commonly studied. All analyses were descriptive and were conducted using SAS software version 9.4 (SAS Institute), STATA 15

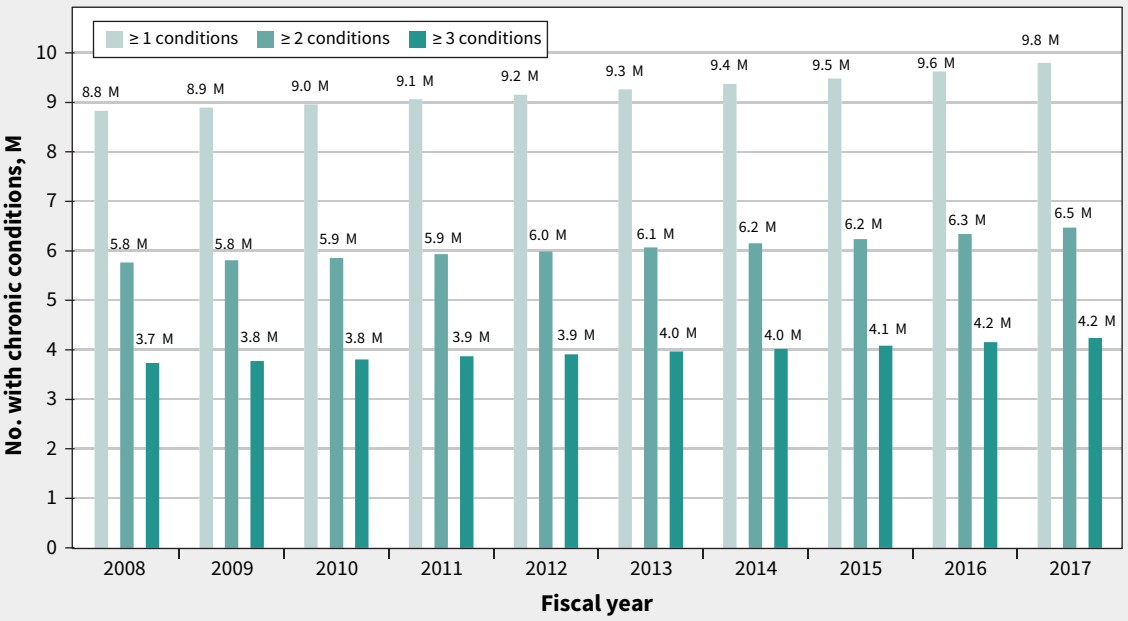

Figure 1: Number of patients with chronic conditions in Ontario from fiscal years 2008 to 2017. Note: M = millions.

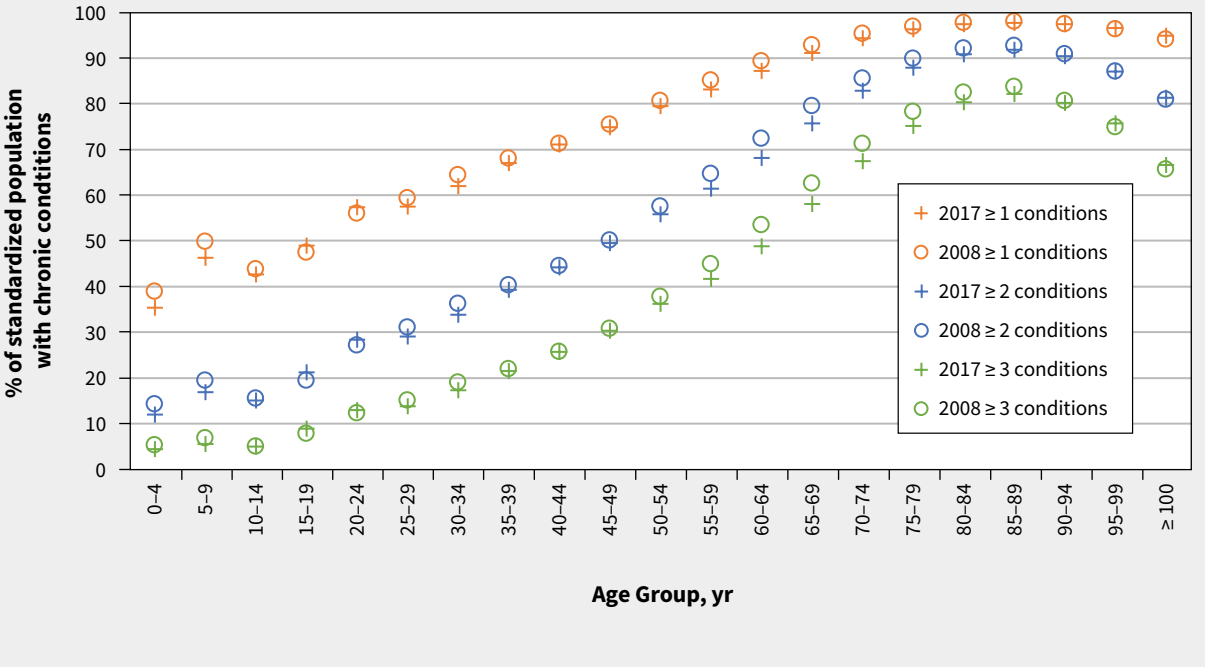

Figure 2: Five-year prevalence of 85 chronic conditions (fiscal year 2008 v. 2017) by age group. Note: Prevalence in both fiscal years was standardized to the 2017 population.

Table 1: Age- and sex-standardized prevalence of number of chronic disease conditions in Ontario, fiscal year 2008 versus 2017

	% prevalence*		
	2008	2017	*p* value†
≥ 1	70.20	69.05	0.002
≥ 2	47.11	45.57	< 0.001
≥ 3	31.33	29.87	< 0.001
≥ 4	20.61	19.50	< 0.001
≥ 5	13.34	12.66	< 0.001
≥ 6	8.48	8.14	< 0.001
≥ 7	5.28	5.16	0.071
≥ 8	3.21	3.23	0.031
≥ 9	1.90	1.98	< 0.001
≥ 10	1.10	1.19	< 0.001
≥ 11	0.62	0.70	< 0.001
≥ 12	0.34	0.40	< 0.001
≥ 13	0.19	0.22	< 0.001
≥ 14	0.10	0.13	< 0.001
≥ 15	0.05	0.07	< 0.001

*Age- and sex-standardized to the population in the 2017 fiscal year.
†The *p* value is reported for Student *t* tests on linear trends in standardized prevalence from fiscal year 2008 to 2017.

(Statacorp LLC) and Tableau Desktop Professional Edition version 10.4.1 (Tableau Software).

Ethics approval

Formal ethics approval was not required because this study used deidentified administrative health care data that were obtained from the Ontario Ministry of Health under an agreement with the Ontario Medical Association.

Results

The study population ranged from 12 770 341 in FY 2008 to 13 821 055 in FY 2017. Patients were excluded on an annual basis; on average, sample restrictions resulted in the removal of about 8.8% of person-observations, with only slight variation by year.

The number of people living with a chronic disease in Ontario exhibited substantial and statistically significant increases ($p < 0.001$) over the study period (Figure 1) (for statistical test results, see Appendix 4, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.201473/tab-related-content). As of FY 2017, the number of patients with at least 1 of the 85 chronic diseases was estimated to be 9.8 million, an increase of 11.0% from FY 2008. Multimorbidity also increased during this period. The number of patients with 2 or more chronic diseases increased by 12.2%, and those with 3 or more increased by 13.5% (Appendix 5, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.201473/tab-related-content).

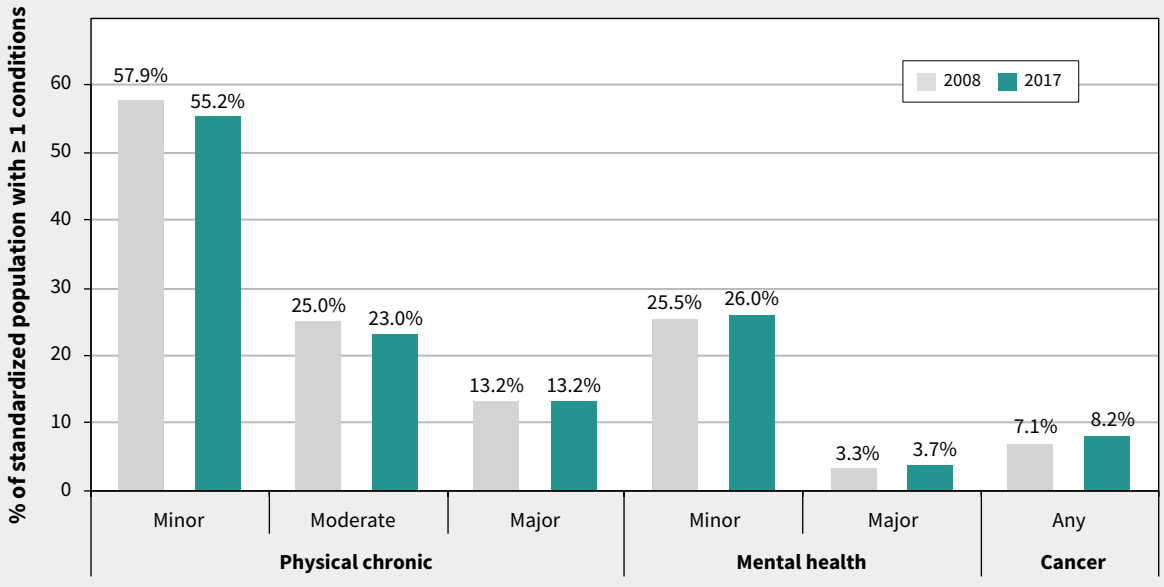

Figure 3: Age- and sex-standardized 5-year prevalence of ≥ 1 chronic conditions by category (fiscal year 2008 v. 2017). Note: Eighty-five conditions were classified based on type and severity into existing Canadian Institute for Health Information clinical categories (Appendix 2, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.201473/tab-related-content). Prevalence in both fiscal years was standardized to the 2017 population.

Age- and sex-standardized prevalence of chronic disease declined slightly over the study period, as 70.2% had 1 or more chronic conditions in FY 2008 compared with 69.1% in FY 2017 ($p < 0.01$). Overall, multimorbidity also declined modestly. The prevalence of 2 or more chronic diseases in the standardized population decreased from 47.1% in FY 2008 to 45.6% in FY 2017; for 3 or more chronic diseases, the prevalence decreased from 31.3% in FY 2008 to 29.9% in FY 2017 ($p < 0.001$). However, the trend varied by age. We noted small standardized increases in single disease prevalence and multimorbidity ($p < 0.05$) in adolescent and young adult populations (i.e., 15–24 yr), and small decreases in both ($p < 0.05$) among the older adult population (i.e., 45–89 yr) (Figure 2). Further, more extreme multimorbidity (≥ 8 to upwards of ≥ 15 co-occurring diseases) increased slightly on an age- and sex-standardized basis during the study period ($p < 0.05$) for the full population (Table 1).

Figure 3 shows statistically significant increases in the age- and sex-standardized prevalence of 1 or more major mental health disorders and cancer (0.5 and 0.9 percentage points, respectively), although the prevalence of minor and moderate physical chronic disease declined (2.7 and 2.0 percentage points, respectively). Changes in the prevalence of patients with ≥ 1 major chronic conditions and ≥ 1 other mental health conditions were not statistically significant.

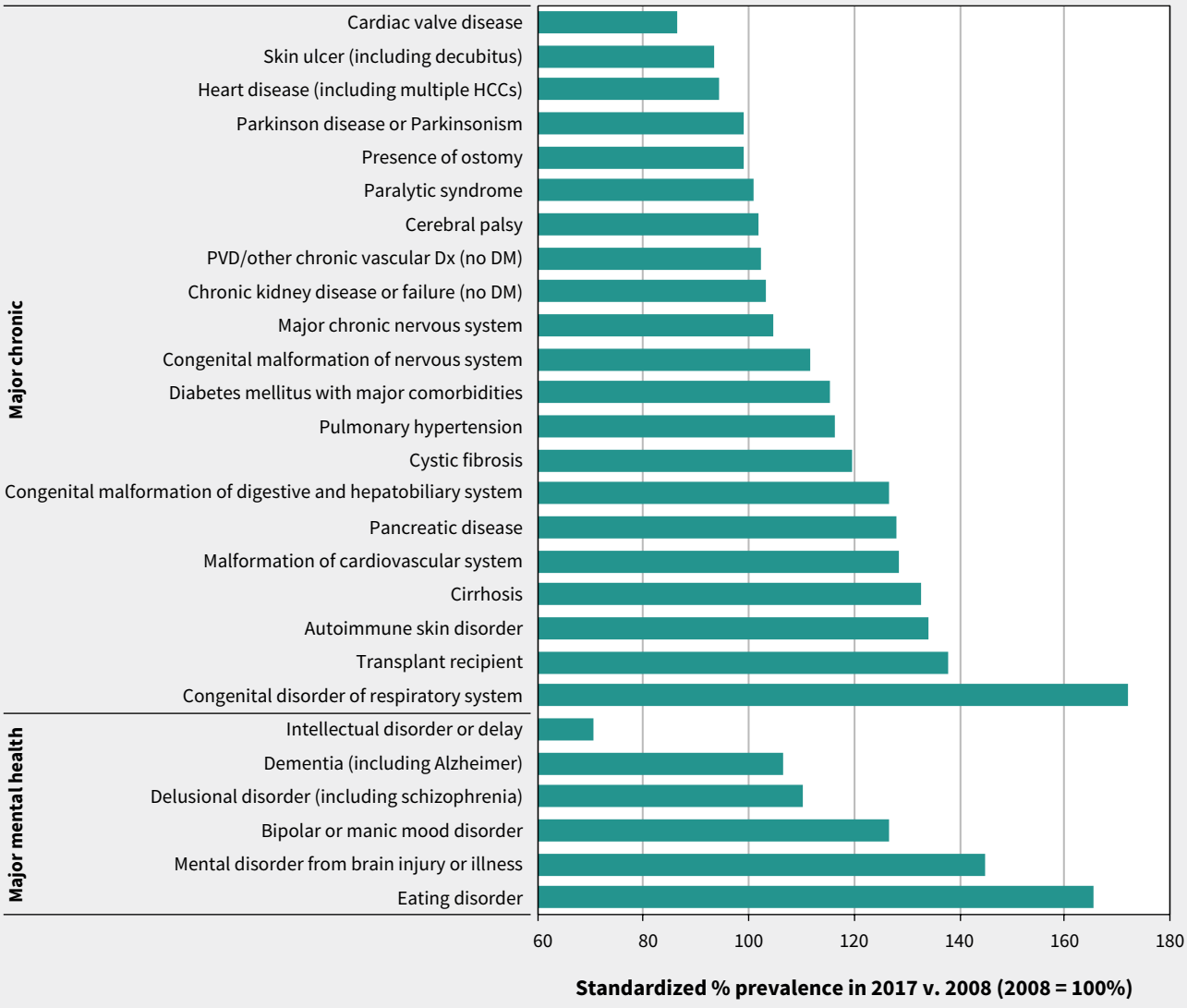

Figure 4: Change in age- and sex-standardized 5-year prevalence of major chronic and major mental health conditions (fiscal year 2008 v. 2017). The change is expressed as the relative prevalence in 2017 compared with 2008, where the prevalence in 2008 is equal to 100%. DM = diabetes mellitus, Dx = diagnosis, HCC = health condition code, PVD = peripheral vascular disease. Note: "No DM" indicates diabetes mellitus and hypoglycemia have not been diagnosed.

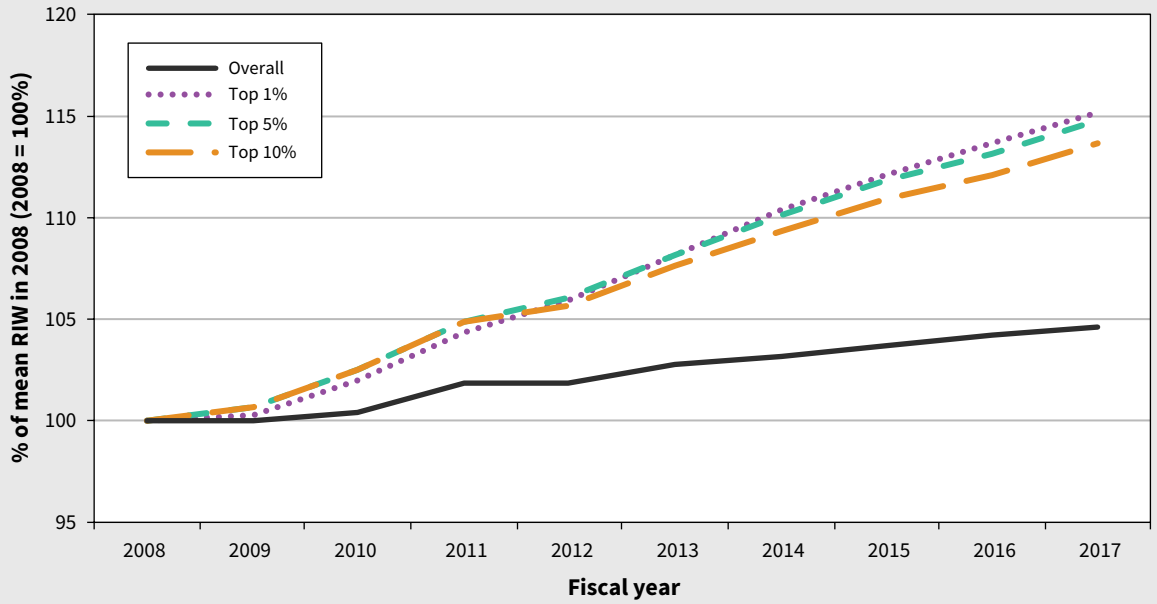

Figure 5: Age- and sex-standardized concurrent resource intensity weights (RIWs) from 2008 to 2017, by risk threshold (i.e., expected resource use percentiles selected to highlight patients in the top 10%, 5% and 1% of RIWs). Note: RIW is a measure of expected relative resource utilization based on a patient's diagnostic history and is an output of the Canadian Institute for Health Information's Population Grouping Methodology (Appendix 3, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.201473/tab-related-content).

Of the 85 chronic conditions, 51 showed a statistically significant increase in standardized prevalence from FY 2008 to 2017, and 23 showed declining prevalence (Appendix 6, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.201473/tab-related-content). The conditions with the largest declines tended to be minor or moderate. Only 3 of 21 major chronic conditions, and 1 of 6 major mental health conditions, showed statistically significant declines in standardized prevalence over the study period. Figure 4 highlights the increase in standardized prevalence of many major chronic and mental health conditions between 2008 and 2017.

The average concurrent RIW for the age- and sex-standardized population increased by 4.6% over the study period. The growth in expected resource use among patients in the top 10%, 5% and 1% of RIWs in each year exceeded that of the overall standard population, and trends were statistically significant. For the top 1% of cases specifically, the average RIW in FY 2017 was 115% of the FY 2008 value (Figure 5).

Sensitivity analysis

Several sample restrictions were imposed to test the robustness of our results. First, our analysis was reproduced using only DAD and NACRS, removing the possibility that physician billing data were driving our results. Overall, we found that the prevalence was lower. Although the slight downward trend in chronic disease prevalence over time remained, multimorbidity exhibited slight increases with this database restriction. Second, conducting the same analysis on separate age groups and removing those aged 85 years and older had little to no impact on our overall findings. Third, restricting the number of included conditions from 85 to 11 conditions that are more commonly studied — considering 5 Canadian studies on chronic disease — resulted in similar trends, albeit with lower levels of estimated comorbidity.[3,10–13] Slight differences in the grouping of *International Classification of Diseases, 10th Revision* codes prevented exact replication. (Appendix 7, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.201473/tab-related-content). Lastly, as with some previous studies,[16,17] we compared the 5-year lookback with a 2-year lookback period. This resulted in lower estimates of chronic disease prevalence (Appendix 8, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.201473/tab-related-content).

Interpretation

The number of patients with chronic diseases increased in Ontario between 2008 and 2017. Although age- and sex-standardized chronic disease prevalence and multimorbidity (≥ 2 and ≥ 3 conditions) fell slightly over this period, the decline was observed predominantly in minor or moderate conditions. Standardized rates of extreme multimorbidity (≥ 8 conditions) rose over this period. We also found that chronic disease prevalence increased for adolescents and young adults, which may portend an even greater future health risk for this cohort as it ages. Rising RIWs in the age- and sex-standardized patient

population show that the mix of health conditions in Ontario requires increasing amounts of health system resources, beyond what would be expected from population aging alone.

Our study showed a much higher prevalence of chronic disease than previous reports.[3,10–13] However, we did not find the same sharp increase in chronic disease in recent years that was noted in previous studies from Ontario. For example, one study found that rates of patients with ≥ 2 conditions increased from 22.2% in 2001 to 27.8% in 2011, adjusted for age and sex.[11] Another found that the prevalence of patients with ≥ 2 conditions rose from 17.4% in 2003 to 24.3% in 2009.[12]

The comparatively high prevalence of chronic disease reported in our study can be attributed to the comprehensiveness of the diagnostic tools used. Although efforts have been made to move toward a more standardized methodology for reporting the prevalence of multimorbidity in Canada,[19] the focus has been on improving tools for patient self-report, which is limited to a small number of common conditions.[20] Studies employing administrative data have relied on subsets of between 10 and 20 chronic conditions, which reduces comparability and greatly underestimates the overall prevalence of chronic disease.[21]

Limitations

The utility of CIHI's Population Grouping methodology depends on the completeness and accuracy of the diagnosis codes included in the model. Although previous studies have validated the use of diagnosis codes to capture disease prevalence in Ontario,[22–24] coding practices may have changed over time. Furthermore, the CIHI model attempts to minimize false-positive results by requiring at least 2 instances of a code to be recorded in physician billing records. Hence, the CIHI model may underestimate the prevalence of some conditions. The exclusion criteria removed patients with unreliable data and those with no health system contacts, which may be related to a patient's chronic disease status. Population characteristics like socioeconomic status, race, ethnicity and geography influence health care resource use, but were not considered. Finally, our inability to access the Ontario Mental Health Reporting System for inpatient mental health data and data from the Ontario Cancer Registry may bias our estimates for these conditions. However, diagnoses recorded in more than 1 setting contribute to establishing a patient's diagnostic record, mitigating the impact of missing data from any 1 source.

Conclusion

This study evaluates the prevalence of chronic disease and multimorbidity by estimating patient complexity using the CIHI Population Grouping Methodology. A strength of this approach is that the CIHI system uses diagnosis codes from all available health care settings to populate a complete set of clinically meaningful conditions at the patient level, which permits a fuller accounting of chronic disease prevalence than many existing approaches and allows for a richer characterization of trends over time. Consequently, we found evidence of much higher rates of chronic disease prevalence and multimorbidity than other studies have reported. A broader notion of patient complexity should be accounted for in health system planning in Canada and beyond; the CIHI Population Grouping Methodology is one tool to support this aim.

The CIHI Population Grouping Methodology has future applications for research in needs-based health resource planning, in chronic disease surveillance and in understanding the relation between patient illness and cost. Future research using this tool may compare the prevalence of chronic conditions between or within Canadian provinces to better understand geographic factors influencing health and health human resource needs.

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Contributors: Mitch Steffler, Sharada Weir and Jasmin Kantarevic conceived the study and developed the analysis plan. Jasmin Kantarevic acquired the data. Mitch Steffler, Sharada Weir, Yin Li and Farshad Murtada analyzed the data. Mitch Steffler drafted the manuscript. All authors contributed to the interpretation of the data, revised the manuscript for important intellectual content, approved the final version to be published and agreed to be accountable for the work

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TAB 23

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Who gets access to an interprofessional team-based primary care programme for patients with complex health and social needs? A cross-sectional analysis

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ABSTRACT

Objectives To determine whether a voluntary referral-based interprofessional team-based primary care programme reached its target population and to assess the representativeness of referring primary care physicians.

Design Cross-sectional analysis of administrative health data.

Setting Ontario, Canada.

Intervention TeamCare provides access to Community Health Centre services for patients of non-team physicians with complex health and social needs.

Participants All adult patients who participated in TeamCare between 1 April 2015 and 31 March 2017 (n=1148), and as comparators, all non-referred adult patients of the primary care providers who shared patients in TeamCare (n=546 989), and a 1% random sample of the adult Ontario population (n=117 753).

Results TeamCare patients were more likely to live in lower income neighbourhoods with a higher degree of marginalisation relative to comparison groups. TeamCare patients had a higher mean number of diagnoses, higher prevalence of all chronic conditions and had more frequent encounters with the healthcare system in the year prior to participation.

Conclusions TeamCare reached a target population and fills an important gap in the Ontario primary care landscape, serving a population of patients with complex needs that did not previously have access to interprofessional team-based care.

Strengths and limitations This study used population-level administrative health data. Data constraints limited the ability to identify patients referred to the programme but did not receive services, and data could not capture all relevant patient characteristics.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ This study accessed administrative health data that captures all patients who participated in TeamCare, and enabled comparison with other patient populations.
⇒ This study compared these populations using nearly complete and validated information on patient diagnostic characteristics and healthcare utilisation.
⇒ It was not possible to identify patients who were referred to TeamCare but did not receive services from the programme.
⇒ Administrative health data do not capture all patient characteristics that may have instigated referral to TeamCare.

INTRODUCTION

With an ageing population, growing prevalence of chronic disease and increasing social disparities, health systems and healthcare professionals are grappling with the challenge of caring for people with complex health and social needs. People with complex needs are a heterogeneous population, defined by the interaction of multiple biological, socioeconomic, cultural, environmental and behavioural challenges; these people can experience co-occurring chronic conditions, psychosocial vulnerabilities and/or behavioural health issues.[1–5] People with complex needs are at risk for poor outcomes and frequent interactions with the healthcare system.[6]

The level of support required by people with complex health and social needs is often beyond the capacity of primary care physicians working alone.[1 7] Data from the Commonwealth Fund suggest that people with high needs often do not have access to the services they need, such as care coordination, emotional counselling and assistance with managing functional limitations; this is despite having a regular doctor or place of care.[8] Patients with unmet needs are likely to report difficulties in accessing care primary care, and are therefore less likely to participate in preventative care and more likely to visit the emergency department (ED).[8]

Interprofessional primary care teams are suited to address the needs of people with medical and social complexity and have been implemented for that purpose. A review by

the Commonwealth Fund identified 28 interventions designed for high needs patients, 25 of which included interprofessional teams.[9] Interprofessional teams are groups of professionals from different disciplines collaborating and working toward a common goal of providing comprehensive care for patients and/or populations in partnership with patients and families.[10–12] By improving access to comprehensive and appropriate primary care, interprofessional team-based care is expected to reduce inequities in access to healthcare and reduce unmet need.[13 14]

Evidence suggests that interprofessional team-based interventions are effective in improving health outcomes and reducing acute care utilisation.[15–26] Team-based care has been shown to improve care quality,[27–29] particularly in the management of chronic illnesses.[28 30–32] However, models that link general or family practice to an interprofessional team targeted for complex patients are less represented in the literature on team-based care. Existing models tend to target people with mental illness[19 33] or specific conditions like diabetes[34] and dementia,[35] rather than people with general complex needs.

In Ontario, Canada, two interprofessional primary care models—the Family Health Team (FHT) and the Community Health Centre (CHC), serve about 30% of the population.[36] FHTs are a physician-led primary care model that include teams of physicians and other health professions working to provide care to a rostered patient population.[37] As of 2019, approximately 3.5 million people were rostered with an FHT.[38] CHCs are a community-governed interprofessional model that are mandated to serve vulnerable, marginalised and complex patients. In their mandate to serve vulnerable and complex populations, CHCs may offer a scope of services (eg, community outreach and social services) not available in other models of care. CHCs provided primary care to approximately 250 000 people in 2017.[39] The remaining population receives primary care from group or solophysician practices.[40 41]

Thus, a large proportion of the population does not receive care from interprofessional practices, and there is a reason to believe that these people are disproportionately those with complex health and social needs.[42] Evidence suggests that FHTs are less likely to serve patients who require complex care, are low income, are newcomers to the province or live in urban centres.[42–44] One study found that 6.1% of the population of Ontario—approximately 725 500 people—had high comorbidity, but that only 15% of these people were rostered to practices offering interprofessional team-based care.[45]

Recognising that people with complex health and social needs were not accessing interprofessional care, a programme called TeamCare was implemented by several CHCs and some FHTs in Ontario. TeamCare allows patients of non-team physicians to access non-physician (interprofessional) services. These services include, but are not limited to, counselling, community health work, health promotion, dietitian services and chiropody. TeamCare is intended to support patients with complex health and social needs and their physicians by improving the connection between non-team physicians and participating TeamCare sites. The programme model is based on voluntary referral; patients are referred by their own primary care physician, who had the discretion to identify patients with complex needs and did not have the means to access teams elsewhere (eg, through private insurance). Patients did not have to meet a specific set of eligibility criteria to be referred. While receiving services through TeamCare, patients maintain their relationship with their existing primary care physician. A key question is whether voluntary physician participation and referral led to improved access for the target population of people with complex health and social needs who do not already have access to team-based primary care.

The purpose of this study is to address two specific aims: (1) to characterise the patients and physicians participating in TeamCare, and (2) to determine whether TeamCare reached individuals with more conditions and higher complexity health and social needs than the general adult population. The results of this study have implications for the implementation and expansion of TeamCare, and more generally for programmes that rely on voluntary participation and referral.

METHODS

Study setting and design

At the time of this study (2015–2017), three distinct programmes existed in Ontario under the umbrella of TeamCare: Primary Care Outreach (PCO), Solo Practitioners in Need (SPiN) and TeamCare (previously People in Need of Teams (PINOT)). PCO operated in Ottawa delivering team-based care services to frail seniors. During the study period, SPiN operated through a network of CHCs in Toronto delivering care to medically complex and socially vulnerable patients. Both PCO and SPiN are referral-based programmes. TeamCare (PINOT) is the most recent iteration of the programme and aimed to move beyond the referral model by emphasising ongoing communication between the referring primary care physician and the interprofessional team. TeamCare (PINOT) has been implemented in several CHCs and a few FHTs in various regions of the province. However, no FHTs were participating in TeamCare during the period of this study; thus, our analysis is limited to CHC participants. In this cross-sectional study, the patients who participated in TeamCare between 1 April 2015 and 31 March 2017, and their primary care physicians were identified and described. The TeamCare exposure group was compared on characteristics related to medical and social complexity, including emergency, primary and specialist care in the year prior to the exposure date. Characteristics of the most responsible physicians of TeamCare participants were compared with those of all other practising primary care physicians in Ontario.

Data

We used administrative health data accessed at ICES (formally known as the Institute for Clinical Evaluative Sciences), a research institute in Toronto, Ontario. All databases used in this study are listed in online supplemental table S1. A database of electronic health record data collected by CHCs was also available as an ICES data holding linked to the administrative databases. The CHC data included a special programme variable that flagged participation in TeamCare, allowing for the identification of TeamCare patients, as well as data on patient encounters, including the date of each contact with the TeamCare programme. Additional administrative data sources provided information on inpatient admissions and ED use, patient and physician sociodemographic, geographic, and socioeconomic characteristics, clinical conditions, and prescription drug use for people 65 years and older or on social assistance. These datasets were linked using unique encoded identifiers and analysed at ICES. Missing data are reported where >1% of patients had missing data for any variable.

Study population

Patients

All patients who participated in TeamCare between 1 April 2015 and 31 March 2017 were included. Each patient was assigned an index date based on their date of first encounter at a CHC.

Two comparison groups were created to determine whether patients who received TeamCare services reflect the target population of people with complex health and social needs. The first comparison group included non-TeamCare patients who had the same responsible primary care physician as those who accessed TeamCare. To track comparator patients from a comparable point in time, index dates were set for the comparators following the temporal distribution among TeamCare participants. Subjects were assigned a most responsible physician based on the plurality of contacts in the previous 12 months and were excluded if they visited a CHC physician between 1 April 2015 and 31 March 2017. The second comparison group included a 1% random sample of the Ontario population. An index date of 31 March 2017 was assigned to all subjects in the comparison groups.

Baseline characteristics were measured at the index date. Subjects were excluded if they were less than 18 years of age or greater than 105 years of age, were not an Ontario resident, were not eligible for provincial health insurance or were missing data on key variables (age and sex). Subjects recruited for this study were not directly involved in this research.

Physicians

We also compared the most responsible physicians of TeamCare participants to all other practising primary care physicians in Ontario.

Patient and public involvement

No patient involved.

Variable definitions

Patient-level demographic variables included age, sex and rurality. Rurality was defined using the Rurality Index of Ontario (RIO) score. The RIO score is 0-to-100-point index of census subdivision population density and distance to nearest referral centres, where higher scores indicate higher rurality. Patients were grouped into major urban (RIO=0–9), non-major urban (RIO=10–39) and rural (RIO=40+).[46]

Patient social complexity was measured with an indicator for whether a patient was a recent migrant to Ontario (ie, within the last 10 years), neighbourhood income quintile and marginalisation. Marginalisation was measured using the Ontario Marginalisation Index—an area-based index of measures of dependency, material deprivation, ethic concentration and residential instability.[47] Patient medical complexity was measured using the ACG® System Aggregated Diagnosis Groups (ADGs) and Resource Utilisation Bands (RUBs). ADGs are based on International Classiciation of Diseases (ICD)-10 codes and group diagnoses based on severity and likelihood of persistence.[48] There are 32 ADGs, which can be further condensed into 12 Collapsed ADGs based on likelihood of persistence, severity and types of healthcare services required.[48] RUBs further group the ADGs into six categories based on expected resource use: 0—no use or invalid diagnosis; 1—healthy use; 2- low; 3—moderate; 4—high and 5—very high use.[48] ICES-derived disease cohorts were also used for specific chronic conditions. These cohorts are derived using validated algorithms for asthma,[49] Congestive Heart Failure (CHF),[50] Chronic Obstructive Pulmonary Disease (COPD),[51] hypertension[52] and diabetes.[53] Cohorts were also generated for dementia and chronic psychotic illness using validated algorithms.[54 55]

To measure healthcare utilisation, patients' mean non-urgent ED visits (Canadian Emergency Department Triage and Acuity Scale score=4 or 5), all-cause ED visits, primary care physician visits and specialist physician visits in the 12 months prior to index date were assessed.[56]

Physician characteristics included age, sex, rurality of practice based on RIO score, Canadian medical graduate (yes/no), number of years since graduation, participation in a Family Heath Team, the number patient visits in the previous 12 months and patient roster size.

Statistical analyses

First, crude frequencies of TeamCare patient characteristics were measured. Second, to determine if TeamCare reached a target population of individuals with complex health and social needs, we compared TeamCare participants with the two comparison groups on crude baseline characteristics and healthcare utilisation in the year prior to the date of exposure. The following comparisons were made: (1) TeamCare exposure group versus non-TeamCare patients of the most responsible

physicians and (2) TeamCare exposure group versus non-TeamCare 1% random sample of the general population. For comparison across categorical variables, χ^2 tests and Cramer's V were used to assess statistical significance and effect size, respectively.[57 58] For continuous variables, t-tests and Hedge's g[59] statistics were used. A p<0.05 was used as a threshold to determine statistical significance. See online supplemental table S2 for the interpretation of Cramer's V and Hedge's g effect sizes, noting that while these measures are most suitable for our research questions, the thresholds are context-dependent and should be used cautiously for interpretation. All analyses were conducted using Stata V.13.1.

RESULTS

Characterising TeamCare patients

One thousand one hundred and forty-eight patients flagged as TeamCare patients had a date of first encounter at a CHC between 1 April 2015 and 31 March 2017 and were included in the TeamCare group (see table 1). Across all variables, less than 1% of patients had missing data, and the missing values were evenly distributed across patient groups. Most patients in the TeamCare exposure group were female (63.7%), above the age of 60 (79.6%) and lived in major urban centres (55.4%). Only a small proportion of the group (5.7%) were migrants to Ontario within the last 10 years, based on the first year of OHIP eligibility.

The TeamCare group was heavily skewed to the lower income quintiles, with over half (56.3%) of TeamCare patients in the first and second quintiles. On the Ontario Marginalisation Index, the distribution of scores in the TeamCare group were skewed to higher (ie, worse) scores on three of the four factors: dependency, material deprivation and residential instability. Only 11.6% of TeamCare patients lived in areas with high ethnic concentration (score=5), while 38.4% lived in areas with the lowest ethnic concentration (score=1).

TeamCare patients tended to have high expected resource use in the 12 months prior to participation in the programme based on the Johns Hopkins RUBs: 52.9% of patients had high or very high expected resource use (RUB=4–5) and 39.7% had moderate expected resource use (RUB=3). The mean number of ADGs in the sample was 8 (SD=4). In terms of chronic conditions, 17.2% of TeamCare patients had hypertension, 16.1% had dementia, 12.6% had diabetes, 12.4% had CHF, 9.9% had COPD, 5.0% had chronic psychotic illness and 4.0% had asthma.

Comparison of TeamCare patients to comparison groups

On 31 March 2017, a 1% random draw of the Ontario population generated a sample of 117 753 subjects, and 546 989 subjects were identified as other patients of most responsible primary care physicians of TeamCare patients. Descriptive characteristics of the TeamCare patient group and the two comparison groups are presented in table 1, with effect sizes and p values provided for each comparison group in reference to the TeamCare group.

The TeamCare exposure group had a higher proportion of rural patients compared with the non-TeamCare patient group (30.2% TeamCare vs 15.4% non-TeamCare; p<0.001). TeamCare Patients also had a higher mean number of ADGs and higher prevalence of each of the chronic conditions examined; all differences were statistically significant except for asthma. The prevalence of CHF (12.4% vs 2.8%), COPD (9.9% vs 2.5%), diabetes mellitus (12.6% vs 8.5%), chronic psychotic illness (5% vs 1.3%) and dementia (16.1% vs 2.6%) was much higher in the TeamCare exposure group. Patients in the exposure group also had two more (8 vs 6) ADGs on average (p<0.001). Though the difference in overall distribution of patients across RUBs between the two groups was statistically significant, the difference between the proportion of individuals in the two lowest RUBs—representing no or low expected use—was not (2.9% TeamCare vs 2.8% Other Primary Care patients; p=0.862). TeamCare patients had higher mean utilisation across all four utilisation measures in the year prior to their date of first encounter when compared with the patient populations of their most responsible physicians.

Compared with the general population, TeamCare patients were more likely to be female (63.7% vs 51.1%; Cramer's V=0.0257; p<0.001). The age distributions of the two groups also differed significantly, with TeamCare patients heavily skewed to the older age groups (60 and above). The TeamCare exposure group had a higher proportion of patients living in rural areas (30.2% vs 7.1%; p<0.001) and a lower proportion of recent migrants to the province (5.7% vs 11.3%; Cramer's V=0.0171; p<0.001).

Overall, the distributions of TeamCare patients and the random sample of the general population across income quintiles differed significantly (Cramer's V=0.0398; p<0.001). The random sample of the general population was relatively evenly distributed across the five income quintiles, while over half (56.3%) of TeamCare patients lived in areas in the lowest two income quintiles (vs 37.8% of the general population sample). Distributions across each of the Ontario Marginalisation Index dimensions differed significantly between the two groups, with TeamCare patients tending to score higher on dependency (Cramer's V=0.0663; p<0.001), material deprivation (Cramer's V=0.0351; p<0.001), and residential instability (Cramer's V=0.0529; p<0.001), and lower on ethnic concentration (Cramer's V=0.0657; p<0.001).

The mean of 8 ADGs (SD=4) in the exposure group was double that of the general population (mean=4, SD=3; p<0.001). The TeamCare group also had a significantly higher prevalence of each of the chronic conditions measured. For instance, the prevalence of CHF and Dementia were over 7 and 10 times higher in the exposure group, respectively. The distribution of patients across RUBs differed significantly between the two groups, with TeamCare patients tending to have higher expected

Table 1 Patient characteristics of the TeamCare exposure group versus comparison groups

	TeamCare patients (reference) N=**1148**	Non-TeamCare patients of most responsible physicians N=**546 989**			Non-TeamCare Ontario Population 1% random sample N=**117 753**		
Characteristic	n (%)	n (%)	Effect size*	P value	n (%)	Effect size†	P value
Female	737 (63.7)	307 315 (56.2)	0.007	<0.001	60 143 (51.1)	0.026	<0.001
Age			0.043	<0.001		0.124	<0.001
<30	72 (6.2)	79 570 (14.5)			22 808 (19.4)		
30–39	74 (6.4)	71 651 (13.1)			19 576 (16.6)		
40–49	82 (7.1)	79 767 (14.6)			20 266 (17.2)		
50–59	103 (8.9)	106 053 (19.4)			21 913 (18.6)		
60–69	206 (17.8)	97 939 (17.9)			16 675 (14.2)		
70–79	259 (22.4)	67 646 (12.4)			10 132 (8.6)		
80–89	278 (24.0)	35 413 (6.5)			5030 (4.3)		
≥90	74 (6.4)	8950 (1.6)			1353 (1.1)		
Rurality			0.019	<0.001		0.0868	<0.001
Major urban	636 (55.4)	359 226 (65.7)			86 241 (73.2)		
Non-major urban	165 (14.4)	102 139 (18.7)			22 241 (18.9)		
Rural	347 (30.2)	84 221 (15.4)			8343 (7.1)		
Migrant to Ontario within last 10 years	66 (5.7)	48 618 (8.9)	0.005	<0.001	13 251 (11.3)	0.0171	<0.001
Neighbourhood income quintile			0.022	<0.001		0.040	<0.001
Quintile 1 (lowest)	305 (26.6)	88 662 (16.2)			21 830 (18.5)		
Quintile 2	341 (29.7)	102 674 (18.8)			22 755 (19.3)		
Quintile 3	222 (19.3)	108 594 (19.9)			23 289 (19.8)		
Quintile 4	147 (12.8)	120 362 (22.0)			25 301 (21.5)		
Quintile 5 (highest)	131 (11.4)	124 956 (22.8)			24 043 (20.4)		
Dependency			0.0218	<0.001		0.066	<0.001
1 (lowest)	128 (11.1)	134 081 (24.5)			32 249 (27.4)		
2	162 (14.1)	92 793 (17.0)			22 672 (19.3)		
3	132 (11.5)	90 364 (16.5)			20 949 (17.8)		
4	236 (20.6)	91 924 (16.8)			19 627 (16.7)		
5 (highest)	489 (42.6)	135 995 (24.9)			21 585 (18.3)		
Material deprivation			0.024	<0.001		0.035	<0.001
1 (lowest)	95 (8.3)	122 951 (22.5)			20 468 (17.4)		
2	159 (13.9)	123 569 (22.6)			22 932 (19.5)		
3	287 (25.0)	113 453 (20.7)			23 194 (19.7)		
4	231 (20.1)	88 978 (16.3)			24 436 (20.8)		
5 (highest)	375 (32.7)	96 206 (17.6)			26 052 (22.1)		
Ethnic concentration			0.018	<0.001		0.066	<0.001
1 (lowest)	441 (38.4)	126 784 (23.2)			18 482 (15.7)		
2	132 (11.5)	107 252 (19.6)			18 982 (16.1)		
3	233 (20.3)	109 498 (20.0)			21 050 (17.9)		
4	208 (18.1)	119 426 (21.8)			24 218 (20.6)		
5 (highest)	133 (11.6)	82 197 (15.0)			34 350 (29.2)		
Residential instability			0.019	<0.001		0.053	<0.001
1 (lowest)	69 (6.0)	80 187 (14.7)			25 089 (21.3)		
2	141 (12.3)	97 070 (17.7)			22 114 (18.8)		
3	219 (19.1)	114 367 (20.9)			21 383 (18.2)		

Continued

Table 1 Continued

	TeamCare patients (reference) N=**1148**	Non-TeamCare patients of most responsible physicians N=**546 989**			Non-TeamCare Ontario Population 1% random sample N=**117 753**		
4	238 (20.7)	111 087 (20.3)			21 570 (18.3)		
5 (highest)	480 (41.8)	142 446 (26.0)			26 926 (22.9)		
No of ADGs, mean±SD	8±4	6±3	0.55	<0.001	4±3	−0.99	<0.001
Prevalence of chronic conditions							
Asthma	46 (4.0)	19 078 (3.5)	0.0013	0.338	3020 (2.6)	0.009	0.002
CHF	142 (12.4)	15 444 (2.8)	0.0263	<0.001	2055 (1.7)	0.077	<0.001
COPD	114 (9.9)	13 440 (2.5)	0.0220	<0.001	1761 (1.5)	0.066	<0.001
Hypertension	197 (17.2)	73 253 (13.4)	0.0051	<0.001	12 389 (10.5)	0.021	<0.001
Diabetes mellitus†	145 (12.6)	46 234 (8.5)	0.0069	<0.001	7984 (6.8)	0.023	<0.001
Chronic psychotic illness‡	57 (5.0)	7218 (1.3)	0.0146	<0.001	1258 (1.1)	0.036	<0.001
Dementia	185 (16.1)	14 432 (2.6)	0.0382	<0.001	1761 (1.5)	0.113	<0.001
Resource Utilisation Bands			0.0307	<0.001		0.109	<0.001
0–1 (no—lowest expected use)	33 (2.9)	15 261 (2.8)			22 278 (18.9)		
2	52 (4.5)	64 172 (11.7)			18 486 (15.7)		
3	456 (39.7)	306 470 (56.0)			54 471 (46.3)		
4	282 (24.6)	107 345 (19.6)			16 184 (13.7)		
5 (highest expected use)	325 (28.3)	53 741 (9.8)			6334 (5.4)		

*Effect size measure is Cramer's V for binary/categorical variables and Hedge's g for continuous variables.
†
‡
ADGs, Johns Hopkins Aggregated Diagnosis Groups; CHF, congestive heart failure; COPD, chronic obstructive pulmonary disease.

resource use than the general population (Cramer's V=0.1093; p<0.001).

TeamCare patients had higher mean utilisation across all four utilisation measures in the year prior to their date of first encounter when compared with the general population (table 2).

Characterising physicians of TeamCare patients

Three hundred and fifty-seven physicians were identified as the most responsible primary care providers of TeamCare patients and included in the physician group. The Non-TeamCare primary care physicians group comprised 11 103 general practitioners or family physicians who did not have rostered patients in the TeamCare patient group. See online supplemental file 1 for more details on physician characteristics.

TeamCare physicians were not significantly different from non-TeamCare physicians except on a few characteristics. TeamCare physicians were more likely than non-TeamCare physicians to practice in rural areas (11.5% TeamCare vs 7.2% Other Physicians; p=0.002) and varied

Table 2 Healthcare utilisation in the year prior to index date

	TeamCare N=**1148**	Non-TeamCare patients of most responsible physicians N=**546 989**			Non-TeamCare Ontario population 1% random sample N=**117 753**		
Characteristics	Mean±SD	Mean±SD	Effect size (Hedge's g)	P value	Mean±SD	Effect size (Hedge's g)	P value
Non-urgent ED visits	0.50±1.44	0.23±0.81	0.342	<0.001	0.13±0.57	0.640	<0.001
All-cause ED visits	2.01±3.75	0.70±1.72	0.580	<0.001	0.40±1.16	0.956	<0.001
Primary care physician visits	7.77±8.77	5.55±6.68	0.333	<0.001	3.85±5.95	0.655	<0.001
Specialist visits	5.45±6.82	3.15±5.19	0.443	<0.001	2.01±4.27	0.801	<0.001

Effect sizes and p values are reported for each comparison group in reference to the TeamCare exposure group.

in terms of roster size: TeamCare physicians had a median roster size of 1180 (IQR 852–1601), while other physicians had a median roster size of 818 (IQR 0–1417); p<0.001. Surprisingly, the difference in physicians practising in an FHT model was not significant between the two groups: 14.3% TeamCare vs 13.6% other Physicians; Cramer's V=0.0047; p=0.882).

Interpretation

The comparison of TeamCare patients to non-TeamCare patients of their most responsible primary care physicians suggests that TeamCare patients had greater clinical complexity and were more likely to live in neighbourhoods with lower income and a higher degree of marginalisation than non-TeamCare patients. TeamCare patients had a higher mean number of ADGs, higher expected utilisation (RUB scores) and a higher prevalence of all chronic conditions measured except asthma, including nearly five times the rate of chronic psychotic illness.

Similarly, compared with the general population, TeamCare patients were more likely to live in low-income areas and tended to score higher on most dimensions of the Ontario Marginalisation Index, indicating that TeamCare patients experienced a higher degree of marginalisation than the population on average.

TeamCare patients had more frequent encounters with the healthcare system in the year prior to the intervention relative to both comparison groups. TeamCare patients had a significantly higher mean number of non-urgent ED visits, all-cause ED visits, physician visits and specialist visits.

Patient populations facing complex medical and socioeconomic challenges with high unmet needs are known to experience poor health outcomes and interact frequently with the health system, particularly with the ED.[5 8] The findings of this study align with the literature on patients with complex needs; TeamCare patients had significantly higher utilisation of the ED for non-urgent issues as well as for any reason, primary care physician visits and specialist visits in the 12 months prior to entering the programme.

The results of this study suggest that there were few significant differences between the most responsible primary care physicians of TeamCare patients and other physicians in the province who did not participate in TeamCare, except that TeamCare physicians were more likely than non-TeamCare physicians to practice in rural areas and had larger roster sizes and number of visits over the past year. Rurality and physician roster size are dimensions known to be related to access to healthcare,[60] and a larger roster has been shown to be associated with lower access to primary care for individuals and gaps in the delivery of prevention, health promotion and chronic disease management.[61] In this regard, TeamCare appears to be more common in areas of greater perceived need.

A surprising finding was that the proportion of physicians that used TeamCare practising in an FHT was not significantly lower than that in the general population. Given that TeamCare is targeted to patients who do not have access to an interprofessional primary care team, it is surprising that just under 15% of most responsible physicians of TeamCare patients were practising in an existing interprofessional FHT model. One possible explanation for this finding is that the CHCs participating in TeamCare offered more extensive services (social services in particular) than some FHTs, and physicians felt it appropriate to refer patients to these services.

Overall, the results of this study suggest that the TeamCare initiative reached a target population of patients with complex health and social needs. TeamCare patients were more complex (on average) than the non-TeamCare patient population of their most responsible physicians, suggesting that physicians generally referred patients with higher needs than those not referred TeamCare patients also had more social and medical complexity than the general adult population. The most responsible primary care physicians of TeamCare patients did not differ significantly from other physicians in the province except on geography and roster size, which may have contributed to poorer access for their patients.

An important limitation of this work is that data constraints limited the ability to identify patients who were referred to the programme but did not receive services. As a result, it was not possible to determine whether there were any systematic differences between patients who participated in the programme and those who were referred but did not participate. It is also important to note that the data used in this study were assembled for administrative reporting and payment purposes and do not capture all characteristics that would make a physician likely to refer patients to TeamCare. However, the characteristics described demonstrate that a voluntary referral programme can target patients perceived to be at highest risk for adverse outcomes. There were also limitations in the data that may influence interpretation of the results. One of the programmes, SPiN, contributed very few patients to the overall TeamCare patient sample, while PCO contributed just over 50%. Results were generated by the TeamCare programme, but small sample sizes limited reporting on this level.

The use of administrative health data was a strength of this research; it captured all patients who participated in TeamCare and enabled comparison to other patients cared for by referring physicians and to the general population. In particular, the comparison to a random sample of the general population increased the generalisability of the main findings. The use of administrative data also allowed for the comparison of nearly complete and validated information on patient diagnostic characteristics and healthcare utilisation between participants and representative comparators.

CONCLUSION

TeamCare fills an important gap in the Ontario primary care landscape, serving a population of patients with complex needs that did not previously have access to

interprofessional team-based care. The initiative has grown considerably since it was first implemented and continues to expand to other regions and evolve its programme model to include additional primary care organisations and model types and to serve more patients. The results from this study have the potential to inform further efforts to expand the TeamCare programme model across the province of Ontario, as well as the implementation of other voluntary referral-based interprofessional primary care programmes in other jurisdictions. Future work must further evaluate TeamCare and analyse TeamCare's impact on the health and healthcare utilisation of its patients.

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Contributors SJ, WPW, JR and DR authors made substantial contributions to the conception, design, and interpretation of data. WPW and JR supported the acquisition of the administrative health data. SJ led the statistical analysis. SJ and DR drafted the final manuscript and WPW and JR revised it critically for important intellectual content. SJ, WPW, JR and DR agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. DR is the guarantor for this study.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

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Ethics approval The use of data in this project was authorised under section 45 of Ontario's Personal Health Information Protection Act. The study also received ethics approval from the University of Toronto Research Ethics Board (Protocol #36927).

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement The data that support the findings of this study are approved for use by data stewards and accessed through a process managed by ICES (www.ices.on.ca/DAS (email: das@ices.on.ca). We are not permitted to share the data used in this analysis with other researchers. The full dataset creation plan and underlying analytic code are available from the authors on request, understanding that the computer programs may rely on coding templates or macros that are unique to this project and to individual data centres and are therefore either inaccessible or may require modification.

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TAB 24

ISSUE BRIEF
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The COMMONWEALTH FUND

How High-Need Patients Experience Health Care in the United States

Findings from the 2016 Commonwealth Fund Survey of High-Need Patients

Jamie Ryan, Melinda K. Abrams, Michelle M. Doty, Tanya Shah, and Eric C. Schneider

ABSTRACT

Issue: Health care costs are highly concentrated among people with multiple chronic conditions, behavioral health problems, and those with physical limitations or disabilities. With a better understanding of these patients' challenges, health care systems and providers can address patients' complex social, behavioral, and medical needs more effectively and efficiently. **Goal:** To investigate how the challenges faced by this population affect their experiences with the health care system and examine potential opportunities for improvement. **Methods:** Analysis of the 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016. **Key findings and conclusions:** The health care system is currently failing to meet the complex needs of these patients. High-need patients have greater unmet behavioral health and social issues than do other adults and require greater support to help manage their complex medical and nonmedical requirements. Results indicate that with better access to care and good patient–provider communication, high-need patients are less likely to delay essential care and less likely to go to the emergency department for nonurgent care, and thus less likely to accrue avoidable costs. For health systems to improve outcomes and lower costs, they must assess patients' comprehensive needs, increase access to care, and improve how they communicate with patients.

INTRODUCTION

In the United States, patients with clinically complex conditions, cognitive or physical limitations, or behavioral health problems use a disproportionate amount of health care services.[1] In any given year, 10 percent of patients account for 65 percent of the nation's health care expenditures.[2] Moreover, many patients with high needs—that is, people with two or more major chronic conditions like diabetes or heart failure—also have unmet social needs that may exacerbate their medical conditions.[3]

With a better understanding of this patient population, health care providers would be more equipped to develop strategies for addressing behavioral health problems and unmet social needs. These, in turn, could lead to improved medical outcomes and potentially lower health care costs.

Previous studies by The Commonwealth Fund have examined this population's demographics and their high use of health care services, but we require

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additional information about their medical and nonmedical needs, as well as recommendations that could assist health systems to improve outcomes and curb costs.[4] The 2016 Commonwealth Fund Survey of High-Need Patients sampled 3,009 U.S. adults, including 1,805 high-need adults and 1,204 other adults without high needs, to investigate how the challenges faced by this patient population affect their experiences with the health care system and where there might be opportunities for improvement. For additional information on the sampling strategy and population breakdown, see How This Study Was Conducted.

WHO WE SURVEYED

High-need patients are adults with ***two or more major chronic conditions*** like heart failure, stroke, or diabetes requiring insulin.

High-need patients ***may or may not have functional limitations*** in their ability to perform daily tasks like meal preparation, dressing, or bathing.

Some are ***under age 65 with a disability***.

Others are ***elderly with multiple functional limitations***.

FINDINGS

This survey confirms prior studies that examined the demographic characteristics of the high-need population.[5] Compared with the general population, the high-need population is older, has lower levels of education and income, and includes more women and African Americans (Table 1). High-need patients use more health care services than other adults, as has been reported in previous analyses (Table 2).[6] Nearly half (48%) of high-need respondents were hospitalized overnight in the past two years; a similar percentage (47%) went to the emergency department multiple times in the past two years. Approximately one of five (19%) used the emergency department for a condition that could have been treated in a doctor's office or a clinic.

Many High-Need Patients Report Social Isolation and Other Unmet Social Needs

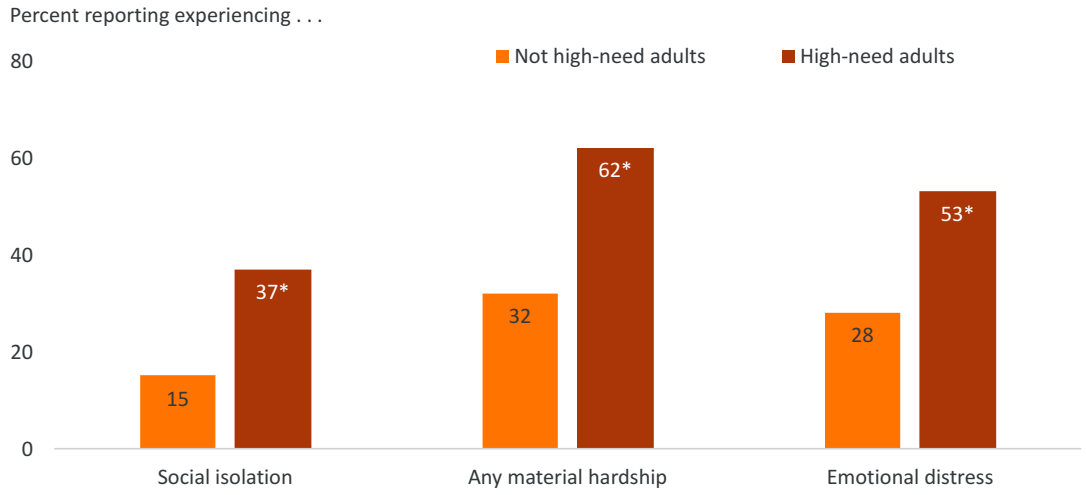
Adults with high medical needs often have unmet emotional and social needs. The survey results indicate that this group is more likely than the general population to report experiencing emotional distress that was difficult to cope with on their own in the past two years. Nearly four of 10 (37%) high-need respondents reported often feeling socially isolated, including lacking companionship, feeling left out, or feeling lonely or isolated from others, compared with 15 percent of other adults (Exhibit 1). Almost two-thirds (62%) of high-need respondents report stress or worry about material hardships, such as being unable to pay for housing, utilities, or nutritious meals, compared to only one-third of other adults (32%). Furthermore, six of 10 (59%) high-need adults report being somewhat or very concerned about being a burden to family or friends (Table 3).

Nearly Half of High-Need Patients Delay Care and Report Access Problems

High-need patients report problems with access to care (Exhibit 2). More than two-fifths (44%) reported delaying care in the past year because of an access problem such as lack of transportation to the doctor's office, limited office hours, or an inability to get an appointment quickly enough. Nearly one-quarter (22%) of high-need respondents specifically reported a lack of transportation as a reason for delaying care, compared with only 4 percent of other adults. Three of 10 (29%) high-need respondents reported delaying care specifically as a result of not being able to get an appointment soon enough with their regular provider.

Exhibit 1

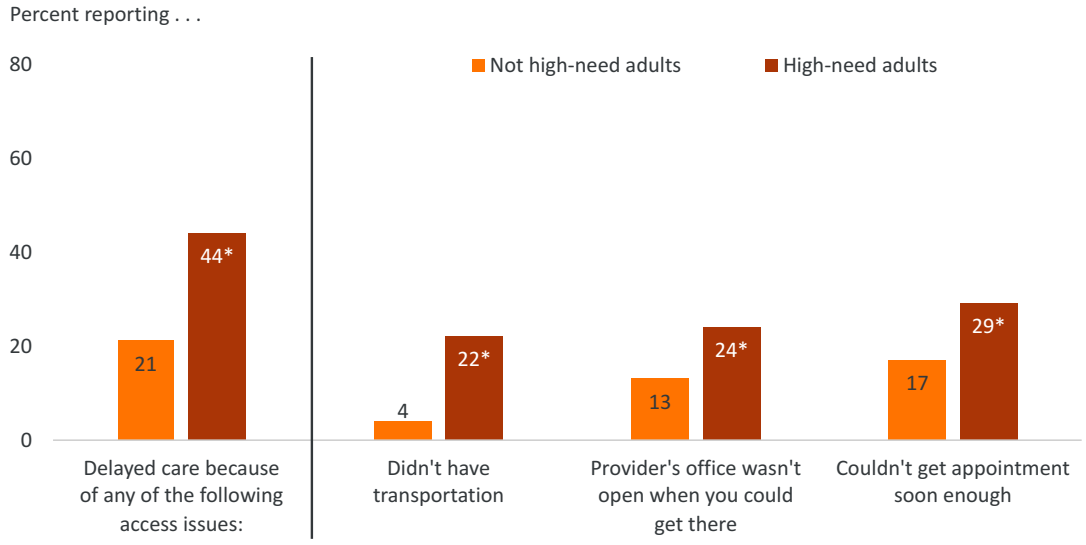
Poverty and Social Isolation Are More Prevalent Among High-Need Patients



Notes: Social isolation = Reported often feeling left out, lacking companionship, or feeling isolated from others. Any material hardship = Reported worry or stress about having enough money to pay rent/mortgage, pay gas/oil/electric, or buy nutritious meals in the past year.
* Significantly different from not high-need adults at the p<0.05 level.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

Exhibit 2

High-Need Patients Experience Disparities in Timely Access to Care

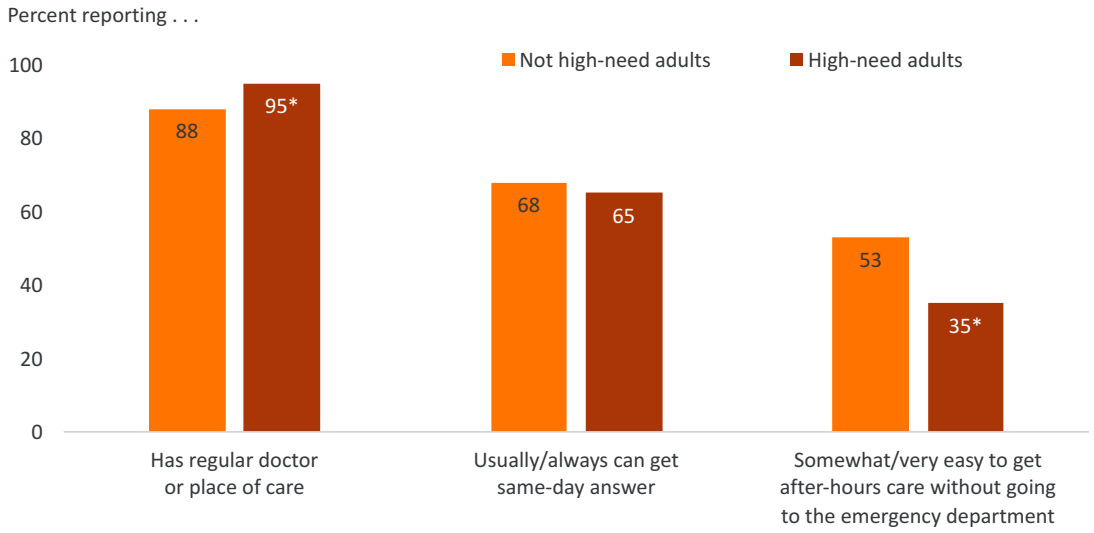


* Significantly different from not high-need adults at the p<0.05 level.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

Nearly all high-need respondents (95%) reported having a regular doctor or place of care (Exhibit 3). Yet, only two-thirds of adults (65% of high-need and 68% of other adults) report being able to get an answer the same day when they contact their doctor's office with a medical question, in line with similar analyses.[7] In particular, high-need respondents report difficulty being able to get after-hours medical care on weekends, evenings, or holidays. Only one-third (35%) of high-need respondents reported it was somewhat or very easy to get medical care after-hours without going to the emergency room, compared with more than half (53%) of other adults.

Exhibit 3

High-Need Patients Report Problems with Convenient Access to Care



* Significantly different from not high-need adults at the p<0.05 level.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

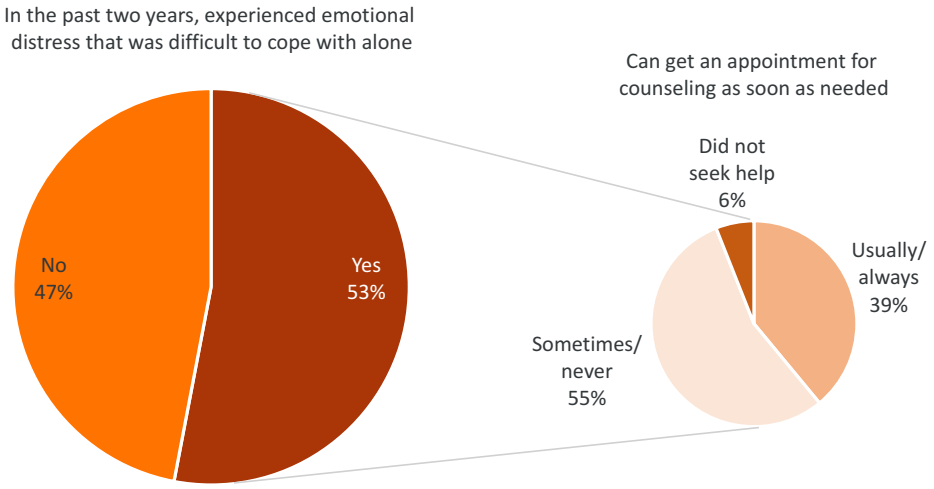
Less Than Half of High-Need Adults Receive Assistance in Managing Conditions

High-need patients are somewhat less likely than others to report receiving care that is accessible, efficient, and high quality. They are also unlikely to have convenient and timely access to key services or supports that can help them manage their conditions outside hospitals or emergency departments.

- Half of high-need respondents reported experiencing emotional distress that they found difficult to cope with alone. Of these, fewer than four of 10 (39%) could get counseling as soon as they wanted (Exhibit 4).
- Of the 53 percent of high-need respondents who reported seeing multiple doctors or using multiple health care services in the past year, less than half (43%) reported having an informed and up-to-date care coordinator (Exhibit 5).
- Of the 57 percent of high-need respondents who have trouble with activities of daily living, fewer than four of 10 (38%) usually or always have someone to help them (Exhibit 6). Among respondents who received help, about three-quarters said it came from family members or relatives (data not shown).

Exhibit 4

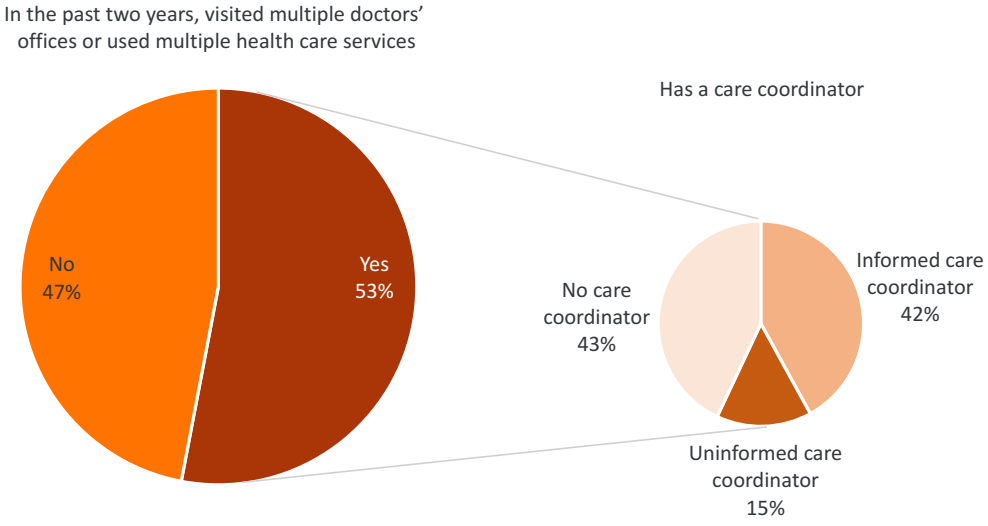
Less Than Half of Distressed High-Need Patients Can Usually or Always Get an Appointment for Emotional Counseling as Soon as Needed



Base: High-need adults.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

Exhibit 5

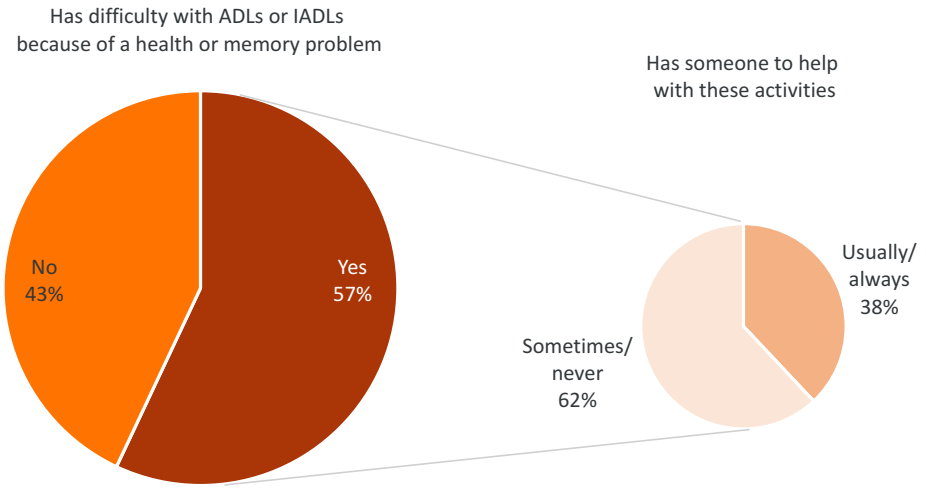
Less Than Half of High-Need Patients Who Might Need One Have an Informed Care Coordinator



Base: High-need adults.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

Exhibit 6

Few High-Need Patients with Functional Limitations Have Adequate Help with Activities of Daily Living



Base: High-need adults.
Note: ADLs = activities of daily living (e.g., eating, bathing, dressing); IADLs = instrumental activities of daily living (e.g., housework, preparing meals).
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

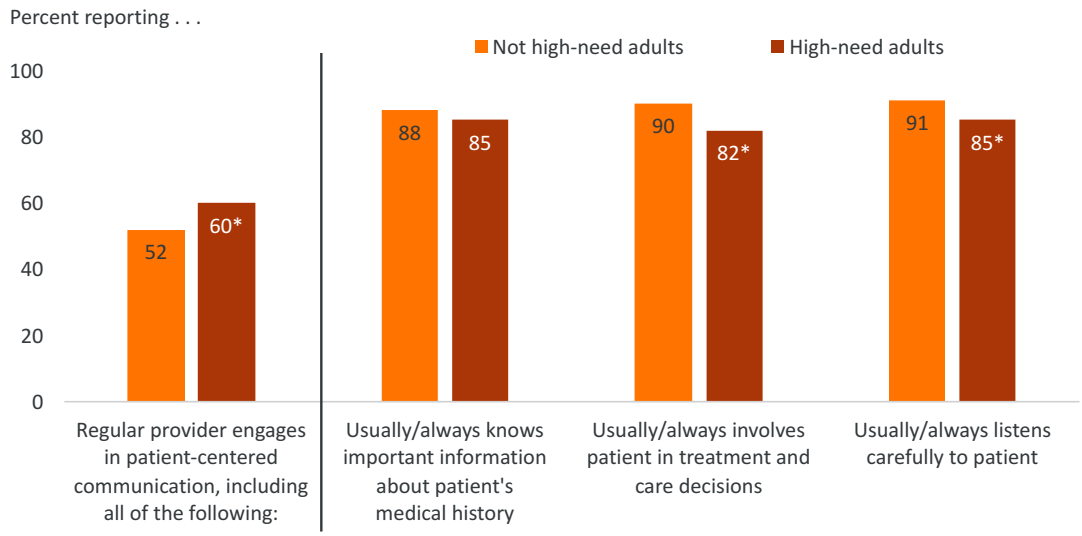
Some high-need respondents are more adversely affected by access issues than others. Among high-need respondents, those who were socially isolated or had low incomes were less likely than respondents without these issues to report having support to manage their conditions, such as easy access to counseling for emotional distress, an informed care coordinator, access to after-hours care, or adequate help for functional limitations (Table 4). Another important factor was their insurance status. High-need adults with employer-sponsored insurance reported a greater likelihood of having these aforementioned resources to help manage their care, while those who are uninsured are less likely to have these resources. Additionally, high-need Medicare and dual Medicare–Medicaid beneficiaries typically had greater access to these resources than the uninsured. While 87 percent of uninsured high-need patients reported having a regular doctor or place of care, less than half reported having an informed care coordinator, adequate help with their functional limitations, patient–centered communication with their regular provider, easy access to emotional counseling, or easy access to after-hours care.

Good Patient–Provider Communication Is Critical for High-Need Population

Patient-centered communication—when patients report that their health care provider listens carefully and involves them in decisions as much as they would like—is critical to high-quality care, especially for high-need patients.[8] More high-need patients (60%) than other adults (52%) have doctors or providers who fully engage in patient-centered communication (Exhibit 7). However, high-need adults are less likely to report that their providers specifically involve them in treatment decisions (82% of high-need adults vs. 90% of others) or listen carefully to them (85% of high-need adults vs. 91% of others).

Exhibit 7

There Is Room for Improvement in Patient-Centered Communication for High-Need Patients



* Significantly different from not high-need adults at the p<0.05 level.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

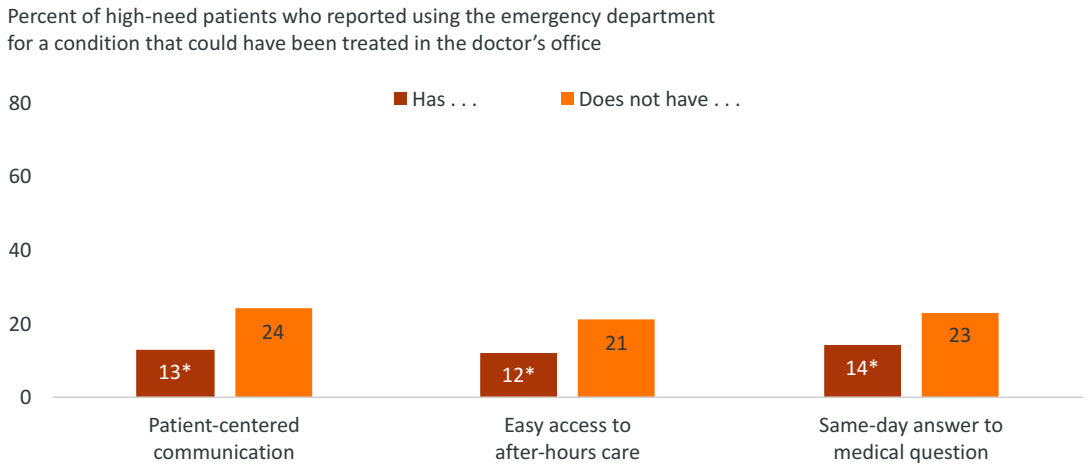
With Good Access and Communication, High-Need Patients Are Less Likely to Delay Care and Visit the Emergency Department

Survey findings suggest tangible strategies to reduce nonurgent emergency department use and to help high-need adults avoid delaying care (Table 2). For high-need patients, having accessible after-hours care, being able to get a same-day answer to a medical question, and having a good relationship with their regular health care provider through patient-centered communication are associated with lower rates of nonurgent emergency department visits for conditions that could have been handled by a regular doctor if one had been available (Exhibit 8). Additionally, having accessible after-hours care is associated with less frequent total emergency department use (both urgent and nonurgent) among high-need patients. While the analysis suggests a relationship between access and communication and a reduction in emergency department visits, there was no similar association with inpatient hospitalizations (Table 5).

For high-need adults, having good communication with their regular provider and good access to care are associated with lower rates of delaying care because of the following reasons: not having transportation, the office not being open when the patient could get there, and not being able to get an appointment soon enough (Exhibit 9). Being able to access care and information in a timely manner are also associated with decreased emotional distress among high-need adults.

Exhibit 8

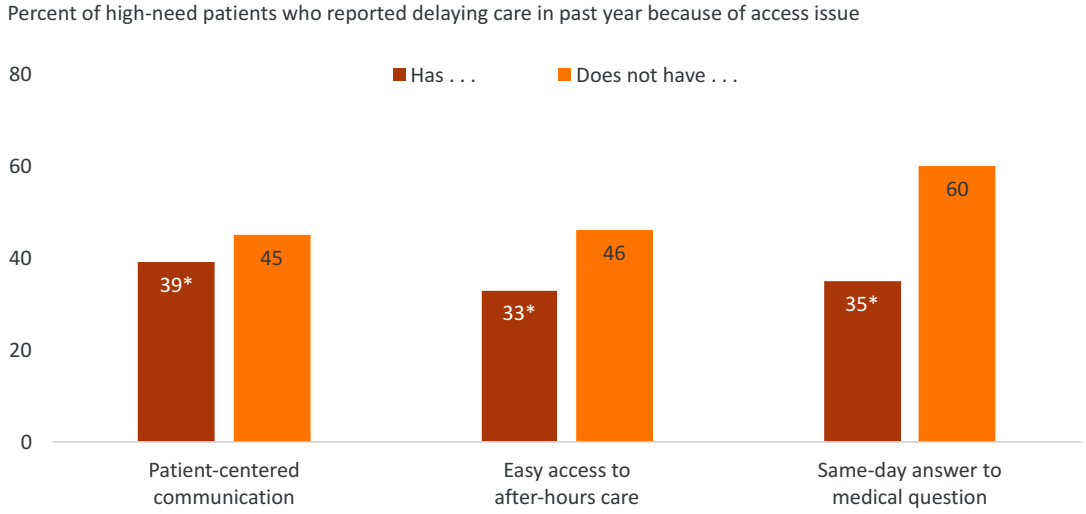
For High-Need Patients, Good Access to Care and Communication with Provider Are Associated with Fewer Nonurgent Emergency Department Visits



Base: High-need adults.
* Significantly different at the p<0.05 level.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

Exhibit 9

High-Need Patients with Good Physician Communication and Timely Access to Care Have Lower Rates of Delaying Care



Base: High-need adults.
* Significantly different at the p<0.05 level.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

IMPLICATIONS

By examining the unique challenges and needs of this patient population, we can identify and develop innovative interventions to meet their needs. In doing this, we should consider the following:

Understand patients' social and behavioral needs in addition to their medical conditions

The survey findings show the range of social and behavioral health challenges facing these patients in addition to their complex medical conditions. Social isolation and material hardship, for example, have been shown to aggravate medical conditions.[9] For health systems, payers, and programs to improve outcomes for high-need adults, providers must consider multiple factors—individuals may have multiple chronic diseases, functional limitations, behavioral health conditions, and material hardships.[10] To help people who most need resources, the interventions must be more comprehensive and creative than just a standard set of doctor visits.[11] Health care providers should build relationships and collaborate with social service agencies, community-based organizations, and behavioral health providers to deliver better outcomes and avoid high-cost care for this population.

Ensure patients obtain much-needed assistance to manage their health

The results suggest that the health care system is largely failing to meet the complex needs of these patients. Although high-need adults report they are more likely to have—and enjoy good communication with—a regular doctor or place of care, these patients do not receive the services and supports they need. In particular, high-need patients report limited access to known effective supports and services, such as transportation services, emotional counseling, assistance in managing functional limitations, and care coordinators.[12] Of patients who have high needs and functional limitations, as well as financial stress, those who had an informed care coordinator or had patient-centered communication with their provider were less likely to use the emergency department for a nonurgent condition (data not shown).

Improve outcomes while potentially lowering costs of care

Health systems are increasingly focused on targeting high utilizers of care as a way to simultaneously improve outcomes and save money. Our analysis suggests two key strategies for improving patient care while potentially curbing costs: increasing patient-centered communication and enabling easier access to appropriate care and information, both of which would support patients in managing their conditions.[13] Having timely access to care—by phone, or in person after hours—and good provider–patient communication could potentially reduce nonurgent emergency department visits and help patients avoid delays in needed care.[14] Increasing the health care system's responsiveness to patients in this way could help avoid unnecessary care that drives up the nation's health care costs.

HOW THIS STUDY WAS CONDUCTED

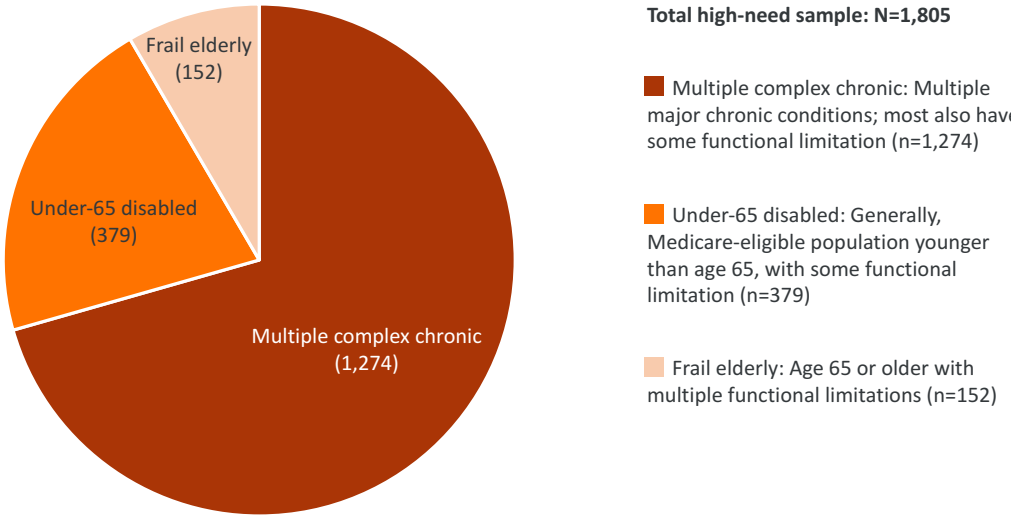
The 2016 Commonwealth Fund Survey of High-Need Patients was conducted by SSRS from June 22 to September 14, 2016, as a part of SSRS's weekly, nationally representative omnibus survey. The survey consisted of 15-minute telephone interviews in English or Spanish, conducted among 3,009 adults age 18 and older living in the United States. Of these, 1,805 were completed with respondents who qualified as high-need based on screening questions (Exhibit M1). Respondents were screened into the high-need group based on combinations of major chronic conditions, functional limitations, age, and insurance status (Exhibit M2). The remaining 1,204 interviews were conducted among respondents who did not qualify as high-need. Overall, 1,323 interviews were conducted with respondents on landline telephones, including 31 in Spanish; 1,686 interviews were conducted on cellular phones, including 61 in Spanish.

Data were weighted by age, race, sex, region, education, and phone status to provide nationally representative estimates of the U.S. adult population age 18 and older. The weighting process takes into account the disproportionate probabilities of household and respondent selection as a result of the number of separate telephone landlines and cellphones answered by respondents and their households, as well as the probability associated with the random selection of an individual household member.

Accounting for sample size and design effect, the margin of sampling error for this study was +/– 3 percent. The response rates for this study were calculated using AAPOR's RR3. The landline portion of the survey achieved a 10 percent response rate and the cellular phone component achieved a 5 percent response rate. The overall response rate was 7 percent.

Exhibit M1

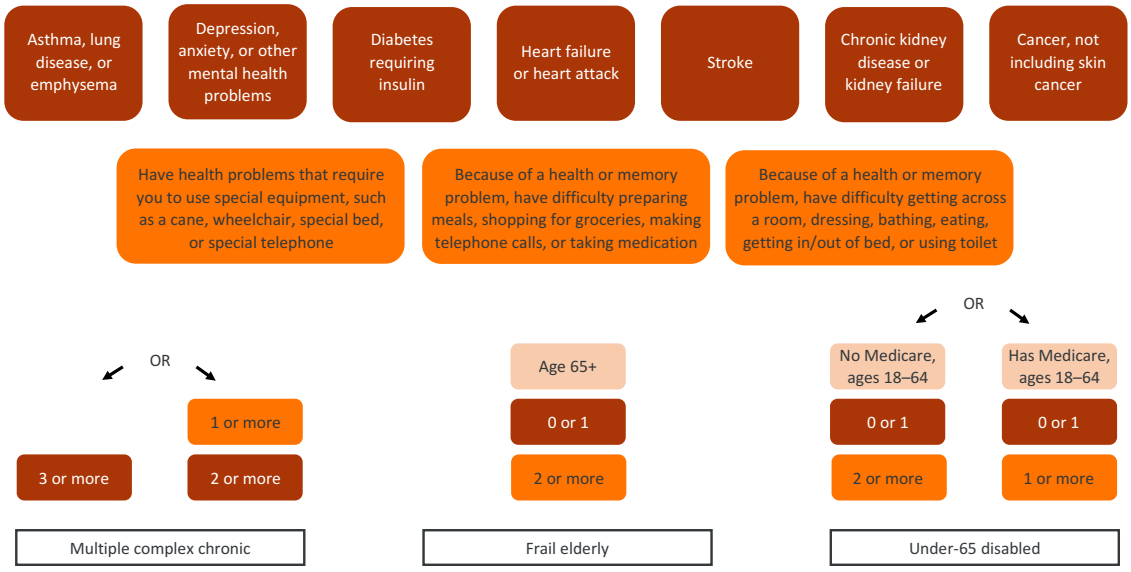
Distribution of Survey Respondents with High Needs



Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

Exhibit M2

Distribution of Survey Respondents with High Needs by Chronic Conditions, Functional Limitations, Age, and Insurance Status



Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

NOTES

[1] U.S. Department of Health and Human Services, *Multiple Chronic Conditions: A Strategic Framework—Optimum Health and Quality of Life for Individuals with Multiple Chronic Conditions* (DHHS, Dec. 2010); and S. Goodell, B. G. Druss, and E. R. Walker, *Mental Disorders and Medical Comorbidity* (Robert Wood Johnson Foundation, Feb. 2011).

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[4] S. L. Hayes, C. A. Salzberg, D. McCarthy, D. C. Radley, M. K. Abrams, T. Shah, and G. F. Anderson, *High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care—A Population-Based Comparison of Demographics, Health Care Use, and Expenditures* (The Commonwealth Fund, Aug. 2016); and C. A. Salzberg, S. L. Hayes, D. McCarthy, D. C. Radley, M. K. Abrams, T. Shah, and G. F. Anderson, *Health System Performance for the High-Need Patient: A Look at Access to Care and Patient Care Experiences* (The Commonwealth Fund, Aug. 2016).

[5] Survey patient population has a similar demographic profile to those identified in recently published analyses of federal surveys. See S. L. Hayes, C. A. Salzberg, D. McCarthy, D. C. Radley, M. K. Abrams, T. Shah, and G. F. Anderson, *High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care—A Population-Based Comparison of Demographics, Health Care Use, and Expenditures* (The Commonwealth Fund, Aug. 2016); and S. B. Cohen, *Differentials in the Concentration of Health Expenditures Across Population Subgroups in the U.S., 2013,* MEPS Statistical Brief #480 (Agency for Healthcare Research and Quality, Sept. 2015).

[6] S. L. Hayes, C. A. Salzberg, D. McCarthy, D. C. Radley, M. K. Abrams, T. Shah, and G. F. Anderson, *High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care—A Population-Based Comparison of Demographics, Health Care Use, and Expenditures* (The Commonwealth Fund, Aug. 2016).

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Table 1. Demographic Characteristics of Survey Respondents

	Total	Not high-need	High-need
Unweighted N=	3,009	1,204	1,805
	%	%	%
Age			
19–29	18	19	4*
30–49	18	35	25*
50–64	25	24	40*
65 or older	19	18	29*
75 or older	8	7	13*
Insurance status			
Publicly insured	32	28	71*
Medicare only	4	3	10*
Medicare and Medicaid (dual)	8	6	29*
Medicare and employer-sponsored insurance	3	3	5*
Medicaid only	5	5	7
Employer-sponsored insurance only	36	39	9*
Race/Ethnicity			
White, non-Hispanic	64	65	63
Black, non-Hispanic	10	10	15*
Hispanic	15	16	12*
Income status			
<$30,000/year	36	32	66*
Education status			
Less than high school	12	11	24*
High school diploma	31	31	33
Some college or two-year degree	25	25	25
Bachelor's degree or higher	31	32	17*
Employment status			
Employed full- or part-time (under age 65)	67	71	18*
Gender			
Female	52	51	58*

* Significantly different from not high-need at the $p<0.05$ level.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

Table 2. Health Care Utilization and Promising Interventions

	Total	Not high-need	High-need
Unweighted N=	3,009	1,204	1,805
	%	%	%
Health care utilization			
Hospitalized overnight in past two years	18	15	48*
Used ER multiple times in past two years	18	15	47*
Used ER for a condition that could have been treated in doctor's office	14	13	19*
Access barriers			
Delayed care because of an access issue:	23	21	44*
Didn't have transportation	6	4	22*
Place of care wasn't open when you could get there	14	13	24*
Couldn't get an appointment soon enough	18	17	29*
Promising interventions			
Has a regular doctor or place of care	88	88	95*
Usually/always can get same-day answer when contacted doctor's office with medical question	68	68	65
Somewhat or very easy to get after-hours care without going to the emergency department	51	53	35*
Usually/always can get an appointment for emotional counseling or treatment as soon as needed	30	29	39*
Has informed and up-to-date care coordinator (base: saw multiple doctors or used multiple services in past year)	–	–	42
Usually/always has adequate help for trouble with ADLs/IADLs	34	–	38
Person-centered communication			
Regular doctor or place of care engages in patient-centered communication by doing all of the following:	53	52	60*
Usually/always knows important information about patient's medical history	87	88	85
Usually/always involves patient in treatment and care decisions	89	90	82*
Usually/always listens carefully to patient	90	91	85*

* Significantly different from not high-need at the $p<0.05$ level.
– N/A.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

Table 3. Concerns and Vulnerabilities of High-Need Patients

	Total	Not high-need	High-need
Unweighted N=	3,009	1,204	1,805
	%	%	%
Loneliness and social isolation	17	15	37*
Often feel that you lack companionship	12	11	23*
Often feel left out	6	5	21*
Often feel isolated from others	8	7	22*
Material hardships			
Was stressed or worried in the past 12 months about having enough money to:	35	32	62*
Pay rent or mortgage	26	24	45*
Pay gas, oil, or electric bill	25	22	51*
Buy nutritious meals	21	18	44*
Functional limitations			
Has any trouble with ADLs and/or IADLs	7	2	57*
ADLs: Because of a health or memory problem, has any difficulty getting across a room, dressing, bathing, eating, getting in and out of bed, or using the toilet	5	1	38*
IADLs: Because of a health or memory problem, has any difficulty preparing meals, shopping for groceries, making telephone calls, or taking medication	5	1	43*
Usually/always has adequate help with above activities	34	–	38
Emotional health			
Somewhat or very concerned about being a burden to family or friends	–	–	59
Experienced emotional distress which was difficult to cope with alone	30	28	53*
Confident or very confident they can control or manage health problems	–	–	79

* Significantly different from not high-need at the $p<0.05$ level.
– N/A.
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

Table 4. Potential Resources Available to High-Need Patients (base: high-need respondents)

		Informed care coordinator (Base: Used multiple services)		Adequate help for ADLs/IADLs (Base: Has ADL/IADL)		Patient-centered communication		Easy access to emotional counseling (Base: Experienced emotional distress)		Regular doctor or place of care		Easy access to after-hours care		Same-day answer to medical question (Base: Has regular doctor/place of care)	
		Has	Does not have	Has	Does not have	Has	Does not have	Has	Does not have	Has	Does not have	Has	Does not have	Can get	Cannot get
	N=	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Total	1,805	42	58	38	62	60	40	39	61	95	5	35	65	65	35
Insurance															
Medicare	952	42	58	38	62	63	37	43	57	98	2	36	64	67	33
Medicare + Medicaid (Dual)	533	45	55	35	65	57	43	46	54	98	2	38	62	65	35
Medicaid	132	38	62	38	62	56	44	34	66	94	6	29	71	53	47
Employer-sponsored insurance	452	46	54	41	59	68	32	47	53	95	5	43	57	73	27
Uninsured	175	39	61	35	65	42	58	22	78	87	13	19	81	54	46
Income															
<$30,000/year	984	41	59	34	66	58	42	36	64	94	6	30	70	63	37
$30,000/year+	537	43	57	43	57	67	33	46	54	97	3	42	58	70	31
Race/Ethnicity															
White, non-Hispanic	1,216	43	57	38	62	66	34	41	59	97	3	34	66	66	34
Black, non-Hispanic	255	45	55	40	60	58	42	30	70	94	6	40	60	69	31
Hispanic	169	35	65	35	65	41	59	38	62	90	10	36	64	55	45
Social isolation															
Socially isolated	622	40	60	30	70	50	50	36	65	93	7	28	72	57	43
Not socially isolated	1,183	44	56	45	55	66	34	42	58	97	3	39	61	70	30
Material hardship															
Has bill stress/worry	983	41	59	36	64	54	46	37	63	94	6	28	72	59	41
Does not have bill stress/worry	822	44	56	46	54	71	29	46	54	98	2	45	55	75	25
Functional limitations															
Has functional limitations	972	43	57	38	62	58	42	37	63	94	6	30	70	61	39
Does not have functional limitations	833	41	59			63	37	42	58	96	4	41	59	71	29

Note: ADLs = activities of daily living (e.g., eating, bathing, dressing); IADLs = instrumental activities of daily living (e.g., housework, preparing meals).
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

Table 5. Interventions for High-Need Patients (base: high-need respondents)

	Used emergency department multiple times in past two years	Went to emergency department for condition that could be treated in office	Hospitalized in past two years	Experienced emotional distress in past year	Delayed care because of an access issue in past year
	%	%	%	%	%
Among total population:	18	14	18	30	23
Among not high-need population	15	13	15	28	21
Among high-need population	47	19	48	53	44
Among high-need population:					
Has informed care coordinator	46	15	60	51	43
Does not have informed care coordinator	51	18	56	53	48
Has adequate help with ADLs/IADLs	54	17	50	54	48
Does not have adequate help with ADLs/IADLs	47	21	48	58	49
Has patient-centered communication	45	13*	51	49	39*
Does not have patient-centered communication	46	24	45	49	45
Has easy access to counseling	51	21	51		49
Does not have easy access to counseling	56	23	53		53
Has regular doctor or place of care	45	17	49	49	
Does not have regular doctor or place of care	42	25	35	52	
Has easy access to after-hours care	38*	12*	47	42*	33*
Does not have easy access to after-hours care	49	21	50	53	46
Can get same-day answer	44	14*	52*	46*	35*
Cannot get same-day answer	46	23	43	56	60

* Significantly different at the $p<0.05$ level.
Note: ADLs = activities of daily living (e.g., eating, bathing, dressing); IADLs = instrumental activities of daily living (e.g., housework, preparing meals).
Data: The 2016 Commonwealth Fund Survey of High-Need Patients, June–September 2016.

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Editorial support was provided by Deborah Lorber.

The COMMONWEALTH FUND

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TAB 25

Paperwork burden driving Ontario family doctor to quit, amid critical GP shortage

In the midst of a critical family doctor shortage about a thousand Mississauga patients are scrambling to find a new physician. Their doctor can't take it anymore, she says she spends more time on "unsustainable" admin than on seeing her patients.

By Cynthia Mulligan

Posted February 14, 2024 2:11 pm.

Last Updated February 15, 2024 9:07 am.

Ontario is in the midst of a critical shortage of family doctors, and one more is leaving the profession, meaning her roughly 1,000 patients will join the millions of residents looking for primary care.

Mississauga physician Dr. Fan-Wah Mang tells CityNews there are multiple reasons she has decided to shut her practice down on May 31.

"I'm simply burnt out. I'm physically and mentally exhausted," said Dr. Mang.

She has been a family doctor for 29 years and hoped to work for up to 10 more years. Dr. Mang said it's not the patients that have her burnt out, it's the paperwork.

"I'm overburdened by too much administrative work. I have an inbox, I probably read over 100 reports a day," explained Dr. Mang. "It's just unsustainable if I have to be on the computer until midnight every night, all day Saturday, all day Sunday. It would be nice to have dinner with my family."

She spends up to 25 hours per week alone on lab reports, x-ray results, and lately on processing pharmacists' prescriptions. The administrative work has forced her to cut the time she sees patients from four days to three days per week.

When her clinic is open, she sees about 20 patients per day. The Ontario health care system pays her up to $40 per patient visit. After taxes and administrative costs, Dr. Mang takes home roughly $60,000 a year. There isn't enough in the budget to hire an administrative assistant, and she just can't do it anymore.

"I had to make a very difficult decision," Dr. Mang said. "If I can't afford to maintain my practice, because if I cut to less than three days a week, I won't make the overhead. My only option is to close."

Related:

- **Ontario family doctors letting patients go as caseloads become unmanageable**
- **Family doctor shortage skyrockets during COVID-19 pandemic**

But Dr. Mang worries about her patients, including Patricia MacKay, who cares for her 108-year-old mother and her ailing husband. It was Dr. Mang who discovered he had had a silent heart attack.

"This just put me stressed to the max," said Mackay. "She is a fantastic doctor. She is caring for her patients, she advocates for her patients."

"If family doctors are not being supported by our government and taken seriously, then people are going to go to emergency that don't have family doctors. Emergencies are already overloaded, so what are you going to do?," said Mackay.

It won't be easy for any of Dr. Mang's patients to find a new family doctor, it can take months, even years.

The Ontario Medical Association (OMA) estimates there are currently 2.3 million Ontarians who don't have a family physician. The problem has been growing for over a decade. As the population grows, physicians retire and fewer medical students choose to become family physicians.

Dr. Andrew Park, president of the OMA, said this is because people don't see it as an attractive option at this point. "We need to ensure that the profession of being a family physician is viable and sustainable for future generations."

He agrees that paperwork and the administrative work has been a real issue for family physicians.

"The solution is, first off, let's get rid of some of the forms that are not necessary. And the ones that are necessary — let's reduce them in terms of what is necessary from a physician perspective," said Dr. Park.

"I think that's the first thing we have to have — a real care to this. We're overutilizing an extremely valuable resource in our family doctors for something that's not very valuable to the patient or the system at large."

The Ford government has said they have set up a Burnout Task Force and launched an initiative called Patients Before PaperWork aimed at further tackling "the administrative burden on physicians while reducing the risk of delays in diagnosis and treatment."

"Our work has significantly accelerated work to simplify forms and we look forward to sharing the improvements that have been made in the near future," read a statement from the Minister of Health.

"We all have to come up with solutions and work together in a nonpartisan fashion to ensure that every person in Ontario gets the care that they need," said Dr. Park, adding they are working with the government.

Dr. Mang said if there are changes, it is too late for her but she hopes they will help future family doctors.

With files from Meredith Bond

Top Stories

TAB 26

CITY

“I’ve been a family doctor for more than 20 years. Now, I have no choice but to close my practice”

Rising costs, new administrative duties and subsequent burnout have made it impossible for physician Fan-Wah Mang to keep her Mississauga clinic open. Delivering the news to her patients–many of whom have nowhere else to go–broke her heart

BY FAN-WAH MANG, AS TOLD TO ANTHONY MILTON | PHOTOGRAPHY BY BRENT GOODEN | APRIL 18, 2024

Everyone knows it's nearly impossible to find a family doctor in Canada, with 6.5 million people across the country going without a regular physician. Last year, Ontario allowed pharmacists to prescribe treatments for some minor ailments, like pink eye and cold sores, but it's far from the level of care patients receive in a doctor's office. And private clinics are popping up across the province to fill the gap—for those who can pay. To make matters worse, a growing number of family doctors are walking away from the public system, citing poor funding and overwhelming paperwork. One such physician is Fan-Wah Mang, a 53-year-old family doctor who's shutting down her Mississauga practice after more than 20 years because she's overwhelmed by rising costs and administrative burdens. Here, she explains the dysfunction plaguing Ontario's health care system.

From a young age, I knew I wanted to be a doctor. And when I pictured a physician, it was always a family doctor—the only kind I'd ever met. So, in 1989, I started my undergrad at the University of Toronto, and after my second year, I was accepted into the school's medical program. By then, I bit more about the field, but I still liked the jack-of-all-trades aspect of family medicine. I

got my independent medical licence in 1997, and after six years travelling across the province as a locum, or substitute doctor, I joined a family clinic in Mississauga in 2003. I became the fourth doctor to share the practice.

Related: *"Hospitals are overwhelmed. Physician burnout is rampant. I'm working to change that"*

Over the years, I came to know my patients well. Family medicine is cradle to grave: some of my patients came to me as newborns and are now young adults. I've watched others transition into old age. It's incredibly rewarding to see kids grow up and sick patients get better. My patients trust me deeply—some seek my opinion on treatments prescribed by specialists. They know I have their back.

Family doctors sharing a practice don't share income, but we do pool expenses—rent, our secretary's salary, the cost of office supplies. Each of us is paid by the government for every appointment. Currently, the rate is $37 per appointment, plus another $3 or so if they happen to be enrolled in the government's Family Health Plan program. We also get a fee for each patient, with rates varying based on their sex and age. With my roughly 1,000 patients, that comes out to about $2,000 per month. When I was first building my practice, I made about $90,000 per year, after all our office expenses were accounted for. In 2022, that figure was about $142,000. For your typical doctor, family medicine isn't the pathway to luxury people imagine it is.

For a while, the practice managed to do all right financially. We've been totally full since I started. By 2015, though, two of the doctors I originally shared the practice with left for larger operations. With just two of us left, we couldn't afford to keep our nurse, and by the time we got back to three doctors, we couldn't hire a new nurse because hospitals were offering far better salaries than we ever could.

Meanwhile, inflation was making all our equipment more expensive. By 2015, the government was cancelling subsidies for electronic medical records systems. We had to buy our software subscriptions ourselves, which cost $5,000 a year. The provider of that service also made us upgrade to internet faxing, which cost another $1,300 a year. In 2020, the pandemic brought even more stress. We scrambled to adapt to PPE and new precautions. The final financial blow was cyber insurance, which was mandated by the College of Physicians and Surgeons during that time. There's no doubt it's needed—cyber threats are very real, as we saw when SickKids was targeted in December 2023—but it cost us another $2,500 a year.

At first, Doug Ford's government decided to allow us to bill for phone appointments, which saved us. Then, in 2022, the province decreased the pay for phone appointments by 15 per cent. I'd started doing quite a few appointments that way, since many of my patients had moved to more affordable places (Guelph, Peterborough, even Sturgeon Falls) but worried that they wouldn't find another family doctor if they left my practice. I wasn't going to make them drive for hours just to speak with me. But, with a quarter of my visits occurring over the phone, that pay cut definitely hurt.

Related: *"Meet the researcher investigating the future of AI in medicine"*

As medicine digitized, I also got more and more faxes and messages from partners in the health care system who required my sign-off as a doctor. For example, pharmacists who needed me to review patients' medications. It didn't help that, in 2023, when the province began allowing pharmacies to treat minor ailments, they required them to fax us for those too. As physicians, our oversight was supposed to bring a check and balance to the new system, but suddenly my inbox was flooded with 100 administrative reports a day, all needing my acknowledgement to move forward. By July of 2023, I had to go from seeing patients four days a week to seeing them three

days a week, just so I could dedicate one entire workday to paperwork. That also meant I was cutting out one full day of income each week—after all, I get paid only when I'm seeing patients.

But, when messages from my patients started piling up, I couldn't turn them down. With my reduced hours, the next available appointment would often be weeks away. Some would go to public walk-in clinics and then come back to me describing treatments that hadn't worked. One had headaches he simply couldn't wait months to address. I ended up calling them on my "off days" or seeing them in-person during my lunch hour and in the evenings.

Burnout started to creep up on me. The more the tasks piled up, the longer it took me to get things done. In the end, it was impossible to fit all my admin tasks into a single workday. Before things went haywire, I'd get to the office at 8:30 a.m. and leave around 5 p.m. Now, I wasn't leaving until 7

p.m., and after a short dinner, I'd be on the computer until midnight—plus all day Saturday and Sunday. My colleagues and I tried to make a pact to spend 24 hours offline every weekend, but I never managed to do it.

Other aspects of my life started suffering too. My two teenage sons frequently had to make themselves instant noodles for dinner and would ask me why I was always on my computer. I felt like I was failing not only as a physician but as a mother.

By September, it was all too much. I knew our lease on the office was up for renewal in May 2024. I wasn't going to wait until I was so exhausted that I became sick myself. So I met with the two other doctors at my clinic and told them how badly I was doing. They were shocked. But then one of them turned to me and said, "If you're going, I'm going." Just like that, it was settled: the business was going to fold.

The guilt was terrible. I spent two months doing grief counselling in my office every 15 minutes. Many of my patients are women between 85 and 90 years old. I remember one crying, silently, behind her medical mask. I held her hand as she told me how terrified she was that no other practice would take her—that they'd see her as too old or her issues as too complex. When she left, the next patient came in and I did it all over again.

Related: *"My clinic saves lives. The Ford government's funding cuts to virtual health care will shut us down"*

Rising costs, inflation and the burden of all this new administrative work has made running a family clinic untenable. I'm not surprised that so many physicians are moving into private health care—you can charge fees that make running a clinic feasible with way fewer patients. Personally, though, I would never consider going private: that kind of care is inaccessible to those who can't afford it, and I wouldn't want to run a clinic that's only for the wealthy. Seeing a diverse array of patients makes me a better doctor. But I struggle to see what the plan for our public health care system is. It seems like, to some extent, the province wants to replace family doctors with other health professionals, like pharmacists and nurses—but it's just not the same.

For example, I had one patient, a 19-year-old woman, who started experiencing pain urinating. She heard you could go to the pharmacy for minor ailments, so she did. She described the problem, and they gave her a treatment for a urinary tract infection. She didn't tell the pharmacist that she was sexually active or that her boyfriend wasn't using a condom. When the UTI treatment didn't help, she came to me, and in the privacy of my exam room, she felt comfortable telling me the whole story. It was chlamydia, a disease that, if left untreated, could have led to infertility. I shudder to imagine having to tell her, 20 years from now, that she can't have children because of a simple misdiagnosis. You can't treat that kind of thing at a pharmacy. You need the consistency and resources of a family doctor's office.

I wish I could stay and keep helping patients like her, but I can't continue working like I have been. The fees doctors get paid for seeing patients needs to double, at the very least. With that money, family doctors would be able to hire the staff they need to sustain their practices, like more nurses. At the same time, we should be paid for the administrative work we do, a policy that's already been implemented in BC. And the government needs to find a way to reduce that administrative burden. It's not a good use of my time to validate prescriptions that don't require any follow-up or sign-off on the treatment of minor ailments. If those were taken off my hands, my inbox would be at least a quarter less full.

I love being a family doctor. I want to protect our public health care system because it has worked for my patients. But it's getting impossible to care for them with expenses skyrocketing, income declining and only so many hours in a day. Family doctors are not trying to get rich. We just want to earn enough to keep the lights on and allow us to protect our patients.

TAB 27

“I Feel Like I am Failing”

Dr. Sabra Gibbens is the sole family physician in Verona, Ont. *[Photo by Lars Hagberg]*

Family physician says she is not delivering the kind of care she wants to be providing

Dr. Sabra Gibbens says she has her dream job. As a family physician in a small town outside Kingston, she is working with people she enjoys, and doing work she loves and finds meaningful. But her spirit is uneasy — she knows she is not delivering the kind of care she wants to be providing to her patients and it is a source of ongoing pain.

“I feel like I am failing my patients. There is a real disconnect between why I went into medicine and my day-to-day reality,” says the family physician who works in Verona, a town of 2,000 people.

Dr. Gibbens’ reality is that she, like many family physicians across Ontario, is stretched far too thinly. (Please see the accompanying article, *Family Medicine in Crisis*.) Shortly before coming to Verona to replace a retiring physician, she learned the town’s other doctor was leaving to return to residency to pursue a specialist degree. She agreed to take on his patients on a “temporary” basis, expecting a replacement would appear shortly. But seven years on, she is still the town’s only doctor. With 2,500 patients in her roster — double the size of most family practices — she says she is completely and utterly overwhelmed.

“All I am doing is putting out fires,” says Dr. Gibbens, who works more than 65 hours a week and comes into the clinic on weekends to catch up on her paperwork. “I just don’t have the bandwidth to do anything else.”

She pays a nurse practitioner to come in three days a week and hires a locum one day a week. Because she is familiar with their medical histories, she sees the patients with complex needs, many of whom have multiple conditions.

> *“There is a real disconnect between why I went into medicine and my day-to-day reality.”*

Dr. Gibbens runs a “cradle-to-grave” general practice. Most of her patients, however, are at the far end of life’s spectrum. Many suffer from chronic obstructive pulmonary disease, diabetes, heart failure, kidney disease, dementia and/or cancer.

“And so, to do justice to any one of these patients, sometimes even 30 minutes isn’t long enough,” says Dr. Gibbens. The result is she may only see 18 to 20 patients a day, which is fewer patients than the Ministry of Health would like her to see.

She also receives periodic reports from the Ministry of Health on how she compares to other family doctors in her region and across Ontario on the delivery of colon-cancer screening, mammograms, flu shots and other preventative care services, and she is disheartened — but not surprised — to see that she falls below average on most metrics.

“It breaks my heart to know my patients are not getting the kind of care they need and deserve. I just hate that I don’t have the time to reach out.”

Throughout the day, her office phone rings constantly. Many of the calls are from people looking to be taken on as patients. In the vast majority of cases, the answer is a polite no. But many of the calls are her own patients asking to be seen on an urgent basis. Her staff members have been trained to triage the most serious cases, but she says too many of these patients are told they can’t be accommodated for several weeks.

“These are the phone calls that pain me. I would love to be able to squeeze them in. But I just don’t have the capacity to see them as soon as they want and need to be seen. So, they will hang up, clearly distressed, and then have to basically fend for themselves,” which may involve going to a Kingston-area emergency department for treatment, she says.

The language used to describe such clinician distress in health care is changing. Dr. Gibbens says the term “moral injury” resonates with her, because it more accurately identifies the root of her anguish in a way that “burnout” does not. Moral injury, originally used to describe the post-traumatic stress experienced by combat soldiers, is the feeling that one has participated in actions that transgress their deeply held moral beliefs, or the sense of being betrayed by an authority figure or system in a high-stakes situation, preventing one from doing the right thing.

> *“In the meantime, the patient is calling me repeatedly, worried they may have been overlooked. I honestly don’t know what to tell them.”*

Dr. Gibbens, who is from the U.S., remembers a time she used to brag to her American friends about working in a universal health care system. Although she will remain in Canada, she’s not bragging now, she says. She is astonished at the length of the wait times to see a specialist — often as long as two years. It’s not much better in cases that she would describe as semi-urgent. “In the meantime, the patient is calling me repeatedly, worried they may have been overlooked. I honestly don’t know what to tell them,” she says. “But I don’t begrudge the specialists — I know they are struggling to keep up as well. Nobody is having an easy time.”

Perhaps her biggest challenges lie in accessing Child and Adolescent Psychiatry for her patients. Because she has very limited access to these specialists, she has had to extend her comfort zone in terms of diagnosing and treating children’s mental health and behaviour conditions.

It is challenging to differentiate between or recognize overlapping anxiety disorders, temperaments, attention deficit disorders, autism spectrum disorders, intellectual disabilities, and family or school environmental dynamics. Dr. Gibbens spends hours assessing the patient herself, collecting collateral information from parents and teachers, and factoring in what she knows about the child’s parents and siblings.

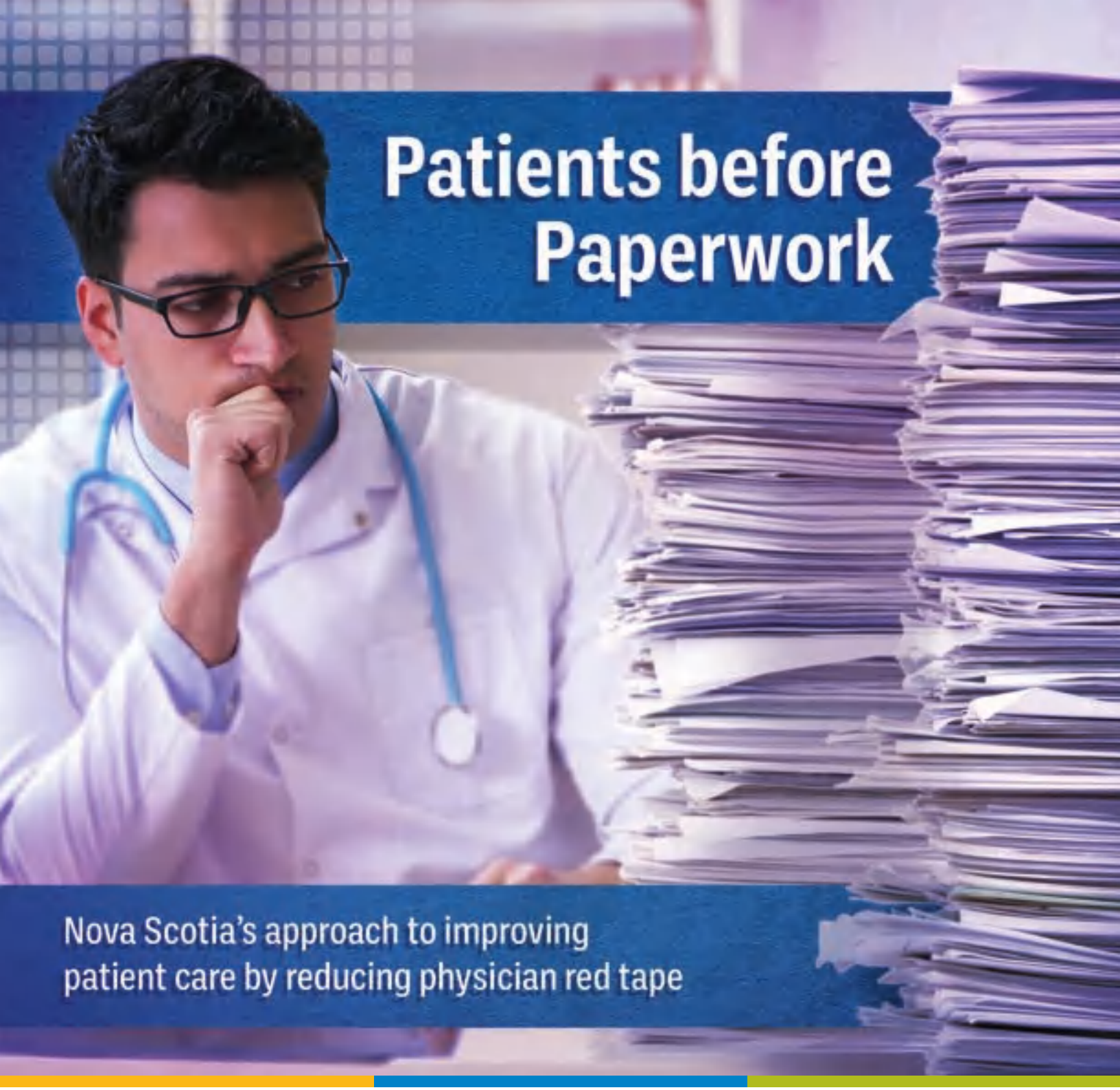
“I often have to make an educated guess as to which disorder is primary, initiate treatment, and then bring them back again and again to see what’s improving and what’s not,” she says. Many of these patients do well and never need specialist consultations. In those instances when she does need specialists’ help clarifying the diagnosis and/or guiding treatment, she

is frustrated to learn the wait times are still 12 to 18 months. “I don’t know how else to help this child and their family while we wait. It’s painful,” she says.

Centralized referral programs have reduced the administrative burdens and wait times in some areas of care, for which she is thankful. But she would love to see it implemented for mental health services as well.

In the meantime, Dr. Gibbens says she will continue to do what is needed for her patients. “There are moments in each day when I do feel like I am making a real difference in people’s lives. And I say to myself, ‘Yes, I can definitely keep going.’”

TAB 28



Patients before Paperwork

Nova Scotia's approach to improving patient care by reducing physician red tape

January 2023

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January 2023

Patients before paperwork

Nova Scotia's approach to improving patient care by reducing physician red tape

Alchad Alegbeh, Research Analyst
Laura Jones, Executive Vice-President & Chief Strategic Officer

Executive Summary

Health ministries across Canada are facing many complex challenges. A chronic shortage of health professionals, an aging population, and capacity constraints all have put pressure on the health care system and the physicians who support it. Recent survey data[1] shows this is also a priority for small business owners, with 60% wanting governments to place a high priority on addressing challenges in the health care system (Figure 1). Governments will need to consider a broad range of innovative solutions to ensure doctors are able to provide timely care to patients. Nova Scotia leads the country with its efforts to implement one such solution: reducing physician red tape.

Physician advocacy groups have consistently identified red tape as an obstacle that detracts from patient care and contributes to physician fatigue and burnout. "Red tape" in this context refers to *unnecessary* paperwork or administrative tasks and includes work that doesn't require a physician's clinical expertise - and could therefore be completed by someone else - and work that is wholly unnecessary and could be eliminated. Red tape negatively impacts patient care by limiting both the time physicians can spend caring for existing patients and the number of new patients doctors can take on. **Put simply, red tape makes it harder for doctors to do what they do best: care for their patients.**

The Government of Nova Scotia has been a leader in working to address this problem. Nova Scotia's Office of Regulatory Affairs and Service Effectiveness, in partnership with Doctors Nova Scotia, recently led an innovative project to quantify physician administrative burden, better understand its impact, and identify ways to reduce it. The results[2] are compelling: each physician in Nova Scotia spends the equivalent of more than one full day per week[3] (10.6 hours) on administrative tasks, which amounts to 1.36 million hours annually equivalent to 1.73 million patients visits annually. The study identified the

[1] CFIB *Your Voice* Survey. September 8-26, 2022. Final results. Canada n = 3,677.
[2] Nova Scotia Office of Regulatory Affairs and Service Effectiveness, *Physician Administrative Burden Survey – Final Report*. September 2020. https://doctorsns.com/sites/default/files/2020-11/admin-burden-survey-results.pdf?_ga=2.265779338.421049101.1670431195-102944459.1669867174
[3] Assuming a typical 8-hour workday.

portion of administrative work that is unnecessary (38%), including work that could be completed by someone other than a physician (24%), and tasks that could likely be eliminated (14%).

In response to these findings, the Nova Scotia government has committed to reducing physician red tape by 10% - roughly 50,000 hours - by 2024. To accomplish this, Nova Scotia's Office of Regulatory Affairs and Service Effectiveness has worked with doctors to identify specific forms and processes that can be shortened, eliminated, or completed by someone other than a doctor, and is publicly reporting on its progress. The time that these initiatives will save is equal to 150,000 patient visits, demonstrating that even a relatively small reduction in red tape can have a significant impact. CFIB recognized Nova Scotia for its efforts in February 2022 with a CFIB Golden Scissors Award for demonstrating leadership in cutting red tape.

Using Nova Scotia's data as a benchmark, this report estimates the physician administrative burden across Canadian provinces and territories. We then calculate what this represents in total patient visits. These estimates are intended to illustrate the potential impact that reducing physician red tape could have in different jurisdictions.

Our analysis finds that across Canada, physicians are spending 18.5 million hours each year on unnecessary administrative work - the equivalent of 55.6 million patient visits. By setting a target to reduce physician red tape by 10%, governments across Canada could reduce physician fatigue and burnout, improve the quality of patient care, and save the equivalent of 5.5 million patient visits a year.

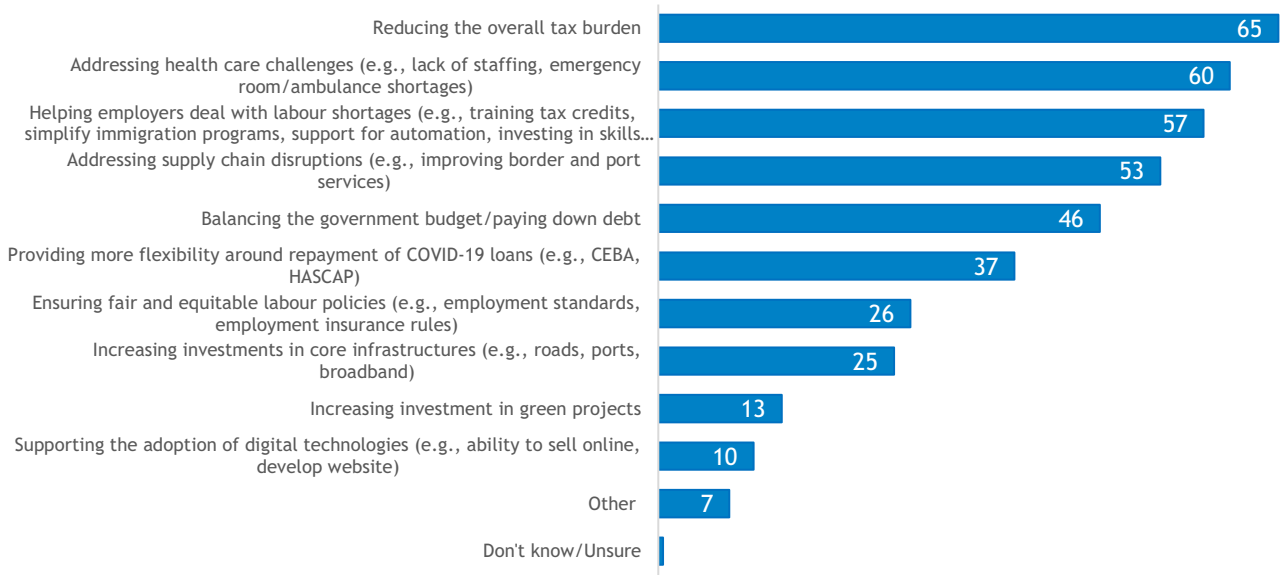
While by no means a panacea for the myriad challenges facing Canada's health care system, reducing physician red tape is a measurable, concrete action that governments can take. CFIB recommends that other provincial and territorial governments work with their respective medical associations to estimate the administrative burden and its impact in their jurisdictions, identify key red tape irritants to resolve, and set measurable targets to reduce physician red tape.

Background

The COVID-19 pandemic put a spotlight on Canada's health care system and its limitations. Many businesses were subject to closures and restrictions imposed to protect health care system capacity, with devastating impacts on their operations. And of course, as individual users of the health care system, small business owners care about the availability of health care services. They, and their employees, are directly impacted by challenges that limit the ability to access care - for example, physician shortages. In a recent survey, when asked what priorities they would most like governments to focus on, 60% of small business owners selected "addressing health care challenges," making it their second-highest priority (Figure 1).

Figure 1

Heading into the fall, what would you most like governments to focus on? (% of response)



Source: CFIB. Your Voice survey. September 8-26, 2022. Final results. CAN n = 3,677.

The Angus Reid Institute recently found that half (50%) of Canadians either don't have a family doctor or can't get a timely appointment with the one they have[4]. Meanwhile, wait times for diagnostic tests and medical procedures are growing longer. According to the Fraser Institute, Canadians are waiting for an estimated 1.2 million procedures – and the median wait time between referral from a general practitioner to receiving treatment is 27.4 weeks in 2022, up from 25.6 weeks in 2021.[5] The data demonstrates the severity of the physician shortage in Canada and that demand for physician care clearly outstrips supply.

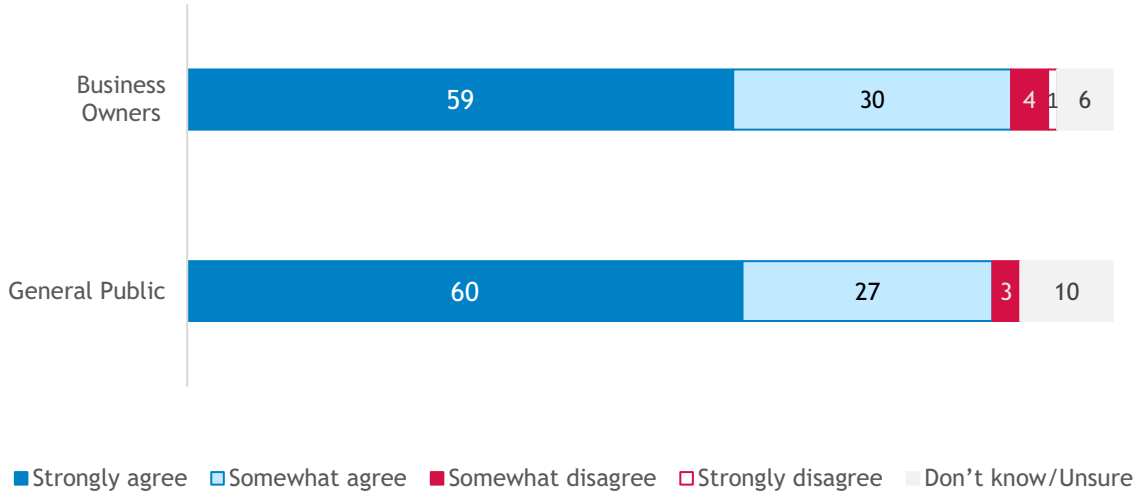
[4] Angus Reid Institute, *Spectrum of access to family doctor in Canada*. September 2022. https://angusreid.org/canada-health-care-family-doctors-shortage/

[5] Fraser Institute, *Waiting Your Turn: Wait Times for Health Care in Canada*. 2022. https://www.fraserinstitute.org/sites/default/files/waiting-your-turn-2022.pdf.

At the same time, small business owners – including doctors - understand the cost of red tape in time and lost productivity. It is perhaps not surprising that in a recent CFIB survey, 89% of respondents agreed with the statement: *Governments should reduce unnecessary paperwork for physicians so they can focus on patient visits* (Figure 2). Small business owners' opinions closely mirror those of the general public: 87% of respondents in a public opinion poll agree with the same statement (Figure 2).

Figure 2

Question: Governments should reduce unnecessary paperwork for doctors so they can focus on patient visits (% of response)



Source: 1) CFIB, Your Voice survey, November 10-28, 2022. Final results. CAN n = 3,030.
2) CFIB Red tape public opinion poll survey, November 18-21, 2022, Final results, n = 1,507.

Nova Scotia: leading the way in reducing red tape for physicians

In 2019, Nova Scotia began a landmark project to measure the provincial physician administrative burden, identify its sources, and better understand its impact. Nova Scotia's Office of Regulatory Affairs and Service Effectiveness led this work in collaboration with Doctors Nova Scotia. Together, they conducted a comprehensive survey of more than 500 Nova Scotia physicians, along with dozens of interviews, and embarked on a pilot project that included some key initiatives to reduce red tape for physicians.

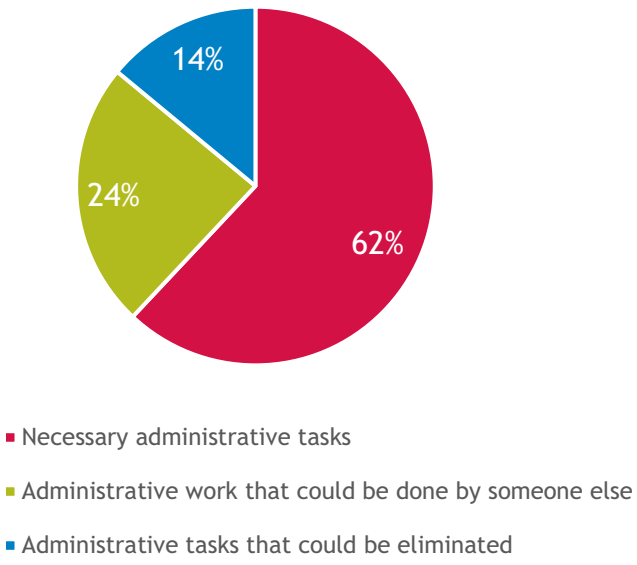
The survey results[6], published in September 2020, revealed that Nova Scotia physicians each spent more than the equivalent of one day per week[7] (10.6 hours weekly) on administrative work. This work

[6] Nova Scotia Office of Regulatory Affairs and Service Effectiveness, *Physician Administrative Burden Survey – Final Report*. September 2020. https://doctorsns.com/sites/default/files/2020-11/admin-burden-survey-results.pdf?_ga=2.265779338.421049101.1670431195-102944459.1669867174
[7] Assumes a typical 8-hour workday.

includes tasks such as: completing paperwork, forms, and doctor's notes; work related to certification, licensing, and privileging; billing and audits; managing their practice, scheduling, and attending administrative meetings. Cumulatively, this translates to Nova Scotia physicians spending 1.36 million hours per year on administrative work. Of this total, physicians in this study judged 62% of this work to be necessary and 38% to be unnecessary representing 518,000 hours (Figure 3). The unnecessary administrative work included tasks that could be completed by someone other than a physician (24%) and tasks that could likely be eliminated (14%) (Figure 3).

Figure 3

Share of necessary and unnecessary administrative work, Nova Scotia



Source: Nova Scotia Office of Regulatory Affairs and Service Effectiveness. "Physician Administrative Burden Survey – Final Report."

To quantify the impact of unnecessary administrative work on patient care, the Nova Scotia study calculated the total unnecessary administrative burden as an equivalent number of patient visits. The study concluded that if physicians in Nova Scotia were able to recoup the 518,000 hours per year spent on unnecessary administrative tasks, over 1.73 million additional visits with new or existing patients could be booked annually.

Equipped with this data, Nova Scotia's Office of Regulatory Affairs and Service Effectiveness then set a target to reduce the unnecessary physician burden by 10% by 2024 – eliminating approximately 50,000 hours of administrative work, equivalent to roughly 150,000 patient visits. Since the completion of the

survey, the Office has established a workplan with 15 short-, medium-, and long-term deliverables to reduce the physician administrative burden, and has reported publicly on its progress.[8]

Provincial and territorial medical associations (PTMAs) have long advocated for reducing the physician administrative burden, and some jurisdictions have signalled their intent to work with PTMAs to reduce red tape in health care. In November 2022, following a Doctors Manitoba report identifying the administrative burden as a key contributor to physician burnout,[9] the Manitoba government announced it would establish a task force to tackle this issue.[10] In 2021, the Ontario Medical Association (OMA) published the findings of its Burnout Task Force, which included a recommendation to streamline and reduce administrative work.[11] In June 2022, the OMA reported that the provincial government had agreed to form a bilateral working group to address the systemic issues contributing to burnout[12]. In British Columbia, Doctors of BC has recently created a "Burden Solutions Tool," an innovative framework for assessing physician demands and developing solutions, such as streamlining or eliminating unnecessary physician tasks.[13]

Estimating the physician administrative burden in Canada

According to the Canadian Institute for Health Information (CIHI), there were 93,998 physicians in Canada in 2021 (Appendix B, Table 1), with the greatest concentrations in Ontario (34,860), Quebec (22,451), and British Columbia (13,540).[14]

Using 2021 data, we extrapolated the results for Nova Scotia to all other provinces and territories to estimate the physician administrative burden across Canada. The methodology assumes that working conditions and administrative tasks are relatively similar across jurisdictions. Of course, there are notable differences based on practice settings; for example, rural or remote communities compared to urban centres, or hospital settings compared to private practice. There are also differences based on physician governance models and different entities doctors interact with – for example, regulatory bodies, health authorities, workers' compensation boards, and government departments. Finally, each province may have its own administrative requirements that differ from Nova Scotia's. However, these differences would be better captured by detailed provincial/territorial analyses, and are beyond the scope of this report, which is intended to provide estimates[15].

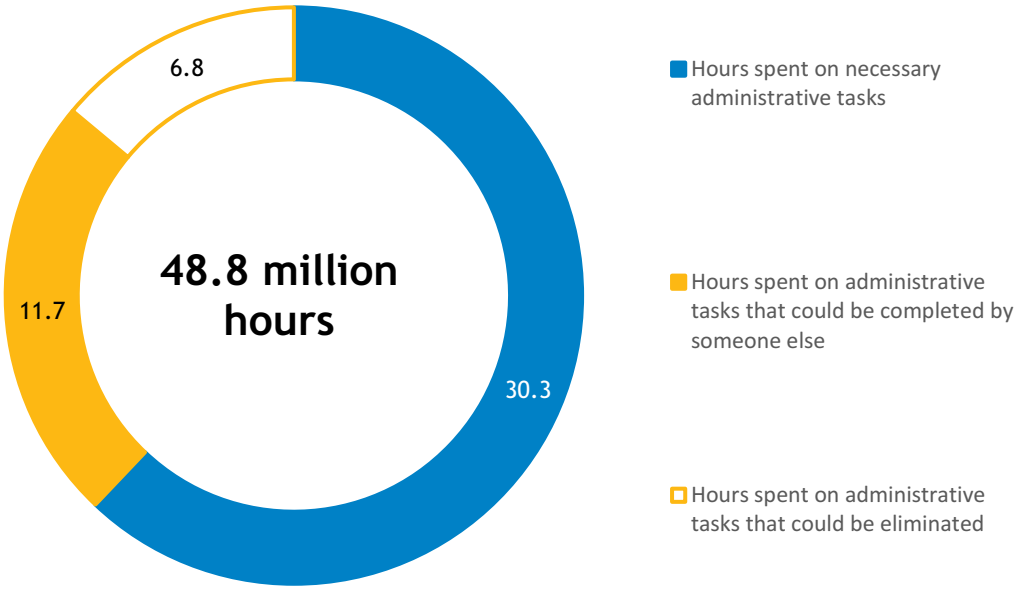
Using this methodology, we estimate that physicians in Canada cumulatively spend 48.8 million hours per year on administrative tasks. Of this total, 30.3 million hours could be considered necessary while 18.5 million hours are unnecessary (Figure 4). Using the Nova Scotia findings, we estimate that of the

[8] Nova Scotia Office of Regulatory Affairs and Service Effectiveness, *Actions to reduce unnecessary administrative burden for Nova Scotia's doctors*. November 2022. https://beta.novascotia.ca/sites/default/files/documents/1-3190/actions-reduce-unnecessary-administrative-burden-nova-scotias-doctors-en.pdf
[9] Doctors Manitoba, *Physicians in Manitoba*. October 2022. https://doctorsmanitoba.ca/news/physicians-in-manitoba-2022
[10] Government of Manitoba news release, November 10, 2022. https://news.gov.mb.ca/news/index.html?item=56864&posted=2022-11-10
[11] Ontario Medical Association, *Healing the Healers: System Level Solutions to Physician Burnout*. August 2021. https://www.oma.org/uploadedfiles/oma/media/pagetree/advocacy/health-policy-recommendations/burnout-paper.pdf
[12] Ontario Medical Association, *Ontario Medical Review*. June 29, 2022. https://www.oma.org/newsroom/ontario-medical-review/summer-2022/omas-journey-of-change/
[13] Doctors of BC, *Creating Space for Doctors to be Doctors: A Cumulative Impact Lens on Physician Demands*. December 2022. https://www.doctorsofbc.ca/sites/default/files/cumulative_impact_lens_on_physician_demands_-_policy_paper_2022.pdf
[14] Canadian Institute for Health Information, *Health Workforce in Canada, 2017 to 2021. Overview — Data Tables*. November 2022. https://www.cihi.ca/sites/default/files/document/health-workforce-canada-2017-2021-overview-data-tables-en.xlsx
[15] CFIB recommends other provinces and territories undertake work similar to Nova Scotia to accurately measure the physician administrative burden in their own jurisdictions.

time spent on unnecessary administrative tasks, 11.7 million hours of administrative work could be done by another professional, while 6.8 million hours could simply be eliminated. For further details on the methodology used in this report, refer to Appendix A.

Figure 4

Estimated cumulative time doctors spend on administrative work, Canada (millions of hours)



Source: CFIB estimates based on Nova Scotia findings

Figure 5 presents our overall estimates of the physician administrative burden in equivalent patient visits. Using Nova Scotia's findings for all other provinces and territories, we estimate that the time spent by physicians on administrative tasks that could be completed by someone else (11.7 million hours) is equivalent to 35.1 million patient visits. The estimated time spent on administrative tasks that could be eliminated (6.8 million hours) is equivalent to 20.5 million patient visits. Cumulatively, we estimate that the total time physicians spend on unnecessary administrative tasks is equivalent to 55.6 million patient visits annually.

Figure 5

Unnecessary administrative work and equivalent patient visits, Canada

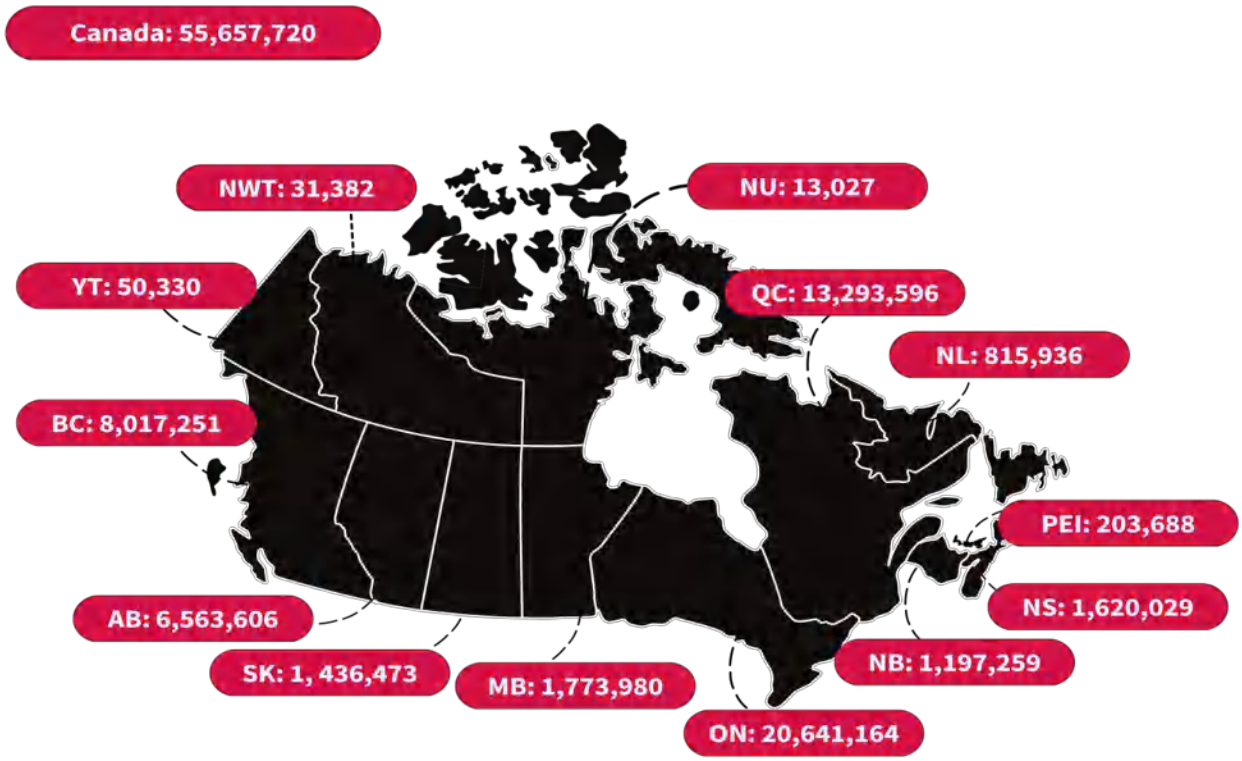
If governments across Canada were to commit to reducing physician red tape by 10%, as Nova Scotia has done, they could free up nearly 1.9 million hours of physician time - the equivalent of more than 5.5 million patient visits. While it is unlikely that all of the time saved would be converted directly into patient-care hours, this moderate reduction in physician red tape would also help reduce physician fatigue and burnout, potentially improving physician retention and the overall patient experience.

The total administrative burden can also be expressed as an equivalent number of physicians. If physicians were freed of this red tape burden, the time saved would be like adding 7,052 doctors to Canada's health care system – a 7.5% increase over the current physician complement.[16] A provincial breakdown of this figure is included in Appendix B.

Figure 6 shows the total estimated equivalent patient visits in each province and territory. Table 1 in Appendix B shows the total estimated administrative burden in each province/territory and the equivalent number of patient visits. At a provincial level, the province of Ontario, with its large number of physicians, would benefit most from a significant reduction in physician red tape. In Ontario, the estimated physician administrative burden is equivalent to 20.6 million patient visits. This is followed by the province of Quebec (13.2 million visits) and British Columbia (8 million visits per year).

Figure 6

Total patient visits that could be scheduled if governments eliminated physician red tape (number of visits, by province/territory)[17]



[16] The Canadian Medical Association estimates physicians work an average of 53.7 hours per week (https://www.cma.ca/sites/default/files/2022-08/NPHS_final_report_EN.pdf). Assuming 49 work weeks per year, this means each physician works 2,631 hours per year. The total unnecessary administrative burden (18.5 million hours) divided by 2,631 hours worked per physician each year is the equivalent of 7,502 physicians working full time for a year.

[17] Estimated patient visits as depicted in this image are derived from extrapolating the results of Nova Scotia's Physician Administrative Burden survey results to all other provinces and territories (see Appendix A, Methodology). "Red tape" includes both tasks that could be completed by someone other than a physician and tasks that could be eliminated.

Reducing physician red tape

Once the red tape burden and its impact had been quantified, Nova Scotia set a target to reduce the administrative burden and identified actions it would take to meet the target. To have the biggest impact, Nova Scotia focused on reducing or streamlining duplicative or overly complex forms, improving out-of-date processes, and working to ensure doctors were not doing tasks that could be completed by other staff. Nova Scotia's Office of Regulatory Affairs and Service Effectiveness identified key red tape irritants (*specific* forms, policies, and processes) and worked with multiple partners, including Doctors Nova Scotia, the Department of Health and Wellness, the province's two health authorities, the Workers' Compensation Board, and numerous other government departments to develop solutions.[18]

For example, doctors in Nova Scotia identified medical assessment for the Employment Support and Income Assistance Program (sometimes called the "blue form") as a frequent red tape irritant. Doctors estimated that they spent 60,000 hours per year completing the form; the form was old and out of date, questions were redundant or unclear, and it had to be filled out frequently (often in its entirety, even when only small updates were necessary).

With the support of the Department of Community Services and input from physicians, the Office of Regulatory Affairs and Service Effectiveness worked to update, streamline and improve this form. Improvements included adding clarity to necessary questions and eliminating redundant questions, consolidating two forms into one, parsing the form so that case workers could select only the sections of the form that they require, and providing policy details in an appendix to explain the program and clarify common misperceptions.

In addition, as Nova Scotia went through this process, it came to light that the fee paid to physicians for completing the medical assessment had not changed in over 25 years. At the request of Doctors Nova Scotia, the Department of Community Services increased the fee to better reflect the time involved in completing the assessment.

Testing conducted by the Office and their partner department suggest that the new form is 10-30%[19] faster to complete, depending on the specific circumstances of the patient. As a matter of practice, the Office prefers to err on the conservative side when generating estimates, and so for the purposes of measuring this improvement initiative, they are assuming a 10% overall time savings, which translates to about 6,000 hours per year, the equivalent of roughly 18,000 patient visits.

Nova Scotia's Office of Regulatory Affairs and Service Effectiveness tracks and reports on its progress with these initiatives, with another progress report expected in 2023. On an ongoing basis, the Office reaches out to other entities (government departments, health authorities, etc.) to identify additional or emerging red tape irritants. CFIB recommends that provincial and territorial governments take

[18] Nova Scotia Office of Regulatory Affairs and Service Effectiveness, *Actions to reduce unnecessary administrative burden for Nova Scotia's doctors*. November 2022. https://beta.novascotia.ca/sites/default/files/documents/1-3190/actions-reduce-unnecessary-administrative-burden-nova-scotias-doctors-en.pdf

[19] Work is still underway to validate these measurements with physicians directly.

similar action to identify key red tape irritants in their jurisdictions, implement solutions, and publicly report on progress.

Recommendations

CFIB recommends that provincial and territorial governments:

1. **Measure the total physician administrative burden**. Governments should work with their provincial/territorial medical associations and consult with physicians to quantify the total physician administrative burden. The total administrative burden measured should specify how many hours are spent on both necessary and unnecessary administrative tasks. Of the unnecessary tasks, governments should identify both the portion of administrative work that could be completed by someone else, and the portion that is wholly unnecessary and could be eliminated.

2. **Identify the *impact* of the physician administrative burden**. For example, Nova Scotia's study (and this report) quantifies the impact of physician red tape in terms of patient visits, which clearly and concretely shows the effect of unnecessary administrative tasks. There is an impact on physician fatigue and burnout that should be examined.

3. **Identify the sources of physician administrative burden and top irritants to resolve**. Are there particular forms or processes that physicians frequently cite as unnecessary and/or burdensome? For example, eliminating or modifying a form that is filled out tens of thousands of times annually can have a significant cumulative impact.

4. **Set a reduction target (such as 10%)** and identify short, medium, and long-term actions to achieve the target. Publicly report on progress annually.

5. **Assign responsibility for physician red tape reduction to a specific entity with dedicated resources to begin the work.** Nova Scotia's success with these initiatives is in part due to the structure of the Office of Regulatory Affairs and Service Effectiveness as an entity that can work across government departments with a mandate to reduce red tape. For these initiatives to succeed, an individual or group must be empowered and resourced to do this work as a key priority.

Appendix A: Methodology

To estimate the administrative burden experienced by physicians across all jurisdictions, CFIB extrapolated data from an existing study from Nova Scotia[20]. Particularly the following data points were used:

- Estimated number of hours spent by Nova Scotia Physicians on administrative tasks per week (10.6 hours).
- Estimated average hours worked per week by the Canadian Medical Association (53.7 hours/week)[21]
- Number of weeks considered in a year in the Nova Scotia (49 weeks).
- Percentage of administrative work considered necessary (62%).
- Percentage of administrative work considered unnecessary (38%).
    - Percentage of unnecessary administrative work that could be done by someone else (24%).
    - Percentage of unnecessary administrative work that could be eliminated (14%).
- Estimated time for patient visits is equivalent to 20 minutes.[22]

This extrapolation assumes that working conditions and administrative tasks are relatively similar across jurisdictions. Of course, there are notable differences based on practice settings; for example, rural or remote communities compared to urban centres, or hospital settings compared to private practice, and each province may have its own requirements that differ from Nova Scotia.

CFIB directly applied the data from the Nova Scotia study to the total number of physicians in each province/territory.[23] Note, these estimates are illustrative and provincial/territorial governments are encouraged to conduct a more detailed analysis of the physician administrative burden in their respective jurisdictions.

Angus Reid Survey Data:

These are the findings of a survey commissioned by CFIB. The survey was conducted from November 18 to 21, 2022, among a nationally representative sample of n=1,507 Canadians who are members of the online Angus Reid Forum, balanced and weighted on age, gender, region and education. For comparison purposes, a probability sample of this size has an estimated margin of error of +/- 2.5 percentage points, 19 times out of 20. The survey was conducted in English and French.

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[20] Nova Scotia Office of Regulatory Affairs and Service Effectiveness, *Physician Administrative Burden Survey Final Report*. September 2020. https://doctorsns.com/sites/default/files/2020-11/admin-burden-survey-results.pdf
[21] Canadian Medical Association, *National Physician Health Survey*. August 2022. https://www.cma.ca/sites/default/files/2022-08/NPHS_final_report_EN.pdf
[22] The Nova Scotia Office of Regulatory Affairs and Service Effectiveness consultants estimated that a typical visit is about 18 minutes, which was rounded to 20 minutes to offer a conservative estimate.
[23] Canadian Institute for Health Information, *Health Workforce in Canada 2017 to 2021: Overview — Data Tables*. November 2022. https://www.cihi.ca/sites/default/files/document/health-workforce-canada-2017-2021-overview-data-tables-en.xlsx

Appendix B: Provincial/Territorial Estimates of Physician Administrative Burden and Equivalent Patient Visits[1]

	NL	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YT	NWT	NU	Canada
Total number of physicians-2021[2]	1,378	344	2,736	2,022	22,451	34,860	2,996	2,426	11,085	13,540	85	53	22	93,998
Total time spent on administrative work hours/year)[3]	715,733	178,673	1,421,078	1,050,226	11,661,049	18,106,284	1,556,122	1,260,064	5,757,549	7,032,676	44,149	27,528	11,426	48,822,561
Unnecessary administrative work (38%) (hours/year)[4]	271,978	67,895	540,009	399,086	4,431,198	6,880,387	591,326	478,824	2,187,868	2,672,416	16,776	10,460	4,342	18,552,573
Administrative work that could be done by someone else (24%) (hours/year)[5]	171,775	42,881	341,058	252,054	2,798,651	4,345,508	373,469	302,415	1,381,811	1,687,842	10,595	6,606	2,742	11,717,414
Administrative work that could be eliminated (14%) (hours/year)[6]	100,202	25,014	198,950	147,031	1,632,546	2,534,879	217,857	176,409	806,056	984,574	6,180	3,853	1,599	6,835,158
Equivalent number of patient visits for total time spent on unnecessary admin work[7]	815,936	203,688	1,620,029	1,197,259	13,293,596	20,641,164	1,773,980	1,436,473	6,563,606	8,017,251	50,330	31,382	13,027	55,657,720
Equivalent number of patient visits for administrative work that could be done by someone else[7]	515,328	128,645	1,023,176	756,163	8,395,956	13,036,524	1,120,408	907,246	4,145,435	5,063,526	31,787	19,820	8,227	35,152,244
Equivalent number of patient visits for administrative work that could be eliminated[7]	300,608	75,043	596,853	441,095	4,897,641	7,604,639	653,571	529,227	2,418,171	2,953,724	18,543	11,562	4,799	20,505,475
10% target: number of hours of unnecessary administrative work to be reduced [8]	27,198	6,790	54,001	39,909	443,120	688,039	59,133	47,882	218,787	267,242	1,678	1,046	434	1,855,257
Equivalent number of patient visits if 10% reduction target is achieved[9]	81,594	20,369	162,003	119,726	1,329,360	2,064,116	177,398	143,647	656,361	801,725	5,033	3,138	1,303	5,565,772

Equivalent number of physicians for total time spent on unnecessary administrative work[10]	103	26	205	152	1,684	2,615	225	182	831	1,016	6	4	2	7,052

Notes:

1. To estimate the administrative burden and equivalent patient visits across jurisdictions, CFIB extrapolated data from an existing study from Nova Scotia: Nova Scotia Office of Regulatory Affairs and Service Effectiveness, September 2020. "Physician Administrative Burden Survey Final Report." https://doctorsns.com/sites/default/files/2020-11/admin-burden-survey-results.pdf.
2. Health Workforce in Canada 2017 to 2021: Overview — Data Tables. https://www.cihi.ca/sites/default/files/document/health-workforce-canada-2017-2021-overview-data-tables-en.xlsx
3. This estimate is made using the results from the above referenced Nova Scotia report (physicians reported 10.6 hours of administrative work per week) and assumes 49 working weeks in the year.
4. Of the total time spent on administrative work, physicians surveyed in Nova Scotia stated that 38% of their administrative work is unnecessary.
5. This estimate is based on Nova Scotia's findings (physicians surveyed stated that of their total administrative work, 24% could be done by someone else).
6. This estimate is based on Nova Scotia's findings (physicians surveyed stated that of their total administrative work,14% could be eliminated).
7. This estimate is made assuming a patient visit is equivalent to 20 minutes based on Nova Scotia's methodology.
8. This target has been set by Nova Scotia as a goal to be reached by 2024.
9. This estimate is made assuming a patient visit is equivalent to 20 minutes based on Nova Scotia's methodology.
10. This estimate is based on the Canadian Medical Association estimate of average hours worked per physician (53.7 hours/week) (https://www.cma.ca/sites/default/files/2022-08/NPHS_final_report_EN.pdf)) multiplied by 49 weeks in the year.

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TAB 29

Post-pandemic boom in billable services

Flu shots by province, 2013-14 TO 2022-23

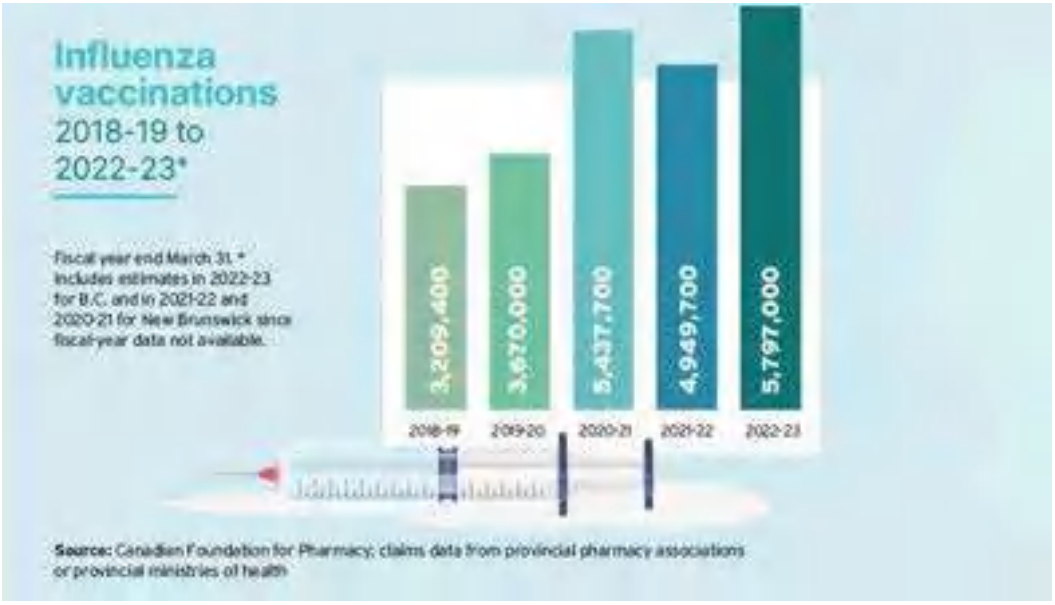
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
British Columbia	381,300	434,700	491,400	557,500	666,600	708,600	790,000	1,047,300	1,085,600	1,124,000
Alberta	340,000	487,000	475,300	533,000	491,400	724,600	871,100	1,099,900	898,300	971,200
Saskatchewan	-	-	54,600	90,400	118,100	157,300	190,600	232,700	171,100	188,600
Manitoba	-	-	56,000	79,100	107,200	120,000	166,900	184,600	172,500	179,500
Ontario	764,000	905,400	867,700	1,090,700	1,148,900	1,228,300	1,353,600	1,833,300	1,489,200	2,100,800
Quebec	-	-	-	-	-	-	-	672,300	580,000	648,000
New Brunswick	40,500	51,600	65,100	69,300	72,700	82,800	98,900	100,000	99,000	110,300
Nova Scotia	78,200	100,700	98,100	104,200	124,800	147,900	160,000	202,300	200,400	275,300
Prince Edward Island	-	-	5,000	5,300	26,800	31,100	31,100	44,800	33,000	37,000
Newfoundland & Labrador	-	2,800	2,800	3,800	7,200	8,800	9,800	81,300	70,400	87,300
Total	**1,626,000**	**1,980,200**	**2,075,400**	**2,481,100**	**2,938,000**	**3,309,400**	**3,670,000**	**5,437,700**	**4,979,700**	**5,197,000**

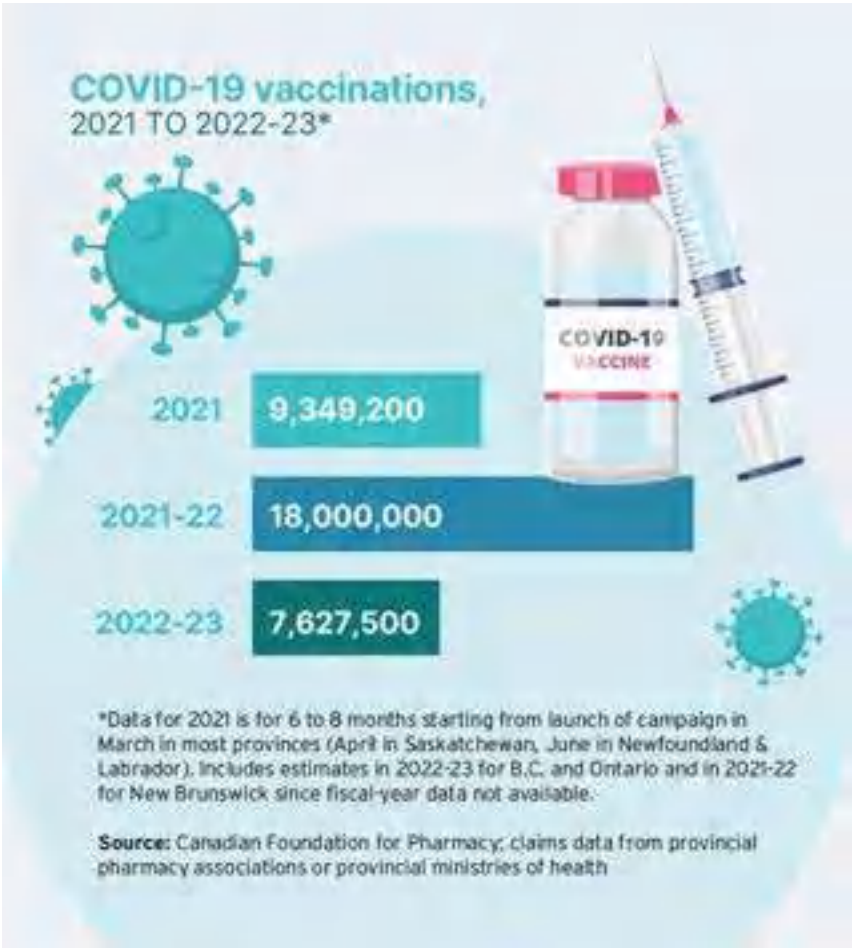
NOTES: In Newfoundland & Labrador, public funding limited to public plan beneficiaries until 2020-21.
Fiscal year end Mar. 31. *Includes estimates in 2022-23 for B.C., and in 2021-22 and 2020-21 for New Brunswick since fiscal year data not available.
Source: Canadian Foundation for Pharmacy; claims data from provincial pharmacy associations or provincial ministries of health.

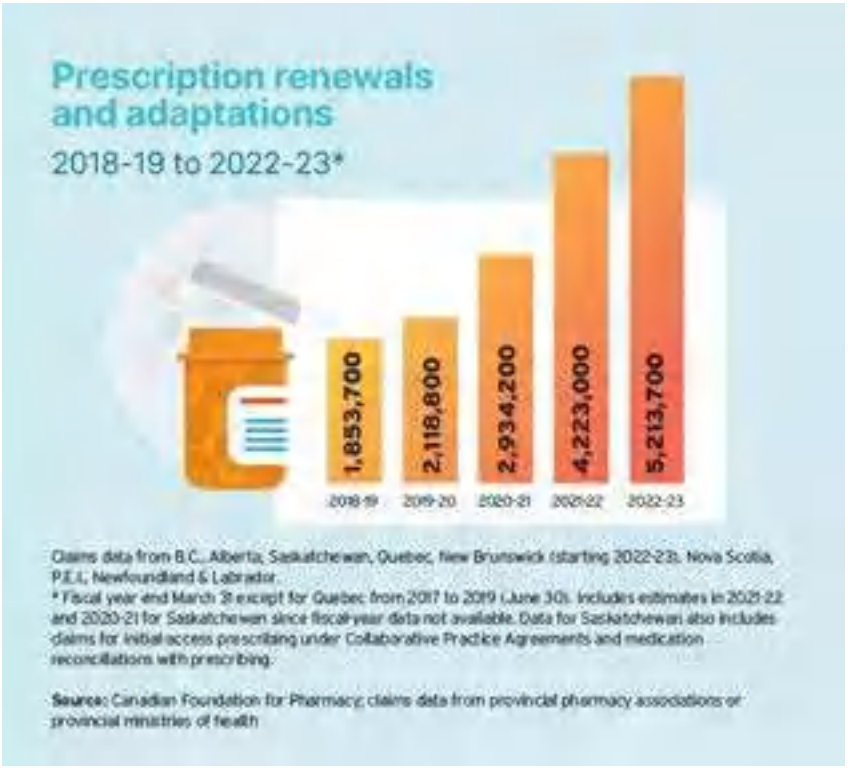
Post-pandemic boom in billable services

By Karen Welds(https://cfpnet.ca/author/kr7nwldz_cfpmv8zm1v0/)
March 28, 2024(https://cfpnet.ca/2024/03/28/)

Pharmacists have set a record for influenza vaccinations and a scorching pace for prescription renewals and adaptations, according to the latest full year of claims data from provincial ministries of health. Almost every province reported significant gains—with Quebec leading the way for the second year in a row.


Influenza vaccinations
2018-19 to 2022-23*
Fiscal year end March 31. * Includes estimates in 2022-23 for B.C. and in 2021-22 and 2020-21 for New Brunswick since fiscal-year data not available.
3,209,400
3,670,000
5,437,700
4,949,700
5,797,000
2018-19
2019-20
2020-21
2021-22
2022-23
Source: Canadian Foundation for Pharmacy; claims data from provincial pharmacy associations or provincial ministries of health


COVID-19 vaccinations,
2021 TO 2022-23*
COVID-19
VACCINE
2021
9,349,200
2021-22
18,000,000
2022-23
7,627,500
*Data for 2021 is for 6 to 8 months starting from launch of campaign in March in most provinces (April in Saskatchewan, June in Newfoundland & Labrador). Includes estimates in 2022-23 for B.C. and Ontario and in 2021-22 for New Brunswick since fiscal-year data not available.
Source: Canadian Foundation for Pharmacy; claims data from provincial pharmacy associations or provincial ministries of health



The Canadian Foundation for Pharmacy gathers provincial claims data for pharmacy services every year for its **Services Chart** (https://cfpnet.ca/publications/provincial-services-chart/). Below we highlight trends over the past five years or more for services that are publicly funded. All provinces operate with a fiscal year ending on March 31, therefore, unless otherwise stated, all data reported here are for the fiscal year ending on March 31, 2023. Numbers have been rounded to the nearest hundred.

Influenza vaccinations

The last few years have been a roller-coaster ride for flu shots in community pharmacies. During the first year of the pandemic, pharmacists (or other authorized pharmacy staff in some provinces, i.e., nurses, technicians and students) injected 48% more Canadians than the year before, or 5.4 million in 2020-2021 compared to 3.7 million in 2019-2020. Vaccinations then dropped by 9% in 2021-22, to 4.9 million, before climbing again, by 17%, to reach the new height of 5.8 million in 2022-23.

Note these numbers include estimates for B.C. in 2022-23 and for New Brunswick in 2021-22 and 2020-21 since final data for the fiscal year were not available for these time periods. Regionally, the biggest increase occurred in Ontario (30%). New Brunswick also recorded an increase well ahead of the national average of 17%, however the actual rate of increase is not reported since it is based on CFP's estimates for the previous two years.

COVID-19 vaccinations

The number of COVID-19 vaccinations in pharmacies plummeted by more than half (58%) in 2022-23, though the total of 7.6 million is still well ahead (by 31%) of flu vaccinations. Time will tell if this result is the baseline for annual COVID-vaccination volume in pharmacies following the initial year-long campaign in 2021-22, during which pharmacies administered just 18 million doses.

Note these numbers include estimates for B.C. and Ontario in 2022-23 and for New Brunswick in 2021-22, since final data for the fiscal year were not available from these provinces' ministries of health. Scanning the provinces, the biggest declines occurred in Alberta (-74%), Quebec -(71%), Nova Scotia (-70%) and Saskatchewan (-66%).

Prescription renewals & adaptations

In provinces where pharmacies can bill for prescription renewals and adaptations, claims jumped by 24%, to 5.2 million, following huge gains of 44% in 2021-22 and 39% in 2020-21.

Pharmacies in all provinces except Manitoba and Ontario can bill the government for renewals. Governments in P.E.I. and New Brunswick were the most recent to bring in funding, in October 2022 and October 2021, respectively.

All provinces except Manitoba, Ontario and New Brunswick can bill for adaptations. Pharmacies in Nova Scotia, P.E.I. and Newfoundland and Labrador can do so to a limited extent, for beneficiaries of public drug plans. Coming results for 2023-2024 will see a boost in Nova Scotia, following the expansion of funding to all residents in July 2023.

On the renewals front, claims increased 16% to reach 4.4 million. B.C. led the charge with a 67% surge in claims following the government's expansion of the program to include more medications in October 2022.

Quebec was at the forefront for adaptations, with claims more than tripling in 2022-23. Overall, claims more than doubled from 362,600 to 772,400. For the past two years, renewals outpaced adaptations by about 10 to one. That gap closed to about six to one in 2022-2023.

Paxlovid services

All provincial ministries of health have implemented programs that reimburse pharmacists for the prescribing and/or dispensing of Paxlovid for the treatment of COVID-19. The programs' components and fees vary widely, as detailed in the provincial summaries below and in **CFP's Services Chart** (https://cfpnet.ca/publications/provincial-services-chart/).

CFP was able to collect the first fiscal year of claims data for Paxlovid services from all provinces except Ontario. Overall, pharmacies in the nine provinces (i.e., excluding Ontario, where data was unavailable) billed for 98,000 Paxlovid services. That translates into an average of 14.5 interventions per pharmacy, based on pharmacy counts from the National Association of Pharmacy Regulatory Authorities.

British Columbia

The biggest headline for B.C. is the sharp rise in prescription renewals resulting from the program's expansion to include a wider range of medications, including for mental-health conditions. Renewals increased 67% to 460,100, from 276,000 in 2021-22.

Prescription adaptations also rose significantly, by 30% to reach 47,000, after two years of double-digit declines.

Another good news story in B.C. is the initiation of funding, in mid-October 2022, for the administration of drugs by injection. In less than six months, pharmacies billed for 99,800 drug injections, which is an average of 67 per pharmacy.

On the vaccinations front, final fiscal-year data for influenza and COVID-19 vaccines in B.C. were not available. CFP determined estimates based on the previous year's claims data and trending in other provinces. With that in mind, the estimates were 1.1 million flu shots in 2022-23, based on an increase of 10%, and 745,600 COVID-19 shots, based on a decline of 40%.

Final fiscal-year claims data for pneumonia vaccines appear to suggest that B.C. pharmacies helped the province achieve greater vaccine coverage several years ago, when numbers surged by 34% in 2019-20 and 44% in 2020-21. In total, 64,200 eligible persons were vaccinated in pharmacies during that two-year period. Pneumonia vaccinations then dropped by 54% in 2021-22, to 17,400, and by 24% in 2022-23, to 13,300.

Pharmacies' claims for the administration of other vaccines, such as for HPV and chicken pox, climbed by 26% to reach 45,200 in 2022-23.

Medication reviews in B.C. appear to have stumbled and stalled since the start of the pandemic. Billings for Standard medication reviews dropped 16% in 2020-21, from 196,100 to 165,600, recovered somewhat in 2021-22 with a gain of 7%, then fell again by 5% during the latest fiscal year, to 168,400 reviews. Pharmacist Consultation reviews tell a similar story, declining 28% to 12,500 in 2020-21, rebounding 13% to reach 14,200 in 2021-22, then dropping again 30% to 12,700. Selected pharmacies in B.C. can dispense Paxlovid, billing $30 per assessment plus the usual dispensing fee. They can also bill $25 for follow-ups. In 2022-23, B.C. pharmacies were reimbursed for 10,500 assessments and 12,400 follow-ups.

Alberta

Influenza vaccinations in Alberta pharmacies rallied in 2022-23, increasing 8% to 971,200. The previous year's decline of 18% followed a record-setting year of 1.1 million flu shots in 2020-21. COVID-19 vaccinations were down 74%, reflecting the end of the initial campaign. Nonetheless, Alberta pharmacies administered an impressive 1.1 million COVID-19 vaccines.

Other vaccines also saw strong growth: pneumonia vaccinations were up 20% in 2022-23, to 15,800—although this is still below the record highs of 26,200 in 2020-21 and 23,400 in 2019-20. And Tdap injections rose 13% to 13,300, a continuation of several years of growth.

Prescription renewals grew 12% to reach a new high of 1.3 million in 2022-23. Adaptations rallied after two years of double-digit declines: claims increased 26% to 180,600 in 2022-23, coming close to the pre-pandemic high of 191,500.

Prescribing services to initiate or manage therapy rose sharply, by 54%, in 2022-23. Pharmacists with additional prescribing authority (APA) submitted a record high of 492,000 claims, following two years of reduced activity during the pandemic (-9% in 2021-22 and -21% in 2020-21).

After stuttering during the second year of the pandemic, comprehensive annual care plans (CACPs), a program unique to Alberta, rallied significantly. The 9% decline in 2021-22 was soundly set aside with a gain of 29% in 2022-23, resulting in a new annual high of 380,400. CACP follow-ups jumped 40% after a 12% decline, for a record high of 1.8 million in 2022-23. This translates into an average of 4.7 follow-ups per CACP. (Note: Claims for CACPs include assessments for minor ailments that result in a prescription.) In Alberta, pharmacists with APA can prescribe Paxlovid and bill the usual $25 per assessment for initiating a prescription. To dispense Paxlovid, pharmacies can bill $10 in addition to the usual dispensing fee. Separate claims data for Paxlovid prescriptions was not available. Data for dispensing the drug, however, was available, with 12,800 claims submitted.

Saskatchewan

Influenza vaccinations in Saskatchewan did not, unlike all other provinces, rally in 2022-23. Instead, claims dropped by 5%, on the heels of a 24% decline in 2021-22. The net result is 168,600 flu shots in 2022-23, well below the pre-pandemic number of 190,600.

COVID-19 vaccinations fell by 66%; however, this is consistent with other provinces. Saskatchewan pharmacies administered 214,400 COVID-19 shots in 2022-23.

Saskatchewan uses the single category of “prescriptive authority” to capture claims data for prescription renewals, adaptations, prescribing under Collaborative Practice agreements and prescribing as part of medication reconciliations. Claims within this category decreased slightly (-2.4%) to 390,100 in 2022-23 compared to 399,800 in 2021-22. These results are still higher than before the pandemic, in 2019-20, when pharmacies submitted 334,400 claims.

Assessments for minor ailments rallied somewhat in 2022-23, increasing 13% to 36,400 after a 17% decline (to 32,300) in 2021-22. The highest result was in 2019-20, when 38,800 claims were made. In Saskatchewan, as in Alberta, pharmacists can bill only for assessments that result in a prescription. All other provinces pay for assessments whether or not a prescription results. In Saskatchewan, pharmacists can bill $18 per assessment to prescribe or make a referral for Paxlovid, plus $20 to dispense. In 2022-23, 491 claims for assessments were submitted (dispensing claims not available).

Manitoba

Flu shots in Manitoba pharmacies increased 4% in 2022-23 to 179,500 after a 7% decline in 2021-22. Before the pandemic, during the 2019-20 fiscal year, pharmacists had administered 144,900 flu shots. COVID-19 vaccinations dropped to 300,700 from 445,800 in 2021-22, a difference of -33%.

Pneumonia vaccinations decreased for the second year in a row, by 4% in 2022-23 to 3,200 and 10% in 2021-22 to 3,400. Meanwhile, Tdap vaccines are seeing explosive growth. Claims jumped 72% to reach 5,900 vaccinations in 2022-23, after almost quadrupling the previous year, from 900 claims in 2020-21 to 3,400 in 2021-22. Manitoba pharmacies can bill $15 or the usual dispensing fee, whichever is lower, to dispense Paxlovid. They submitted 11,200 claims in 2022-23.

Ontario

Influenza vaccinations in Ontario pharmacies surpassed 2 million for the first time, with a final tally of 2.2 million. The province also posted the highest year-over-year increase in 2022-23, gaining 30% versus the national average of 17%.

For COVID-19 vaccinations, claims data for the fiscal year was not available. Instead, CFP received data for the calendar years of 2022 and 2023, which it used to estimate a result for the fiscal year of 2022-23. With that in mind, CFP estimates that COVID-19 shots declined by almost half (46%), in Ontario, resulting in 3.9 million doses administered compared to 7.2 million in 2021-22.

After very little growth in 2021-22, medication reviews returned to double-digit growth rates in Ontario. MedsCheck Annual reviews jumped 31% to reach 657,800 in 2022-23, and MedsCheck for Diabetes rose even higher, by 48% to 187,800. Follow-ups also made impressive gains, although their frequency still falls well short of at least one follow-up per review. Pharmacies billed for 112,800 MedsCheck Annual follow-ups in 2022-23, an increase of 30%, and for 83,900 MedsCheck for Diabetes follow-ups, well over double the number in 2021-22 (32,000).

Claims for Pharmaceutical Opinions grew after two years of substantial decline. Available to beneficiaries of the provincial drug plan only, pharmacies in Ontario submitted 209,300 claims in 2022-23, up 20% from 175,200 in 2021-22. Before the pandemic, the claims count was 337,600.

Ontario's minor ailments program launched on January 1, 2023. In just three months —that is, during the last three months of the fiscal year—pharmacists conducted and billed for 135,100 assessments. Pharmacists in Ontario can bill $19 per assessment for Paxlovid therapy, whether or not prescribing resulted, plus $13.25 to assess the medication. Unfortunately, claims data was not available for the 2022-23 fiscal year.

Quebec

Pharmacies in Quebec administered 648,000 influenza vaccinations in 2022-23, 12% more than in 2021-22 (579,700). Unlike all other provinces, the total had not gone down significantly during the 2021-22 fiscal year, instead posting a small gain of 1%.

Consistent with other provinces, COVID-19 vaccinations dropped precipitously in 2022-23 in Quebec, by 71% to 516,000 (from 1.8 million in 2021-22).

The administration of other vaccines saw impressive growth—more than quintupling to 370,000 claims, compared to 65,400 in 2021-22. It's worth noting that the shingles vaccine did not factor into this tally, since public funding began in May 2023, after the fiscal year ended.

As of January 1, 2021, expanded pharmacy services in Quebec were no longer subject to the co-pays and deductibles of province's universal drug plan. Claims data since then dramatically tell the story of how the removal of this financial barrier has increased uptake of pharmacists' services.

Even though only three months remained in the 2020-21 fiscal year, claims skyrocketed 108% for prescription renewals (to 683,500) and 150% for adaptations (40,000). The trajectories were even steeper in 2021-22: renewals surged by 156% to 1.7 million and adaptations more than quadrupled to 179,400.

In 2022-23, adaptations continued their impressive ascent, more than tripling to reach 585,000. While renewals appear to be levelling off, edging forward just 2%, the latest total remains impressive at 1.8 million.

Pharmacists' assessments for minor ailments also continue to blaze trails, growing 76% in 2022-23 to 822,000 following an upsurge of 113% in 2021-22 (467,100).

Lastly, pharmacists in Quebec have the authority to assess and prescribe to help patients with certain chronic conditions reach therapeutic targets. While growth has not been as dramatic as for other services, it has been steady: in 2022-23, claims grew 11% to reach 310,600, following an increase of 17% in 2021-22 (278,800). Anticoagulation management is by far the top service billed, accounting for 74% of claims in 2022-23. In 2022-23, Quebec pharmacies could bill $22.31 per assessment for Paxlovid therapy (the fee has since increased to $23.43), whether or not a prescription resulted, and $10 plus the usual dispensing fee for dispensing. A total of 24,700 claims for assessments were submitted (dispensing data was not available).

New Brunswick

For the past two years, CFP has had to estimate or omit much of the data for New Brunswick due to a change in reporting by government. Specifically, the reports had combined claims data for flu and COVID-19 shots, and for renewals and minor-ailment assessments. Fortunately, for the 2022-23 fiscal year, the province's Ministry of Health supplied CFP with separate data for each service.

New Brunswick pharmacists administered 150,300 influenza vaccines in 2022-23, substantially more than CFP's estimates of 95,000 in 2021-22 and 100,000 in 2020-21. And we can say with certainty that this latest result is 52% more than the 98,900 vaccines administered in 2019-20, when separate data for flu shots was last available.

COVID-19 vaccinations totaled 289,500 in 2022-23 compared to CFP's estimate of 800,000 in 2021-22, which was based on separate government reporting for the two calendar years of 2021 and 2022.

Government funding for prescription renewals and assessments for uncomplicated urinary tract infections (UTIs) began in October 2021. Funding expanded to include assessments for shingles and contraception management in June 2022. The counts for these services were as follows for 2022-2023:

- 154,000 renewals
- 8,290 assessments for UTIs
- 640 assessments for shingles
- 520 assessments for contraception management

Pharmacists in New Brunswick can bill $20 per assessment for Paxlovid therapy, with or without prescribing, or to adapt, complete or correct an existing Paxlovid prescription. Just over 4,500 claims were made in 2022-23.

Nova Scotia

Pharmacists in Nova Scotia gave 17% more flu shots in 2022-23 to reach 235,300, topping the record set during the first year of the pandemic (212,300). During the year in between, flu shots dipped 5% to 201,400.

COVID-19 vaccinations plummeted to 394,500 from 1.3 million in 2021-22, a decline of 70%.

Prescription renewals rebounded, striding ahead 16% to 211,300 after stumbling 8% in 2021-22 to 182,400. Adaptations almost tripled, though the number was small to start at just under 800 in 2021-22, increasing to 2,000 in 2022-23. Substantial growth is expected in 2023-24 in response to expanded funding in June 2023 to make the service available to all residents (rather than beneficiaries of the public plan only).

Three years of claims data are now available for the two minor ailments funded by government, with double-digit gains all around. In 2022-23, assessments for UTIs grew 24% to reach 19,900 and claims for herpes zoster jumped ahead 37% to reach 1,700.

Meanwhile, initial assessments for contraception management grew just 5% in 2022-23 after tumbling 41% in 2021-22. Total claims were 3,300 in 2022-23 compared to 5,300 in 2020-21, year one of the program. Follow-ups increased 10% in 2022-23, to 1,900.

The first year of claims data for Nova Scotia's Community Pharmacist-led Anticoagulation Management Service shows that pharmacies submitted 18,160 claims in 2022-23. Selected pharmacies in Nova Scotia can dispense Paxlovid and bill $3.50 in addition to the usual dispensing fee. They submitted 3,100 claims in 2022-23.

Prince Edward Island

Influenza vaccinations increased 10% to 37,000 after a 25% decline in 2021-22 (33,600), and still well short of the high of 44,800 during the first year of the pandemic. COVID-19 vaccinations fell 43%, to 47,900 from 84,400.

In late February 2022, the provincial government began funding pharmacists to administer the shingles vaccine. By the end of fiscal year 2022-23, 19,700 eligible residents had been vaccinated.

Funding for prescription renewals began in mid-October 2022. In less than six months till the end of the fiscal year, pharmacies submitted claims for 16,800 renewals. Funding for UTI assessments also began in October 2022, resulting in 7,600 claims in less than six months. Pharmacists in P.E.I. can bill $25 per assessment for Paxlovid, with or without prescribing, as part of the province's minor-ailments program. Just under 900 assessments were billed. The dispensing of Paxlovid, for which pharmacies can bill $5 on top of the usual dispensing fee, resulted in 7,700 claims.

Newfoundland and Labrador

Pharmacists administered 87,300 flu shots in 2022-23, a 14% gain after a 15% loss in 2021-22 (76,400). COVID-19 vaccinations fell 44% to 82,300 from 146,800 in 2021-22. With this results, Newfoundland and Labrador joins B.C. and Quebec as the only provinces where vaccinations for flu outnumber those for COVID-19.

In 2022-23, claims for renewals declined 10% to 77,200 after almost tripling in 2021-22 (85,700). That number is expected to rebound and then some, as funding was expanded to include all residents in April 2023 (rather than beneficiaries of public drug plans only). Adaptations, for which funding remains limited to public-plan beneficiaries, surged 76% to 4,400 from 2,500. The government pays pharmacies $20 to assess for Paxlovid eligibility, and the usual fee for dispensing. Assessments totaled 5,300 in 2022-23 and the medication was dispensed 4,600 times.

TAB 30

OMA Ontario Medical Association

Healing the Healers: System-Level Solutions to Physician Burnout

Recommendations of the Ontario Medical Association Burnout Task Force

Aug. 18, 2021

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Executive Summary

Burnout among physicians has been described as an "epidemic"[1] and a "public health crisis."[2] It is a work-related syndrome characterized by emotional exhaustion, depersonalization or feelings of detachment and cynicism toward people and work, and a reduced sense of personal accomplishment.[1,3] At the individual level, burnout is associated with increased symptoms of fatigue and depression, suicidal ideation, substance use, and motor vehicle crashes.[1] Terms other than "burnout" have been suggested such as workplace exhaustion, physician burden, moral injury, or (to adopt a more positive focus) promoting physician wellness or resilience. This paper will use the term burnout, given its general usage and recognition within the physician community.

In 2019, the Ontario Medical Association (OMA) established a Burnout Task Force. Beyond documenting the rates of burnout, a key objective of the task force was to determine the causes of, and potential for, solutions for physician burnout. In March 2020 and March 2021, the task force surveyed Ontario physicians, residents and medical students about their levels of burnout and ranked the most significant contributors as well as the highest-priority solutions to address it. According to the surveys, just prior to the pandemic, 29 per cent of Ontario physicians had high levels of burnout with two-thirds experiencing some level of burnout. By March 2021, these rates had increased, with 34.6 per cent of Ontario physicians reporting high levels of burnout and almost three-quarters reporting some level of burnout.

Burnout occurs at the interface of the individual and system levels. While its impact is experienced at the level of the individual health-care professional - and physicians are well-trained to manage high variability and stress – the system itself causes most of the issues. No single intervention can fully address the problem. Solutions must be found to address the many complex and multi-faceted system-level issues. Priority action is required on the five evidence-based solutions ranked highest in our member surveys. To implement each solution, we present evidence-based recommendations that build on the fourth objective of the Quadruple Aim:[i] improving providers' work lives.

Beyond the longstanding burnout experiences of many Ontario physicians, the COVID-19 pandemic has also exacerbated burnout for many. As we begin to focus on post-pandemic recovery as a system, we need to prevent further burnout of our physicians and health care workers. This is important not only for their personal health and well-being, but to ensure there are sufficient health human resources available to address the system issues that the pandemic has created and compounded, including the backlog of surgical/procedural and diagnostic services, the preventive care and screening backlog, and the exacerbation of existing and new conditions, such as mental

[i] The Quadruple Aim is a framework to guide the development of an effective and sustainable health care system, focused on: "Improving the patient and caregiver experience; improving the health of populations; reducing the per capita cost of health care; and, improving the work life of providers". (Premier's Council on Improving Healthcare and Ending Hallway Medicine, "A Healthy Ontario: Building a Sustainable Health Care System", 2019, https://www.ontario.ca/document/healthy-ontario-building-sustainable-health-care-system/chapter-2-vision-health-care-ontario)

health and addiction conditions. From a health workforce perspective, failure to address burnout will push an already stressed system into crisis. Physicians retiring prematurely, reducing their workloads, changing their scope of practice, or leaving medicine entirely in response to burnout will exacerbate the situation for remaining physicians, resulting in a potential domino effect. Therefore, this paper speaks to needed long-term structural shifts that can begin as the system changes in the post-pandemic era and also discusses shorter-term actions that can help to address urgent needs.

To accomplish these solutions as a system, key stakeholders - including government, medical regulatory bodies, medical schools and residency training programs, health care organizations, digital health partners, and physicians, residents, and medical students themselves – must partner and co-ordinate. The OMA also recognizes that it has an important role to play, including engaging in meaningful collaboration with system partners.

Further, burnout in the health-care system is not exclusive to physicians. By working toward system-level change to improve burnout, our aim is for these impacts to benefit health-care workers throughout the system, recognizing different workers' unique experiences. Five solutions to burnout and specific recommendations to achieve them are presented in the infographic on the next page.

OMA Burnout Task Force Top 5 System-Level Solutions to Physician Burnout

1  Streamline and reduce required documentation and administrative work.

- Assess laws, regulations, policies, standards and documentation requirements collaboratively, regularly and systematically to evaluate the burden, complexity, redundancy and value to patient care of administrative requirements.
- Use medical scribes, particularly in relation to electronic documentation requirements.
- Explore technological innovations to reduce and simplify administrative demands, including billing administration.

2  Ensure fair and equitable compensation for all work done.

- Fairly compensate documentation and administrative work where it cannot be streamlined and reduced.
- Make remuneration equitable, particularly in light of the identified gender pay gap in medicine in Ontario.

3  Increase work-life balance by making organizational policy changes.

- Normalize flexible work arrangements for physicians who seek them, including options for part-time work, job-sharing, float pools and modified schedules.
- Enhance supports for medical student and resident work-life balance.
- Explore innovative strategies to enable work-life balance, such as time banking.

4  Promote the seamless integration of digital health tools into physicians' workflows.

- Implement interoperability standards so physicians can access patient records seamlessly and share patient health information among care providers.
- Involve physicians as key partners from the start in the procurement, design, implementation and ongoing optimization of digital health tools to ensure usability.
- Provide physicians with comprehensive and ongoing training on using digital health tools, beginning in medical school.
- Provide physicians with easily accessible and ongoing technical support.

5  Provide institutional supports for physician wellness.

- Support and promote a workplace culture that prioritizes and promotes physician wellness.
- Regularly evaluate levels of physician burnout within organizations using validated tools to understand burnout levels and implement necessary changes.
- Co-ordinate and implement proven individual-level interventions for physicians.

Introduction

Burnout is a major system-level issue that was affecting physicians, residents and medical students[ii] even before the onset of the COVID-19 pandemic. In the 2018 National Physician Health Survey conducted by the Canadian Medical Association, nearly one-third of physicians and residents reported high levels of burnout.[4] The 2021 Medscape National Physician Burnout & Suicide Report found that for 79 per cent of U.S. physician respondents, burnout began before the start of the COVID-19 pandemic.[5] There has been a dearth of Ontario-specific data on physician burnout; however, specialty-specific research has demonstrated high levels of burnout amongst physicians.[6,7] This is reflected in the personal experiences shared by the Ontario Medical Association (OMA) membership over the years.

Burnout is primarily defined as a work-related syndrome characterized by three dimensions: emotional exhaustion; depersonalization, or feelings of detachment and cynicism toward people and work; and a reduced sense of personal accomplishment.[1,3] It has been conceptualized as a "continuous variable," with different individuals experiencing varying degrees of burnout severity in the three dimensions.[8] The World Health Organization (WHO) has added burnout to the 11th Revision of the International Classification of Diseases (ICD-11) as an occupational phenomenon. The WHO definition specifically states that burnout results from "chronic workplace stress that has not been successfully managed" and emphasizes that "burnout refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life."[9] This definition highlights that burnout is caused primarily by workplaces, and not individuals. Workplace stressors include inefficient work processes and environments, clerical burden, excessive workloads, work-home conflicts, lack of control, lack of autonomy, lack of meaning at work, poor organizational support structures, and leadership culture.[1]

Burnout has been referred to as both an "epidemic"[1] and a "public health crisis."[10] The magnitude of burnout as a problem is evident in its impact on physicians, patients, and the health-care system. At the personal level, physician burnout has been associated with increased depression, suicidal ideation, substance use and motor vehicle crashes.[1] At the patient level, it has been associated with poor patient outcomes, including lower quality of care and increased medical errors.[1] However, researchers have stated that "these associations do not prove that burnout affects patient care"[1] and that further prospective studies are needed to determine if there is causality.[11] At the health-care system level, burnout has been associated with reduced physician productivity, increased physician turnover (and potentially diminished patient access to care as a result) and increased costs for the system.[1,12] As one seminal paper on physician burnout states: "one can't have a high performing health-care system if physicians working within it are not well."[10]

In recent years, there has been increasing recognition that the root causes of burnout extend beyond deficits in individual resilience to

[ii] From here on, this paper refers to "physician burnout" and "Ontario's doctors" for ease of reference. These terms encompass residents and medical students for the purposes of this paper, unless otherwise specified. However, it is acknowledged that medical students may not identify themselves with the term "physician".

include system-level problems. This recognition has brought a shift in potential solutions. The system-level refers to factors and influences at the health-care system level. In the context of burnout this includes - but is not limited to - legislative and regulatory requirements, policies and processes, culture, education and training programs, practice environments, clinical workflows, and the various actors that comprise the system, such as government, accrediting and regulatory/licensing bodies, healthcare institutions and organizations, medical schools and residency training programs, organizational leadership, technology vendors, health-care professionals and teams, and patients.

While some burnout literature refers to the dichotomy between individual-level and organizational-level interventions, for the purpose of this paper, the system-level encompasses the organizational-level as well. Calls to action have recommended that the system "need[s] to stop blaming individuals and treat physician burnout as a system issue."[13] There has been further recognition that "burnout is a system issue" and there is a "need for a system-level strategy."[14] While it has been suggested that both individual- and system-level solutions are needed to combat burnout – "a shared responsibility of both health-care systems and individual physicians"[1] – the root causes of burnout have been identified at the system-level.[10,15] Organizational-level interventions have been found to be more effective at reducing burnout than individual-level approaches,[15] a finding that supports the premise that burnout is a system-level problem. As such, while individual-level solutions may help alleviate certain symptoms of burnout, meaningful, long-term change has to occur at the system-level.

In 2019, in an effort to address the growing prevalence of physician burnout, the OMA identified it is a top priority for the profession and struck a Burnout Task Force. The task force is composed of five physicians with expertise and interest in physician burnout and well-being along with representatives from the OMA's Physician Health Program and OntarioMD. Its mandate was to make recommendations that would inform systemic changes to help prevent burnout, and encourage the development of a system to promote physician wellness. To help inform its system-level recommendations, the Burnout Task Force issued two identical surveys to the OMA membership: one in March 2020—just before the COVID-19 pandemic was declared in Ontario--and another in March 2021.

This paper presents the results of those surveys. It also makes recommendations related to the top five solutions to burnout based on the literature and identified by Ontario physicians through the surveys. These solutions are:

1. **Streamline and reduce required documentation and administrative work.**
2. **Ensure fair and equitable compensation for all work done.**
3. **Increase work-life balance by making organizational policy changes.**
4. **Promote the seamless integration of digital health tools into physicians' workflows.**
5. **Provide institutional supports for physician wellness.**

This paper has three key goals:

1. **Make recommendations related to the top five priorities identified by Ontario physicians where the system needs to start to address burnout.**

It is time to move beyond measuring and documenting burnout rates to addressing and preventing burnout. System-level solutions will take time to implement, but the system must begin to make meaningful the changes that are needed to prevent burnout and uphold the fourth objective of the Quadruple Aim: to

improve health-care providers' work lives. In the aftermath of the pandemic, the system is being overhauled. Therefore, now is the time to think about how we can improve our health-care system and not go back to the pre-pandemic ways that contributed to burnout. This paper serves as that starting point.

2. Contribute Ontario-specific data and research on physician burnout.

As a member-facing organization, the OMA represents medical students, residents, practising physicians and retired physicians across Ontario and is in a unique position to contribute data on burnout in the medical profession and to amplify the experiences of members facing burnout within the system.

3. Recognize burnout as a system-level problem in Ontario that requires system-level co-ordination among key health stakeholders to implement solutions.

Although this paper focuses on burnout in the context of physicians, we recognize that burnout is not unique to physicians: it affects all health-care workers. The solutions in this paper represent larger system changes that could address and prevent burnout for other health-care workers too, recognizing their unique circumstances.

Our survey findings revealed that the COVID-19 pandemic has exacerbated burnout for many physicians. As we begin to focus on post-pandemic recovery as a system, we need to prevent further burnout of our physicians and health-care workers, not only to preserve health-care workers' personal health and well-being, but to ensure there are sufficient health human resources available to address the system issues that have been compounded by the pandemic. These issues include backlogs in surgical/procedural and diagnostic services, backlogs in preventive care and screening, and the exacerbation of existing and new conditions, such as mental health and addiction conditions. From a health workforce perspective, failure to address burnout will push an already stressed system into crisis. Physicians retiring prematurely, reducing their workloads, changing their scope of practice, or leaving medicine entirely in response to burnout will exacerbate the situation for remaining physicians, resulting in a potential domino effect. Therefore, this paper speaks to needed long-term structural shifts that can begin as the system changes in the post-pandemic era and also suggests shorter-term actions that can help to address urgent needs.

OMA Burnout Task Force Survey

Survey Design and Methodology

On behalf of its Burnout Task Force, the OMA launched its first burnout survey in March 2020 and sent it out again in March 2021. The OMA sent these surveys to its entire membership – including medical students, residents, practising physicians and retired physicians – by email. It was received by 37,335 members in March 2020 and by 40,052 members in March 2021, representing the total number of members who had not opted out of receiving the standard communication.

Because the same survey was sent out in both March 2020 and March 2021, the task force was able to compare data on the impact of burnout from pre-pandemic to pandemic.

The purpose of the survey was to hear directly from Ontario physicians about the factors they believe contribute most to physician burnout and potential solutions, in order to inform system-level recommendations. The survey asked respondents to:

1) Rate their level of burnout, using a single-item, non-proprietary, self-defined burnout measure.[16]

2) Rank a provided list of the top 10 contributors to burnout from 1 (those they believe contribute most to physician burnout) to 10 (those they believe contribute least to physician burnout).

3) Rank a provided list of the top 10 solutions to burnout from 1 (those they would most like to see implemented) to 10 (those they would least like to see implemented).

4) Answer an open-ended question about other contributors or solutions to physician burnout that, in their opinion, the previous questions did not capture.

The top 10 contributors and solutions to burnout provided in the survey were based on those most commonly suggested and cited in the literature. Examples were provided for each (for illustrative purposes). The solutions complemented the contributors and were framed to ensure they could be implementable actions as informed by the research.

These four questions were followed by demographic questions about gender, age, years of practice, career stage, primary practice setting and location, and degree of rurality.

Results and analysis from both surveys are highlighted below.

Survey Results and Analysis

Survey response

In total, 1,407 members (3.8 per cent) responded to the March 2020 survey, and 2,649 members (6.6 per cent) responded to the March 2021 survey. The timing of the March 2020 survey launch (March 9 to 22, 2020) coincided with the declaration of the COVID-19 pandemic; survey participation was lower than anticipated, likely due to the events unfolding at that time. However, a large number of respondents still participated.

Overall level of burnout

As shown in Figure 1, the proportion of respondents who reported either persistent burnout symptoms or feeling completely burned out (i.e., levels 4 or 5) increased to 34.6 per cent in 2021 from 29 per cent in 2020. This range aligns with the Canadian Medical Association National Physician Health Survey (2018), that found 30 per cent of respondents reported high levels of overall burnout.[4] The proportion of respondents experiencing at least some level of burnout (i.e., levels 3, 4 and 5) increased to 72.9 per cent in 2021 from 66 per cent in 2020. We can conclude that physicians faced significant burnout issues pre-pandemic, and that the pandemic exacerbated them.

Burnout Level	March 2020 Response Rate (%)	March 2021 Response Rate (%)
1. I enjoy my work. I have no symptoms of burnout.	4.6	5.0
2. Occasionally I am under stress, and I don't always have as much energy as I once did, but I don't feel burned out.	29.4	22.0
3. I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion.	37.0	38.0
4. The symptoms of burnout that I'm experiencing won't go away. I think about frustration at work a lot.	18.4	21.0
5. I feel completely burned out and often wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help.	10.6	14.0

Figure 1: Overall levels of burnout reported by survey participants.

A demographic analysis of the responses pointed to some important differences in how physicians experience burnout. As illustrated in Figure 2, certain physician groups such as female physicians reported experiencing a higher level of burnout on average in both 2020 and 2021. Many of these findings are consistent with other studies that have found that physicians who are female, younger, and work in private practice are at increased risk of burnout.[8] However, it is worth noting however that results on the impact of demographic factors, such as gender and age have been inconsistent. There is a need to clarify "the roles these variables play in physician burnout and response to interventions."[1]

As further discussed in this paper, the differing experience of burnout amongst physicians underscores the need to assess the effectiveness of interventions for different physician groups. A "one-size-fits-all" approach may not succeed at combating burnout if certain groups are at heightened risk.

Demographic Measure	Mean Results – March 2020 (Reported higher level of burnout on average)	Mean Results – March 2021 (Reported higher level of burnout on average)
Gender	Female	Female
Age	45 to 54 years of age	35 to 44 years of age
Years of Practice	11 to 19 years of experience	6 to 10 years of experience
Career Stage	Established physician	Resident/fellow *(Note: this could have resulted from a smaller number of resident/fellow respondents)*
Specialty	Resident/fellow *(Note: this could have resulted from a smaller number of resident/fellow respondents)*	Fairly uniform across all specialties, with marginally higher result for general practice
Primary Practice Setting	Community-based interprofessional practice and community-based solo practice primary practice settings	Community-based group practice and academic hospital
Primary Practice Location	Northern Ontario	Northern Ontario and Greater Toronto Area
Degree of Rurality	Semi-rural areas	Suburban areas

Figure 2: Demographic analysis of higher average burnout levels.

Top 10 ranked burnout contributors
Figure 3 presents the research-based contributors to burnout as ranked from 1 (contributes most) to 10 (contributes least) by respondents in March 2020. The rankings of burnout factors remained almost exactly the same in 2021; the only difference is that the rankings for "practice environment for practising physicians" and "health system sustainability" were reversed in 2021 versus 2020.

The high ranking of reporting and administrative obligations in this survey is consistent with the findings of other surveys that have reported on the top contributors to burnout. For example, both the 2020 and 2021 Medscape National Physician Burnout & Suicide Reports found that physician respondents consistently reported "too many bureaucratic tasks" as contributing most to their burnout.[5,17]

Rank March 2020	Contributor
1	**Patient expectations/patient accountability,** including managing patient expectations, patients wishing for flexible modern solutions, threat of patient complaints or litigation, etc.
2	**Reporting and administrative obligations**, including documentation, charting, forms, etc.
3	**Health-system sustainability**, including increased clinical complexities, high patient loads, managing 'more with less', dealing with an aging population, compassion fatigue, and "moral injury" (i.e. feeling in a double-bind of wanting to put patient needs first, yet being unable to provide patients the care they need due to other constraints and demands beyond your control, etc.)
4	**Practice environment for practising physicians**, including work environment/conditions, programs/services/policies regarding physician health available in the workplace, psychological safety, lack of organizational support, civility, and small business management requirements (such as office space, staff hiring/training, supplies) etc.
5	**Culture of medicine**, including lack of leadership; stigma or discrimination regarding physician health, help-seeking and failure; lack of civility (i.e. physician-to-physician conflict and interprofessional conflict), etc.
6	**Compensation and financial pressures**, including current income, medical school/ residency debt, etc.
7	**Regulatory requirements**, including College of Physicians and Surgeons of Ontario policies and processes, licensing requirements etc.
8	**Technology**, including electronic medical records/electronic health record and digital health tools, etc.
9	**Lack of supports to promote wellbeing**, including management of long work hours with family/leisure time; inadequate sleep, exercise and nutrition; time for self-care and attending to personal medical needs; lack of benefits and paid sick/vacation time, etc.
10	**Practice and training environment for students/residents**, including work environment/ conditions, medical school education and training, residency training programs, psychological safety, civility, etc.

Figure 3: Top 10 ranked contributors to burnout as reported by participants.

Top 10 ranked solutions to burnout

Figure 4 presents the research-based solutions to burnout from 1 (would most like to see implemented) to 10 (would least like to see implemented) as ranked by respondents in March 2020. The rankings of burnout solutions remained almost exactly the same in 2021 as in 2020; the only difference is that the rankings for "institutional supports" and "public awareness campaign" were reversed in 2021 versus 2020. However, this difference was inconsequential. This suggests that the COVID-19 pandemic has not affected the solutions members would like to see implemented to address the long-standing issue of burnout.

The high ranking of compensation and increased work-life balance aligns with the findings of other surveys that have reported on prioritized solutions to burnout. For example, in the 2021 Medscape National Physician Burnout & Suicide Report, physician respondents also reported that "increased compensation to avoid financial stress" and a "more manageable work and schedule" would most help reduce their burnout.[5] The top-ranked solution was also consistent across all genders, years in practice (other than those in training), primary practice setting and location, and degree of rurality. The top five solutions and recommendations to implement them are explored in detail through the paper below.

Rank March 2020	Solution
1	**Streamline and reduce required documentation and administrative work.** This would include, but not limited to, regularly reviewing required documentation and forms with the goal of streamlining/minimizing them where possible, and researching the effect of administrative tasks on our health-care system in terms of quality, time, and cost.
2	**Ensure fair and equitable compensation for all work done.** This would include, but not limited to, benchmarking compensation methods against similar successful organizations to ensure they are fair and competitive, and ensuring reasonable compensation for leadership roles and time spent on administrative duties, such as forms and paperwork.
3	**Increase work-life balance by making organizational policy changes.** This would include, but not limited to, on-call policies, protected time to pursue personally meaningful aspects of work, benefits and paid vacation/sick days, locum support, etc.
4	**Promote the seamless integration of digital health tools into physicians' workflows.** This would include, but not limited to, interoperability between different systems, change management supports for physicians, and physician representation and/or involvement in digital health advancements and design.
5	**Provide institutional supports for physician wellness.** This would include, but not limited to, promoting compassionate leadership, instituting executive wellness officers, and promoting civility in the workplace.
6	**Launch a public awareness campaign around the role of physicians to help manage patient expectations.** This would include, but not limited to, highlighting the role the patient plays in managing their own care, and creating a set of principles and expectations for the physician/patient relationship.

Rank March 2020	Solution
7	**Position the profession to implement new regulatory processes and policies.** This would include, but not limited to, disseminating easily consumable, physician-friendly information on new processes and policies, consulting physicians on new processes and policies before implementation, and evaluating new processes and policies after implementation to ensure they are working in practice.
8	**Develop and promote resources for members on burnout prevention strategies.** This would include, but not limited to, training programs such as stress management training and communication skills training, and developing a toolkit for members with resources.
9	**Promote more dialogue and discussion within the workplace on burnout and physician wellness.** This would include, but not limited to, promoting the Quadruple Aim, normalizing help-seeking behaviour and promoting psychological safety.
10	**Reform medical school training.** This would include, but not limited to, promoting wellbeing, offering wellness and mental health supports, and more hands-on training earlier to help transition with expectations of being a practising physician.

Figure 4: Top 10 ranked solutions to burnout as reported by participants.

Differences between top ranked contributors and solutions

A comparison of the results in figures 3 and 4 highlights an interesting difference between the top contributors and solutions as ranked by physicians: the top 10 rankings do not align. In other words, there is a difference between what physicians say is causing their burnout and the solutions they most want implemented.

Some notable differences include:

- Physicians ranked patient expectations/ accountability as the number 1 contributor to burnout, but they ranked the corresponding solution (launching a public awareness campaign around the role of physicians to help manage patient expectations) as number 6. They ranked streamlining and reducing documentation and administrative work as the top solution.
- Respondents also ranked compensation, technology and lack of supports to promote well-being lower as contributors to burnout, but higher as solutions to it.

That said, there were also a few notable similarities:

- Respondents ranked administrative burden high as both a contributor (number 2) and a solution (number 1).
- They ranked regulatory requirements as number 7 for both contributor and solution.
- They ranked training environments for students and residents ranked as both the lowest contributor and least important solution.

A comparison of the findings reported in the Medscape National Physician Burnout & Suicide Report 2021 also showed differences: respondents said that “too many bureaucratic tasks” contributed most to their burnout, but that “increased compensation to avoid financial stress” would most help reduce it.[5] This suggests that the observed discrepancy between what physicians say is causing their burnout and the solutions they want implemented is not unique to our survey, and warrants further exploration.

Other themes

A thematic analysis of the open-text responses further illuminated many of the contributors and solutions captured in the survey questions. Common themes discussed in the open-text responses of both surveys related to:

- Physicians' expectations, including expectations around increased working hours and types of services provided; patients' expectations that their physician be more available, and government's expectations of physicians to treat more complex patients with fewer resources.
- Workplace environment and general conditions of work, such as hours of work and call, inability to take holidays or breaks, issues with referrals, incivility of colleagues, failings of models of care, and general workplace culture, especially with respect to hospital administration and expectations.
- Compensation, including pension, sick leave payments, maternity leave payments, and compensation for non-billable work.
- Physician reputation and role, including negative portrayal of physicians by government and media, physician rating tools, and role confusion stemming from increased use of non-physicians for medical advice (e.g., "Dr. Google").

Several themes emerged as contributors to burnout that were not captured in the survey questions, including:

- The challenges involved in rural medicine, including social isolation, difficulty finding replacement physicians (and subsequent overwork), lack of support and increased workload.
- Gender disparity, including work-life balance, family planning challenges, and compensation.
- The emotional impact of work, including long-term difficulty coping with emotionally draining work.
- The pressures and impacts of living and working through the pandemic.

Overall, the findings of the surveys contribute to the current dearth of Ontario-specific data on physician burnout. While other Ontario-based studies have largely focused on burnout within a specialty subset, these surveys provide representative data from the OMA membership across the province.

Top 5 Solutions to Physician Burnout

Solutions

The realities of burnout for physicians have been well-studied and -described in the literature. This paper builds on that literature and the experiences of Ontario physicians and focuses forward on system-level solutions. We present the following five solutions:

1. **Streamline and reduce required documentation and administrative work.**
2. **Ensure fair and equitable compensation for all work done.**
3. **Increase work-life balance by making organizational policy changes.**
4. **Promote the seamless integration of digital health tools into physicians' workflows.**
5. **Provide institutional supports for physician wellness.**

We focus on these five solutions because they stem from the evidence base on burnout and because Ontario's doctors identified them as the highest priority solutions in the March 2020 and March 2021 burnout surveys.

However, some survey respondents prioritized a number of other important potential solutions that have also been identified in the literature. Their exclusion from this paper does not mean that they would not be meaningful for Ontario physicians. Rather, burnout is such a complex and multi-faceted issue that as a system, it can be difficult to begin this needed work when faced with so many starting points and necessary changes. We propose priority action on the top five solutions that our member surveys identified because the results demonstrate that this is where Ontario's doctors need the system-level work to begin. However, this does not preclude the important work needed on other system actions.

Given the complexity of burnout as a system-level problem, we need to take a multi-faceted approach (as outlined below). While each solution may contribute to alleviating and preventing burnout, none should be viewed as standalone.[5]

Accountable System Stakeholders

Similarly, there is no standalone actor to solve physician burnout. As a system-level issue, burnout necessitates a system-wide response that includes government, accrediting and regulatory/licensing bodies, health-care institutions and organizations, medical schools and residency training programs, organizational leadership, digital health partners, health-care professionals and teams, and patients. Certain solutions may require work from a specific actor, but many require collaboration among multiple stakeholders across the system, including work from the OMA. At a minimum, the Ministry of Health and/or Ontario Health must lead task forces with key stakeholders to implement system-level changes to address provider well-being as the fourth pillar of the Quadruple Aim. Below, we outline the specific system stakeholders responsible for solution implementation where applicable.

Implementing Solutions

We have developed specific recommendations for each solution based on available research. While the solutions are listed in priority order (based on the burnout survey results), the recommendations are not presented in any particular order. As well, given the interconnectedness of the system, many recommendations exist at the intersections of overarching solutions, both those identified in the top five and others. However, there is limited robust research on – or evaluations of – burnout interventions, particularly the effectiveness

of specific organizational interventions, longitudinal research on the impact of interventions, the interventions that are most effective in different groups of physicians, and the combination of individual and organizational interventions.[1,18,19] Our recommendations represent the interventions identified in the existing literature, but may not be exhaustive. Although the magnitude of the impact of any individual recommendation is uncertain, every recommendation would have some impact. There can be no further delay in addressing burnout.

As well, certain recommendations may require significant long-term effort to effectively reduce and prevent physician burnout. Therefore, we have included both recommendations to address the root systemic issues as well as necessary supports for the short-term so that physicians do not need to continue experiencing the same levels of burnout while long-term changes are implemented. This underscores the importance of a multi-faceted approach to adopting solutions and recommendations. Long-term changes should not be avoided because they require investments of time and resources, nor should short-term supports be discounted, given the help they can provide in the interim.

Some recommendations will be most readily implemented at the level of institutions that staff physicians; however, many physicians work in their own practices or in group practices. The size of an organization will influence what can be achieved internally. These recommendations are not intended to exclude such physicians or to impose the burden of implementation on them. For smaller groups or solo practices, collaborative system supports (for example, supports from professional organizations) should make it easier to benefit from these or adapted recommendations. Further, as Ontario Health Teams continue to develop, they should prioritize such physician supports while they build partnerships to support their work toward the Quadruple Aim. At a minimum, they should be measuring levels of burnout in their workforce before any major changes to the system and at regular intervals thereafter.

Equitable Implementation & Evaluation

In implementing the recommendations, it will be paramount to evaluate their impacts to understand their effectiveness, and particularly if it varies among different groups of physicians. Physicians' experiences with burnout can vary: they are informed by professional differences, such as specialty and practice type, as well as by factors like racialization, ethnicity, religion, gender identity and expression, sexual orientation, ability and the intersection of those identities. A "one-size-fits-all" approach will not succeed at combating burnout if certain physician groups are at heightened risk and if interventions do not address the various and specific sources of burnout. In particular, discrimination in the workplace can affect physician wellness and lead to burnout,[20–22] so it is important that initiatives to address burnout do not, in themselves, contribute to discriminatory experiences and further exacerbate burnout. Therefore, it will be important to evaluate the impact of recommendations while remaining mindful that they may be differentially effective. The implementation should be iterative to ensure recommendations reach all physicians, especially those most at risk.

Fostering the Quadruple Aim

All of our recommendations are underscored by the fourth objective of the Quadruple Aim: improving providers' work lives. We centre our recommendations around this aim not only because physicians' work lives must be improved by protecting against burnout, but also to acknowledge that, as stated in the literature, "[m]aintaining the critical importance of patient safety and optimizing patient outcomes, whilst protecting the most meaningful work roles

for physicians, must become complementary goals."[1] The Quadruple Aim serves as a reminder that supports for physicians need not be seen as being at odds with improvements in other components of the health-care system, like reducing the cost of care, improving the health of populations, and improving the patient and caregiver experience (i.e., the remaining three aims). Rather, all of these elements are complementary to moving the health-care system forward, and must be viewed as enabling each other. As such, improving physicians' work lives by implementing these recommendations will ultimately benefit the health-care system at large.

1 Streamline and reduce required documentation and administrative work.

In our surveys, Ontario's doctors identified streamlining and reducing required documentation and administrative work as the top solution to burnout, and they identified the related burden of administrative work as the second highest contributor. The literature also consistently identifies administrative burden as a key facet of physician burnout in other jurisdictions. This burden includes work related to items like medical forms, doctors' notes, business operations, billing, licensing, privileging and documenting in point-of-care systems, such as electronic medical records and hospital information systems.[23]

A 2020 survey of Nova Scotia physicians found that, on average, physicians spend 10.6 hours per week on administrative tasks.[23] This survey also found that physicians believed that 38 per cent of this time was spent on unnecessary administrative tasks, 24 per cent was spent on work that did not need to be completed by a physician, and 14 per cent was spent on work that could be eliminated.[23] It is imperative to improve this significant contributor to burnout first and foremost by reducing the amount of unnecessary required work, and then simplifying and providing supports for the remaining work.

> **Recommendation: Assess laws, regulations, policies, standards and documentation requirements collaboratively, regularly and systematically to evaluate the burden, complexity, redundancy and value to patient care of administrative requirements.**

A key barrier to reducing and streamlining physicians' administrative burden is the multitude of health-system actors that contribute to it. These include government departments and agencies, medical regulatory bodies, organizations that staff physicians, and actors outside of the health system (e.g., employers and schools requiring doctors' notes). There are also numerous laws, regulations, policies, standards and organizational processes that require documentation and administrative work. These all result in requirements for administrative work that is not always helpful or valuable to patient care, is unnecessarily complex, does not need to be completed by a physician, and/or overlaps other requirements.

Therefore, all requirements should be systematically assessed to determine which ones actually have value for patients and physicians, and which can be streamlined, better aligned with other related requirements, or eliminated altogether.[8] Because of the multi-stakeholder source of these requirements, this assessment must be undertaken collaboratively across system actors – including the Ministry of Health, provincial health agencies, organizations that staff physicians, and medical regulatory bodies – and should involve physicians so they can provide their first-hand experiences with the requirements and their utility. These

stakeholders should undertake this assessment regularly, to ensure that new requirements do not undermine positive changes. Any changes made should be evaluated to understand their effectiveness and identify any further needed changes.

The U.S. National Academy of Sciences recommends that existing and potential future requirements be assessed according to "human-centred design and human factors and systems engineering approaches"[8] to ensure these complex processes take into account the individuals who must actually carry them out and centre both the value to patients and the burden to physicians.

This work is complex and long-term. As a result there is a lack of literature evaluating the impacts of such systematic projects. However, implementation of this recommendation should leverage and build on the on-going work and successes of the OMA Forms Committee and the Joint OMA/Ministry of Health Forms Committee. The OMA Forms Committee reviews forms that must be filled out by physicians with the aim of encouraging fewer and simpler forms to reduce physicians' administrative burden.[24] The experiences of these committees should inform a systematic assessment of other elements of administrative burden.

As detailed below, Nova Scotia provides an additional example of implementation, given that the province recently began a pilot systematic review of administrative requirements.

Recommendation in practice: In January 2020, the Nova Scotia government, through its Office of Regulatory Affairs (ORA) and Department of Health and Wellness, established a partnership with Doctors Nova Scotia to review Nova Scotia physicians' administrative work requirements and identify changes that could be made to reduce their administrative burden by the end of the year.[25] (The Nova Scotia ORA had previously reduced administrative burden for businesses, resulting in cumulative savings of $34 million annually.) While the review was delayed by the onset of the COVID-19 pandemic, as of November 2020, Doctors Nova Scotia and the ORA had surveyed physicians to explore the issue and identify requirements that should be changed or removed,[23] and had begun working with relevant stakeholders to address the issues.[23] To date, completed items include banning employers from requesting doctors' notes and privileging relevant physicians in all regions of the province to lessen administrative approvals requirements. Other actions are now underway, including improving and reducing the forms required by government programs (e.g., to prove a patient's need for income assistance or accessible transportation assistance). The ORA plans to evaluate the impacts of these changes to understand their effectiveness. The Ontario system should look to these evaluations (once available) to identify beneficial actions to adopt in Ontario.

Recommendation: Use medical scribes, particularly in relation to electronic documentation requirements.

A specific component of administrative work physicians across specialties cite consistently as contributing to administrative burden and burnout is electronic documentation in point-of-care systems, such as electronic medical records (EMRs) and hospital information systems (HISs). Studies that have aimed to quantify this burden have found that overall, physicians spend two hours on electronic documentation

for every one hour of direct patient interaction,[26] with one to two hours spent in the evenings catching up on point-of-care documentation.[26–28] Primary care physicians have been estimated to spend approximately six hours each day specifically using their point-of-care systems, both during and after clinic hours.[27]

It is essential for the previous recommendation to be undertaken to identify and remove the documentation requirements, including those within point-of-care systems that are not valuable to patients and physicians and reduce the burden of documentation as much as possible. However, for the required point-of-care documentation that remains, clerical support staff in the form of medical scribes have been employed, evaluated in multiple settings and consistently recommended within the literature. Scribes are defined as "non-licensed team members trained to document patient encounters in real time under the direct supervision of a physician."[26]

In systematic reviews of burnout interventions, introducing scribes has been found to improve efficiency, reduce administrative burden, and improve burnout.[29,30] In fact, this practice was among the most effective interventions for burnout identified within the reviews.[29,30] Scribes can increase productivity and efficiency,[30] decrease time spent on documentation during and after hours,[30] complete patient encounters many days sooner (8.9 days on average),[31] reduce documentation time by 50 per cent, and free up more time for patient interactions.[30] The use of scribes has been studied for specific specialties and found to be effective for physicians in internal medicine,[32] family medicine,[26] emergency medicine,[33,34] urology,[31] and dermatology.[35] It should be explored and evaluated for other specialties and practice settings as well, given their evidence of significant benefit where studied so far.[31] As well, in terms of patient satisfaction, studies that have examined the impact of scribes to date have found either no impact (i.e. scribes did not negatively affect patients' visit experiences with their provider)[26,31] or a positive impact.[33]

One key consideration for this very promising intervention is the cost of scribes and who should bear it. As indicated throughout this paper, individual physicians should not bear the burden of addressing burnout. For organizations where physicians work, if utilized the cost should be covered by the organization; however, physicians who do not work within institutions should also have access to the benefit of this intervention. Evaluations of the use of medical scribes and their impact on revenue have found that, due to their significant benefits for productivity and efficiency, scribes actually had a net positive financial impact despite their upfront cost.[31] However, these financial benefits were identified in two American study settings; the financial impact requires further study in the Ontario context to determine how to help physicians make use of medical scribes in all practice settings and with all payment models. We recognize that, while cost-effective, the introduction of scribes would require a substantial investment. Therefore, we propose some alternative approaches (below) to reduce administrative burden.

Digital health tools also require important modifications to improve their impact on physician burnout. These are discussed in Solution 4: Promote the seamless integration of digital health tools into physicians' workflows.

> **Recommendation: Explore technological innovations for their potential to reduce and simplify administrative demands, including billing administration.**

In addition to health human resource supports to ease physicians' administrative burden, innovative technological supports are becoming available. As with in-person medical scribes

described above, these supports must not be seen as solutions in and of themselves; administrative requirements must still be streamlined and reduced, but these supports can provide support in the interim and for those administrative tasks that remain.

The first of these is a technological expansion of the previous recommendation: the use of "virtual scribes" who listen to a patient encounter virtually. These can give patients a greater sense of privacy without another individual in the room, and are accessible to physicians who are located where there may not be many or any available to hire locally.[36] Virtual scribes also proved to be a valuable and necessary transition from in-person scribes for some physicians during the pandemic.[37] However, there are additional privacy and security considerations when the technology is used in the context of a virtual encounter.[36] Given that the task being undertaken is similar to what in-person scribes do, one would expect similarly positive impacts for reducing administrative burden and burnout. However, the use of virtual scribes has not been studied to the same extent.

A second emerging technology involves artificial intelligence scribes. These document patient encounters automatically in place of an individual scribe or the physician.[28,38] These technologies are not widely available yet, but merit further exploration as they continue to develop. Their potential impact on administrative burden and burnout should be evaluated as they are implemented.

Beyond scribes, voice dictation technological supports (which involve the physician entering information into point-of-care systems by speaking rather than typing) are available.[39] Such tools have demonstrated mixed results, primarily due to the time required to correct errors.[39–44] However, the technology continues to evolve, so dictation programs should continue to be explored and evaluated as they become more accurate, particularly in terms of their overall impact on administrative burden.

Finally, technology solutions as simple as streamlined log-in software can potentially reduce the burden of needing to log in to various required systems to complete required documentation.[45] For example, the Yale School of Medicine implemented a new log-in system in which physicians tap a badge or key card to log in and out of systems. This saves physicians 20 to 140 logins (six to 20 minutes) per day.[46,47] Integrating standalone digital health tools with existing systems can further reduce administrative burden as discussed in Solution 4.

As with the previous recommendation, while these interventions can benefit individual physicians, the burden to procure and pay for them should not be on individual physicians, particularly given that the work they are facilitating is required by the health system, not by physicians. Organizations that employ physicians should explore these interventions, and system stakeholders should determine how they can be made available to physicians in solo or group practices.

2 Ensure fair and equitable compensation for all work done.

This solution is focused on the goal to compensate physicians fairly and equitably for all work that they do, including all required administrative work. It is not focused on higher pay as a standalone concept; that is not supported by the literature for its impacts on burnout,[48] nor was it identified within the OMA's burnout survey results. However, we recognize that, as described in the literature, when discussing issues of pay for physicians in relation to their well-being, "discussions of compensation can carry even more of a stigma because of the inherent tension between the altruistic associations of patient care and the financial realities of medical practice."[49] As with any profession, work that is done in service of that profession should be compensated, and compensated fairly among all those doing it. This is especially true given that physicians have repeatedly stated in surveys in Ontario and elsewhere that they believe these changes would be beneficial for their experiences of burnout. Accordingly, our specific recommendations for this solution are: 1) where documentation and administrative work cannot be streamlined and reduced, it should be fairly compensated; and 2) remuneration should be made equitable, particularly in light of the identified gender pay gap in medicine in Ontario.

As noted in the preamble above, no recommendations herein should be pursued in isolation. This solution is important for addressing the role that compensation issues play in physicians' burnout, but the other solutions must also be pursued to ameliorate the other contributors – in particular, administrative work should not simply be compensated without also being reduced and streamlined, where possible. It should be noted that outside the scope of this solution, and beyond fairly compensating all physicians equitably for all work that they are required to perform, compensation models themselves are a related theme in the burnout literature. Based on this literature, further research exploring compensation models that do not focus compensation on piece-work – and the relationship between piece-work and burnout – may be valuable.

Recommendation: Fairly compensate documentation and administrative work where it cannot be streamlined and reduced.

As described in the previous section, physicians' administrative burden should be streamlined and reduced. However, a certain amount of administrative work will remain – and this necessary and valuable work must be appropriately compensated.

While we stated earlier that there is limited research on how to reduce burnout and on how effective certain strategies are in doing so, this is particularly the case when it comes to solutions to compensation-related impacts on burnout. This may be a result of differing compensation models in different areas (and even within areas, as in Ontario), and/or the result of the initial work needed to streamline administrative tasks to determine those that need to remain (and consequently be compensated); and/or it may be a result of the concern that this real recommendation becomes conflated with and oversimplified as a request for higher pay. This latter consideration ignores the research that not being fairly remunerated

for all work done can affect feelings of value and accomplishment in the workplace, given that compensation is a primary mechanism to indicate that one's work has value.[50,51]

The high ranking of compensation for all work done for physicians as a solution for burnout is not specific to Ontario. In British Columbia, Doctors of BC has similarly found this in its exploration of what it terms "physician burden," with its physicians asking for solutions to "[a]ddress the volume of tasks that are unpaid, inefficient or repetitive."[52] Accordingly, Doctors of BC is recommending action to, "[a]ddress compensation structures to ensure that where demands are necessary and contribute to quality health care, physicians are compensated appropriately."[53] Likewise, Doctors Nova Scotia has identified this as an impact on the stability of the physician workforce in its province – related to its previously described work to reduce administrative burden – and that physicians must be "paid for the work that they do" where administrative burden cannot be removed.[54,55] The Medscape National Physician Burnout & Suicide Report 2021 identified compensation as the second-highest workplace issue that concerned its U.S. respondents, and was also the strategy that respondents ranked highest to help reduce burnout.[56]

Unpaid work can take the form of leadership roles that entail additional work without compensation; services with assigned fee codes that do not match the demands of the administrative work entailed, including required reporting through multiple channels; and a high volume of administrative tasks that are often completed after-hours (for physicians that receive compensation according to established hours of work). For example, in a 2020 member survey, Doctors Nova Scotia found that "[o]ver the past 12-24 months the majority of physicians felt that their overall time spent on administrative tasks had increased," but that "most physicians are not compensated for this administrative work that is often completed outside of clinic hours – during evenings or weekends."[23] Unpaid work also required work with no remuneration through the Ontario Health Insurance Plan (OHIP) and offers no option to bill patients, such as the forms that concern accessible parking permits, transit applications, and the Children's Aid Society, as well as Ministry of Health forms, such as Request for an Unlisted Drug Product forms and Assistive Devices Program forms.

Reducing physicians' administrative burden will also reduce potentially uncompensated tasks and/or the volume of work, such that fewer tasks need be uncompensated due to their completion after-hours (for relevant physicians). Further, by carrying out the recommendation to assess the value of administrative tasks, those tasks deemed necessary must also be assessed to determine which, if any, physicians are being compensated for, whether that compensation matches the demands of the work, and how to rectify any lack of payment specific to each relevant payment model.

> **Recommendation: Make remuneration equitable, particularly in light of the identified gender pay gap in medicine in Ontario.**

The gender pay gap has been explored in many industries,[57] identified in medicine in Canada,[58] and found by the OMA to exist among

[iii] Note that these results were compared between physicians identified as male or female; data are not currently available on the difference for those physicians who may identify as a different gender identity. However, it is important to understand pay differences for these populations as well.

Ontario physicians.[59] In July 2020, the OMA released analysis of Ontario billings data that yielded a significant unexplainable difference between male and female physicians in the daily amounts billed.[1, 59] Female physicians would have to increase their billings by 15.6 per cent, on average, in order to match the average daily billings of male physicians. While no literature has yet explored the specific impact of the gender pay gap on burnout, research has found that it contributes directly to higher rates of depression and anxiety in women,[60,61] "particularly if women are internalizing discriminatory acts as a reflection of their low worth rather than that of biased institutional practices."[61] The open text responses to the OMA burnout surveys also yielded a theme of gender disparity as a contributor to burnout, and this finding aligns with developing research demonstrating that discrimination can affect physician wellness and burnout.[20–22]

The OMA's work on the gender pay gap has identified key actions to reduce the gender pay gap and gender-based disparities in medicine in Ontario.[59] These include the need to reform the Schedule of Benefits to better reflect the work required to perform each service; expanded leadership and mentorship opportunities for female physicians and medical students, including within the OMA itself; addressing relativity issues to ensure that differences in income per specialty only reflect differences in workload, training, skill required, and practice overhead costs; ensuring that medical teaching does not inadvertently contain a hidden curriculum of inherent bias that has been suggested to contribute to the current situation of disproportionately more men in higher-paying specialties;[58] conducting research to understand the impact of physician gender on referrals made to specialists; and improving parental leave benefits for all physicians, particularly given that research has found parental status to be the most important factor in explaining observed differences in time worked.[62]

Issues of inequitable pay should also be explored intersectionally to include racialized physicians, especially given the proven existence of a racial wage gap in Canada.[63] Data on the prevalence of such a wage gap among Ontario physicians should be sought to illuminate the extent of this issue for physicians of all genders and identify similar first steps to ameliorate this issue.

3 Increase work-life balance by making organizational policy changes.

The impact of work hours on burnout has been well-documented in the literature, with an increase in time spent working found to independently increase the risk of burnout. In particular, the risk of burnout has been found to increase by 3 per cent for each additional hour physicians spend working per week, by 3-9 per cent for each additional night or weekend physicians spend on call, and by 2 per cent for each additional hour per week physicians spend working at home.[1] Work-home conflicts have been found to more than double the risk of burnout,[1] and are more likely to be experienced by women and early career physicians[8] – the groups who are generally at heightened risk of burnout.

Organizational policy changes can enable better work-life balance. These changes include normalizing flexible work arrangements, enhancing supports for resident work-life balance, and exploring innovative strategies, such as time banking.

Recommendation: Normalize flexible work arrangements for physicians who seek them, including options for part-time work, job-sharing, float pools and modified schedules.

Providing flexible work arrangements to improve work-life balance can reduce the risk of burnout.[14,18,64] To achieve this, organizations can provide options for part-time work,[1,64] job-sharing (i.e. two part-time physicians sharing a full-time position),[64–66] "float pools" (coverage for life events),[64,65] and modified schedules (i.e. non-traditional work hours and/or variation of hours per day).[14,65] A reduction in work hours due to part-time work or job-sharing can mean a decrease in income. However, this option should be provided for physicians who seek it, and - as previously discussed - the work done should be fairly and equitably compensated.

These flexible work arrangements can foster control and autonomy for physicians[1,65] and give them time to pursue meaningful aspects of work,[66] the lack of which has been associated with burnout.[1] Making these flexible options available can further reduce other associated consequences of burnout, including early retirement and physician turnover.[14,64]

As previously discussed, female physicians have been found to be at increased risk of burnout. Options for flexible work arrangements can help improve their work-life balance and reduce gender differences in burnout, such as by allowing time for personal needs (e.g. pregnancy and maternity leave).[18,64]

Normalizing these options can also help to shift the culture of medicine from one where working long hours is the expected and idealized norm, to one where work-life balance is appreciated.

Recommendation: Enhance supports for medical student and resident work-life balance.

The rigorous pressures faced by medical students and residents have been widely reported. From the start of their career, students and residents face a multitude of stressors - including long hours without adequate rest breaks, competing time demands, financial stress, exam pressures, career uncertainty, personal issues, and lack of time or incentive

to care for their own health and well-being - that ultimately contribute to burnout.[67,68] While this recommendation focuses largely on what organizations can do to support resident and student work-life balance, other system stakeholders also have a role to play in preventing burnout in students and residents. A few examples are highlighted below.

Resident work-life often involves working maximum 26-hour continuous shifts without adequate rest breaks. While establishing system-wide maximum resident duty hour restrictions is largely within the purview of accrediting bodies, there is still much that organizations can do to support work-life balance for residents. For example, organizations can set duty-hour maximums that are lower than the regulated duty hour maximum, explore new scheduling arrangements (such as having more residents on-call during overnight shifts to ensure protected sleep periods during these shifts),[69] schedule residents on shorter shifts, and provide more exposure to the administrative burden involved before residents choose a specialty. We recognize that changes to resident duty-hours and scheduling within an organization may require trade-offs with other important considerations such as the availability of health human resources and resident education. However, it is important to balance this trade-off with residents' well-being. As previously mentioned, any interventions implemented should be evaluated for impact, and in this case, closely monitored for their potential impacts on residents' well-being and education as well as on patient care.

Further, every year, a number of medical students go unmatched in the Canadian Residency Matching Service. These unmatched students report experiencing isolation, stigma, grief, and uncertainty.[70] Addressing the implications for unmatched students and providing them with support will require the collective efforts of government and organizations such as the Association of Faculties of Medicine of Canada, the Canadian Federation of Medical Students, and the Ontario Medical Students Association. This includes making efforts to reduce the number of unmatched students every year,[71] providing supports for students to navigate the unmatched process, and offering mental health support.[70] Reducing the stigma associated with being unmatched will also require a culture shift led by learners, educators, and administrators to normalize the process via "education, role modeling, and healthy conversations."[70] Preventing burnout in trainees from the outset of their careers will ultimately help support their growth as healthy future physicians.

Finally, organizations should provide students and residents access to institutional wellness supports as detailed in Solution 5 of this paper.

> **Recommendation: Explore innovative strategies to enable work-life balance, such as time banking.**

In addition to normalizing flexible work arrangements and enhancing supports for resident work-life balance, organizations should explore innovative strategies to enable work-life balance, such as time banking. An evaluation of the time banking intervention at Stanford University School of Medicine detailed below found an increase in job satisfaction amongst faculty participants, including increased perceptions of a culture of flexibility, wellness, and institutional satisfaction.[72]

Recommendation in practice: In the Stanford University School of Medicine time banking pilot program, faculty participants were given credits for time they spent on unpaid or underrecognized responsibilities - such as providing clinical coverage on short notice,

mentoring, or serving on a committee - and could redeem for support services at home or work, including housecleaning, meal delivery, grant writing, and lab management services.[72] The ability to buy back time spent allowed faculty to dedicate more time to their individual work and life priorities. The program was customizable within individual teams, which determined the activities that would earn credits, and individual participants were able to choose when and how they redeemed their credits. The customizable nature of this program makes it easily adaptable to other medical workplaces.

4 Promote the seamless integration of digital health tools into physicians' workflows.

The use of technology in health care has been associated with both contributing to and reducing burnout. On the one hand, as discussed in Solution 1 of this paper, technological supports can be implemented to reduce some administrative demands and associated burnout. On the other hand, stress induced from the use of technology – coined "technostress" – has also been associated with burnout.[73] This is not only due to the documentation burdens imposed by point-of-care systems (as detailed in Solution 1), but to technology being not usable or poorly integrated with clinical workflow.[8,30] The seamless integration of digital health tools into physicians' workflows is essential to reduce burnout associated with technostress. Digital health tools are a core part of physicians' workflows, including the use of virtual care platforms and point-of-care systems (such as EMRs and HISs). As health care continues to be digitized, seamless integration will become increasingly important.

Digital health tools can be seamlessly integrated into physician workflows by implementing interoperability standards, involving physicians as key partners in tool development and decision-making, equipping them with comprehensive and ongoing training beginning in medical school, and providing easily accessible and ongoing technical support. While the research on technology and burnout has been largely focused on physicians' use of point-of-care systems, the recommendations below can be extended to apply to other digital health tools.

> **Recommendation: Implement interoperability standards to ensure physicians can seamlessly access patient records and share patient health information among care providers.**

A lack of interoperability is one of the most common digital health factors associated with burnout.[8] Providers who use different point-of-care systems that are not interoperable cannot seamlessly access integrated patient records and exchange patient information with each other. This increases their administrative burden and it is worth noting that siloed health information can affect patient care.[8,30] As such, there is a need to implement interoperability standards for digital health tools. A seamless flow and exchange of information across the continuum of patient care will reduce the administrative burden on providers in obtaining patient information, and in turn, reduce burnout. Interoperability standards can further ensure that physicians can continue using the digital health systems that work best for their workflows,[30] and not require multiple providers to switch to a single system.

Further, as our health-care system becomes increasingly digitized, new technologies and tools will continue to emerge. When physicians must use multiple standalone digital health tools requiring multiple logins and clicks to access information throughout the day, it can greatly disrupt their workflow, increasing their administrative burden and associated burnout, as discussed in Solution 1. As such, as new technologies emerge (such as virtual care platforms or provincial digital health tools), they should be meaningfully integrated with existing point-of-care system functions and workflows.

We recognize that the provincial government has taken steps to advance interoperability in the system by mandating health information custodians to comply with applicable interoperability specifications to be established by Ontario Health[74] and developing verification standards for virtual visit solutions.[75] However, successful implementation will be key to achieving interoperability in our health-care system, and will require co-ordinated efforts between government, implementation partners such as OntarioMD and Ontario Health, technology vendors, health-care organizations, and providers. Any interoperability policy should be designed to support and achieve the objectives of the Quadruple Aim and "there should be a balancing of responsibility among the involved stakeholders so that clinicians do not bear the burden of being solely responsible for any adverse outcomes or other unanticipated negative consequences associated with the use of technology."[8] Imposing additional burdens on physicians who lack control over the technology will only exacerbate their burnout. A key component of effective implementation will be equipping physicians with change management supports to incorporate new technologies into their workflow and ensuring the available technologies meet the needs of their practices. Government and policy-makers should also consider how to enforce vendor compliance with the need to implement necessary changes to tools to achieve interoperability. In addition, as discussed in the next recommendation, involving physicians as key partners in decision-making processes around digital health is critical.

Recommendation: Involve physicians as key partners from the start in the procurement, design, implementation, and ongoing optimization of digital health tools to ensure usability.

Poor usability is another of the most common digital health factors associated with burnout.[8,30] For digital health tools to be seamlessly integrated into physician workflows, they have to be usable. Issues with usability often occur when organizations procure and implement new point-of-care systems without physician input, particularly one-size-fits-all systems that are not tailored to unique clinical workflows.[8] This can result in physicians having to make extra clicks and spend more time working through the system.[8]

To ensure successful usability, organizations need to involve physicians who are key end users from the start in the procurement, design, implementation, and ongoing optimization (i.e., refinement and improvement) of digital health tools.[10, 76] Successful usability means the technology meets physicians' needs and desired workflows.[76] Any new technology should also support the fourth objective of the Quadruple Aim (improving the work lives of providers); involving physicians in key decision-making processes from the outset can help. Organizations can involve physicians throughout the process by including them on multidisciplinary clinical teams so they can provide feedback during purchasing and implementation decisions as well as ongoing input on system optimization.[8, 10, 76] Physicians can provide input on the minimum requirements that are common to most users. This can ensure the core product remains usable, without becoming overly-complex. In addition, organizations should give physicians options to customize user interfaces according to their specific clinical workflows, including streamlining access to the most relevant data.[77] This can reduce the number of clicks/keystrokes

per day and, by extension, the amount of time physicians spend on the system.[30, 77] Such interventions to optimize technology have been found to be effective at reducing burnout.[30]

For ongoing optimization, organizations should evaluate any new technology after extensive pilot testing with many users in clinical practice to ensure it is as usable as initial testing suggested.

Physicians also need effective change management support to optimize the usability of digital health tools. This includes organizations publishing workflow improvements and suggestions when the technology is released so physicians can incorporate them into their workflows and mitigate potential stress points from the outset.

Feedback from physicians is also essential to ensure the safety of new technologies[8,76] given that input "on specific design-related safety issues can also prevent adverse patient safety events from occurring at other organizations."[78] An example is incorrect default settings that increase the risk of ordering the wrong medication or dosage.[8]

Ensuring the usability of digital health tools ultimately requires collaboration from technology vendors to implement the desired measures.[10] Organizations should relay the feedback they receive from providers to vendors so they can improve their systems. They should also consider opportunities for vendors to directly observe the clinical workflows and use of technology by staff[78] to inform the development of the most usable systems. As previously mentioned, government and policy-makers should also consider how to enforce vendor compliance with the need to implement necessary changes to tools. Without a legislative or regulatory framework for vendors, additional obligations are often transferred to health-care providers, who end up bearing the associated burden and cost which exacerbates their burnout.

Recommendation in practice: In 2017, Hawaii Pacific Health launched a program called "Getting Rid of Stupid Stuff" that involved asking their staff, including physicians and nurses, to "nominate anything in the EHR [electronic health record] that they thought was poorly designed, unnecessary, or just plain stupid."[79] While the program was originally meant to reduce the unintended documentation requirements imposed by the organization's EHR, engaging clinicians through this program led to additional changes that optimized the EHR, including removing 10 out of 12 of the most frequent alerts physicians receive, reviewing and removing order sets that were unused, and identifying the need to better educate staff on the documentation tools that were available to them. Although the impact of the program on physician burnout was not specifically measured, the changes highlight the potential role of such a program in enabling solutions to burnout.

Recommendation: Equip physicians with comprehensive and ongoing training on digital health tools, beginning in medical school.

Providing physicians with comprehensive training can increase their comfort and satisfaction with digital health tools and, in turn, reduce their technostress and "offset anxiety that exacerbates burnout."[30] For physicians who work in organizations, the organizations can facilitate training; for those in community-based practices, training and mentorship can be provided by, for example, OntarioMD Peer Leaders and OntarioMD staff across the province. Training should be provided on an ongoing basis, not limited to onboarding, to maintain and improve competency.[76,80]

Training should also begin in medical school. With the shift to competency-based medical education, sufficient training for medical students and residents on digital health system competencies during formal education should be provided. Researchers have noted that critical gaps in training still exist because "learners receive limited exposure to EHR training during their formal education."[81]

In 2018, the American Medical Association (AMA) adopted a policy to promote training for medical students on using EHRs, so they could learn and gain experience "well before they enter practice."[82] The AMA's policy "encourages medical schools and residency programs to design clinical documentation and EHR training that provides evaluative feedback regarding the value and effectiveness of the training, and that can be evaluated and demonstrated as useful in clinical practice."[82]

Medical schools in Ontario should ensure that sufficient training on point-of-care systems (EMRs/HISs) and other digital health tools is incorporated into both undergraduate and postgraduate medical education. Training medical students and residents early on can provide them with a more seamless experience in using digital health tools as future physicians,[77] and ultimately reduce their risk of burnout from technostress.

Technology training should be provided on an ongoing basis throughout physicians' careers, particularly as technology evolves and new standards of practice regarding the use of digital health tools emerge. This can be achieved by incorporating digital health training into all continuing medical education conferences to some extent.

Recommendation: Provide physicians with easily accessible and ongoing technical support.

To support usability of digital health tools, physicians should be provided with easily accessible and ongoing technical support[76,83] that responds to the needs of their practice. The availability of technical support for point-of-care systems can improve physicians' attitudes toward the use of the technology and free up time for more meaningful tasks, such as providing direct patient care.[83] As previously discussed, poor usability of technology and a lack of meaning in work have each been associated with increased risk of burnout. In turn, the availability of technical support can help mitigate against these risks of burnout, and continue to foster the seamless integration of digital health tools into physician workflow by resolving technical issues as they arise. For physicians working in large organizations, technical support can most likely be provided on-site; for those in community-based practices, vendors or OntarioMD technical advisors can provide support.

5 Institutional supports for physician wellness.

Finally, given that burnout is by definition a workplace issue, an important solution to it is making positive workplace changes to supports for physician wellness. While such supports are accessible to physicians who work within institutions, those who do not should nonetheless have access to co-ordinated and resourced supports, as previously outlined.

Many of these supports and tools are described in more detail in the OMA's Burnout Toolkit for physicians and physician leaders.

Institutional supports can begin with organizations explicitly establishing a positive workplace culture that prioritizes wellness, and can be aided by regular but non-burdening assessments of burnout and organizational-led interventions for physicians.

Recommendation: Encourage and support a workplace culture that prioritizes and promotes physician wellness.

Organizational culture is defined as "a summary of the shared values, beliefs, or perceptions held by employees within an organization or organizational unit, and it can influence the attitudes and behavior of the staff."[84] It has been shown to influence levels of burnout,[84,85] with a need to foster a culture of wellness to ensure this influence improves burnout rather than contributing to it. Culture can seem a nebulous and intangible factor to try to understand and influence, but there are concrete actions that can be (and have been) taken to contribute to a culture of wellness in health-care organizations.

Wellness principles

To begin with, organizations should signal the importance of wellness to their physicians, establish parameters for accountability, and guide the implementation of further initiatives by adopting explicit principles for a workplace culture that prioritizes and promotes wellness. More research is required to evaluate the impact of wellness principles on physician burnout; however it is recommended that alignment with such principles would bolster and maintain proven initiatives as described in the subsequent recommendations.

Recommendation in practice: Toronto's University Health Network (UHN) has established Wellness Guiding Principles as part of its UHN Wellness mission "to promote, enhance and support behavioural changes in UHN staff to improve health and well-being at both an individual and at an organizational level."[86]

Wellness guiding principles

- Leadership for wellness exists at all levels of the organization
- People are our most important resource at UHN
- Wellness is a common goal, but individual approaches vary
- Wellness at work interacts with wellness at home
- We are all responsible for our own health and well-being
- Wellness@UHN is about continuous improvement
- UHN supports healthy living strategies

A key component of a culture of wellness that can help to protect against burnout is a sense of psychological safety – that is, "the absence of harm and/or threat of harm to mental well-being that a worker might experience."[8,87] As with an overall culture of wellness, psychological safety can be achieved by beginning with established principles to guide cultural changes and provide a source of accountability.

Recommendation in practice: The Mental Health Commission of Canada, HealthCareCAN and the By Health for Health Collaborative of Canada have jointly established a Declaration of Commitment to Psychological Health and Safety in Healthcare.[88,89] This declaration commits its signatories to "advancing the protection and promotion of mental health in the workplace and in alignment with the principles of the National Standard for Psychological Health and Safety in the Workplace," which is "a set of voluntary guidelines, tools and resources intended to guide organizations in promoting mental health and preventing psychological harm at work."[88]

Numerous health-care organizations across Canada have signed on to the commitment, including the London Health Sciences Centre, Michael Garron Hospital, Ontario Shores Centre for Mental Health Sciences, Peterborough Regional Health Centre, Ross Memorial Hospital, Sinai Health System, St. Joseph's Health Care London and the Hospital for Sick Children.[88]

Finally, in encouraging and supporting a culture of wellness, it is essential to recognize and account for diverse identities and experiences among physicians as well as the impacts that workplace discrimination can have on wellness and burnout.[20–22] A culture of wellness should prioritize principles of cultural safety and cultural competence such that all physicians feel safe and supported.

Leadership

In each of these sets of principles, leadership is included as a key component because leaders heavily influence the experiences of those they lead.[90] This influence, unsurprisingly, extends to burnout. A study conducted by the Mayo Clinic demonstrated this, finding that a one-point increase in a leader's "score" (based on 12 components of leadership) was associated with a 3.3 per cent decrease in the likelihood of those they lead experiencing burnout.[91] A recent study conducted at the Stanford University School of Medicine further found that leadership scores were associated with leaders' own levels of burnout.[92] Leaders also model and normalize behaviours within their workplaces, including those related to well-being. This same study found that "each one-point increase in leaders' sleep-related impairment was associated with a 0.15-point increment in sleep-related impairment among those they supervised."[92] The study authors noted the consistency of this finding with research outside of medicine that has found a negative impact on team members' sleep "when leaders publicly devalue sleep (such as boasting that they are productive because of how little they sleep)."[92] Therefore, it is important for organizations to support physician and non-physician leaders for the sake of those they lead as well as their own wellness. This can be done by fostering compassionate leadership and creating psychological safety in the workplace at all levels (organization, institution, department, unit).[90] Leaders can contribute to psychological safety by:

- Recognizing their responsibility to contribute to and encourage a positive culture of wellness.
- Making space for those they lead to experience and share vulnerabilities, and sharing vulnerabilities themselves.

- Modelling and encouraging safe-care.
- Admitting they do not have all the answers and enabling safe idea-sharing.
- Identifying and advocating for needed supports.
- Supporting leadership development and opportunities for those they lead.[93]

Chief wellness officer

Leadership that fosters a culture of wellness should extend to the executive level, and can be enabled by establishing of a chief wellness officer. The U.S. National Academy of Sciences recommends that at the executive level, there should be "a leadership role and function responsible for improving and sustaining professional well-being across the organization. This leader and [their] team should strengthen co-ordination across all organizational programs, especially those that deal with patient care quality and safety and with occupational safety."[8]

A chief wellness officer should be trained, compensated as a full-time role (i.e., the role should not be an additional duty for an existing full-time staff member, executive or physician), involved in leadership meetings, and accountable for improvements in wellness within the organization as measured using validated tools (per the following recommendation).

Physical workspace

Finally, culture can even be influenced by the physical workspace, for example by creating social spaces for physicians.

> **Recommendation in practice:** The University of California at San Francisco found a decrease in burnout rates after it established a doctors' lounge and stocked it regularly with small amenities such as electronic chargers and food items. This space enabled physicians to organically share professional and personal experiences and initiate informal instances of peer support and mentorship.[94]

The design of the physical workspace can also be engineered to improve burnout. For example, access to views of nature, other exterior views, and daylight, indoor plants and other internal design aspects that link to nature have demonstrated positive impacts on physicians' feelings of stress.[95]

The following recommendations can further contribute to a culture of wellness, by measuring physician burnout (to understand the experiences of those within organizations), and implementing initiatives within organizations to directly target burnout.

> **Recommendation: Regularly evaluate levels of physician burnout within organizations using validated tools to understand burnout levels and implement necessary changes.**

While much research has indicated high levels of burnout among physicians – including in Canada and now through our surveys in Ontario – it has also indicated different experiences of burnout among different physicians, such as across specialties, practice settings, and demographics. Therefore, it is essential that organizations working to address burnout begin by evaluating burnout levels specifically within their institution and by collecting qualitative information related to the specific factors in their workplace that could contribute to or could ameliorate burnout.

Organizations should utilize validated tools, such as the Maslach Burnout Inventory, to collect high quality data and data that can be compared across different settings.[8,94,96] Research suggests that even one- and two-item questionnaires can provide reasonable

estimates of the prevalence of burnout.[16,97–99] Other valuable tools include the Copenhagen Assessment Tool, the Stanford Professional Fulfillment Index, the Mayo Well Being Index and the Warwick-Edinburgh Mental Wellbeing Scales. The literature suggests that organizations should make the anonymous aggregate results of these tools available transparently to provide a shared understanding of the state of burnout, to contribute to accountability by leadership and give physicians confidence that their voices are being heard.[8,90] Literature also suggests that these results be made available publicly for those looking for employment within the institution to further encourage accountability. These results should also be shared "so that [physicians] might acknowledge feelings that have been suppressed due to cultural norms"[100] that may imply to some that they are alone in their experiences and/or that they should not have feelings of burnout. Organizations should also use these tools regularly (at least annually)[8] to understand changes in collective burnout levels, both positive and negative.[8,94] A regular commitment to measuring burnout within the institution could be set out in principles adopted to inform the workplace wellness culture.

Beyond the quantitative measure of burnout, institutions should also regularly engage physicians to determine what specifically within their organization is contributing to burnout and what needs there are from physicians to address it.[8,90] As described above, wellness principles should include a commitment to a culture that welcomes such feedback and allows physicians to feel safe and comfortable providing it.[90]

Recommendation in practice: The Mayo Clinic in Rochester, Minnesota uses a model called "Listen-Act-Develop." The first element, "listen," is meant to encourage physicians to provide feedback. It strives to create a "safe haven" "for physicians to be able to voice their concerns" and "allows physicians to feel valued."[94]

By understanding how much and why their physicians experience burnout, organizations can understand their needs and work toward relevant solutions. However, in so doing, "it is essential to identify data capture strategies that minimize burden and protect clinicians' privacy and address any stigma or pressure that clinicians may perceive related to measurement or reporting."[8]

Recommendation: Organizations should coordinate and implement proven individual-level interventions for physicians.

As we have mentioned consistently throughout this paper, as a system-level issue, burnout is the responsibility of system actors to address; it is not up to individual physicians to solve burnout brought on by issues beyond their control. However, that is not to say that initiatives targeting physicians at the individual level cannot still contribute to improvements in burnout and broader well-being. The key is that these initiatives should be designed, organized and resourced by the organization so that their benefits are available for physicians without the physicians having to put in more work to identify, learn and/or organize initiatives for themselves. Indeed, research indicates that "lack of time" is a significant barrier for physicians who are in need of emotional support.[101] Further, research has found that initiatives organized by an institution are more effective than those that individual physicians must undertake on their own, and requiring physicians to enact such initiatives themselves can even be harmful: "Physicians who were expected to deal with their burnout individually and remotely from their institution felt less 'resilient' and took more personal ownership of

the fact that they were burned out, as opposed to those physicians who received support from their institution to cope with it."[18]

There is significant research on the benefits of individual-level interventions (e.g., the effectiveness of practicing mindfulness). However, given that the key here is the application of interventions for physicians as organized and resourced by institutions, we have included only evidence related to individual-level interventions that are implemented and organized for physicians.

Initiatives

Organizations can implement numerous individual-level interventions for physicians. Examples include mindfulness initiatives, stress reduction programs, facilitated discussion groups, peer support programs and Balint groups.

Mindfulness initiatives have demonstrated success in improving indicators of burnout among physicians in multiple studies. These studied initiatives vary in structure, but can include multi-week mindfulness training courses,[18] short-term mindfulness training[102] and mindful communication programs.[103] A resiliency program that included mindfulness meditation along with access to exercise equipment and nutritious foods was also found to be effective among family medicine residents (the trial population).[104]

Further, small group discussions (both facilitated and unfacilitated) have led to demonstrated improvements in burnout symptoms. Facilitated small discussion groups that include elements such as mindfulness, shared experiences and reflection have proven effective,[105] as have unfacilitated discussion groups that simply provide protected time and a venue for physicians to congregate and share experiences.[85] However, facilitated discussion groups specifically for residents may require facilitation by someone viewed as a peer rather than by a professional or a practising physician.[106] Balint groups are a type of facilitated discussion group focused on "enhancing communication skills among physicians, but also putting emphasis on the doctor–patient relationship."[107] They have been found to be effective at improving factors related to burnout,[107,108] including specifically for residents.[109,110]

Professional coaching has also been demonstrated to relieve emotional exhaustion and burnout symptoms overall,[111] and can "support clinicians in managing stress and adapting to change".[8]

Finally, peer support programs are commonly discussed as a means to help address physician burnout.[101,112] However, they are not yet well-studied in the literature for their impacts on burnout. Early research does indicate that peer support programs may be promising for residents[113] and should be further explored for their potential benefit. Any implementation should include evaluation to understand if they do indeed help physicians experiencing burnout.

Implementation considerations

In implementing such interventions, organizations should consider certain factors. First, a study of the implementation of a corporate wellness initiative that had proven successful with other health-care workers showed no success for emergency medicine residents (and led to a worsening of burnout for some).[114] This finding demonstrates the importance of tailoring even proven interventions for physicians and their experiences.

Second, when implementing interventions, it is important to evaluate their impacts to understand if they are helpful and should be continued and/or expanded, or if, as above, they may even cause harm. However, as noted in the previous recommendation, evaluations

and assessments of burnout level should not contribute to burnout themselves by imposing arduous requirements (such as a lengthy survey) on physicians to be able to participate in potentially helpful initiatives.[8] In particular, evaluations of programs should look at professional and demographic information to determine if program impacts are varied or isolated to certain sub-groups of physicians, for example in terms of specialty, payment model, gender identity and expression, or racialization.

Third, it is important for organizationally-led interventions to be provided during paid time for physicians[30] given that, as previously stated, physicians should not bear burdens to participate in programs that aim to address burnout that has largely been brought on by the health system including physicians' workplaces.

Finally and importantly, evidence from the above-cited mindful communication program for primary care physicians found that, while the intervention succeeded, "participants struggled to give themselves permission to attend to their own personal growth."[103] This finding illustrates how important it is for organizations to implement these recommendations in tandem with facilitating a culture of wellness that encourages and empowers physicians to "attend to their own personal growth"[103] so they can derive maximum benefits from such interventions.

Next Steps

These five solutions are a starting point for addressing the complex, multi-faceted problem of physician burnout in Ontario, based on priorities identified by Ontario's doctors and evidence-based recommendations. Addressing burnout is a long-term, system-wide endeavour, but it is crucial that the Ontario health-care system begin making meaningful changes to support the physicians who are vital within it.

Beyond this work, the OMA and its Burnout Task Force will continue on-going initiatives to study, mitigate and prevent physician burnout. The task force has launched a Burnout Toolkit containing resources that individual physicians and physician leaders can use or implement in their organizations. The OMA will also continue to monitor and explore burnout in the context of the pandemic.

To accomplish the solutions proposed in this paper, as a system we need to establish meaningful partnerships and coordination among key stakeholders so we can further explore and implement recommendations to address and prevent burnout. Through these partnerships, solutions can also be adapted and implemented for other health-care workers to contribute to greater health-care worker well-being and the sustainability of Ontario's health-care system.

Given the dearth of comprehensive literature evaluating system-level solutions to physician burnout, particularly in Ontario, any solutions that are implemented should be evaluated to understand their benefits, adapt them as needed and contribute to the evidence base. Future research should focus on gaps identified in this paper, including the impacts of burnout interventions on different groups of physicians, particularly in terms of gender identity and racialization, recognizing that different physicians experience burnout differently, certain physicians are at heightened risk of burnout, and some experience unique contributors to burnout, such as discrimination, that universally-focused interventions may not ameliorate.

Further, many physicians do not work within institutions that can implement certain initiatives to address burnout; therefore, future research should explore how to support physicians who work outside of institutions. As well, given that compensation models are a common theme in the burnout literature, further research exploring the potential relationships between Ontario's compensation models and burnout may be valuable. Finally, future research would be useful to explain the described discrepancy between the top contributors and top solutions to burnout identified in the OMA surveys, particularly to better understand if work should prioritize themes within the top contributors or those within the top solutions.

In the meantime, work must begin on these recommendations across the system to improve the dire situation that has long affected Ontario's doctors. We must commit to building a sustainable and healthy health-care system.

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TAB 31

Physician Burnout and COVID-19

A stressed and overwhelmed medical system can negatively impact patient care and safety even at the best of times. A global pandemic has made things even harder.

In May, Winnipeg general internist Dr. Jillian Horton wrote an editorial in *The Globe and Mail* about her concerns over the long-term psychological impact of the COVID-19 pandemic on Canadian physicians. “No longer in fight-or-flight mode, they will be confronted by the enormity of what they experienced, suddenly given time to reflect on what they could or could not do for the sick and dying, and a misplaced sense of guilt at their inability to help everyone,” wrote Dr. Horton.

On a daily basis, physicians operate under the most stressful of circumstances. When COVID-19 arrived, it only heightened the intensity of workplace pressures. The rising prevalence of burnout among clinicians has led to very real concerns about its toll on physician health and wellness. The effects of burnout also pose a risk to access, and quality of care.

Burnout can threaten patient safety when depersonalization — the development of a negative and cynical attitude toward patients and their concerns — leads to poor interactions with patients and poor decision-making. It can also create problems by impairing attention and memory. Doctors who suffer burnout are also more likely to leave practice, which reduces patients’ access to continuity of care.

Before the arrival of COVID-19, the College recognized that many physicians were tired, overworked and on the brink of burnout. But this deadly virus saw new stressors for front-line workers: ever-changing protocols; information overload; inadequate access to personal protective equipment; concern about a potential scarcity of ventilators; and, of course, fears about their own personal safety, and passing the virus on to their family members.

There is no doubt that the pandemic — and its attendant sacrifices — are compounding the issue of physician burnout, especially for those doctors involved in acute care. “They are working without sufficient resources, and, in some cases, they are living apart from their families to avoid exposing them to COVID-19, wrote CPSO Registrar and CEO Dr. Nancy Whitmore in a message sent to physicians on Doctor’s Day. “Many physicians are working around the clock. In addition to

their clinical work, some are also helping to clean rooms, volunteering to examine and treat patients in long-term care homes, and working beyond regular scopes of practice to ensure patients receive the care they need."

In her message, Dr. Whitmore noted that a New York City emergency physician, whose hospital was in the epicentre of the crisis, died by suicide. Dr. Lorna Breen's family said they believe that trying to care for so many dying patients took a toll on Dr. Breen.

Stark Statistics

Last fall, well before the arrival of COVID-19, the College conducted an informal poll of 263 physicians. Nearly 20% described themselves as being in 'survival' or 'burnout' mode. That number, however, is likely an underestimation. These doctors, who were volunteers in a pilot of our Quality Improvement program, were providing their response through a poll conducted by their regulator.

The Ontario Medical Association and the Canadian Medical Association have separately suggested that the number is more likely between 27% to 32% of physicians are clinically burnt out, with female physicians on the higher end of the scale.

We believe that the uncertainty and fears generated by the pandemic will only see that percentage go up.

Long-Term Stress Reaction

Burnout is a long-term stress reaction marked by physical and emotional exhaustion, depersonalization, and a lack of sense of personal accomplishment.

The concern is such that the Ontario Medical Association has created a Burnout Task Force and made it one of its top priorities for 2020. The Burnout Task Force is exploring the issue in depth and will be making recommendations on system-wide issues that contribute to burnout. They will also make recommendations to prevent burnout, advocate to government and other stakeholders and co-ordinate with national and provincial organizations.

Addressing the causes of physician's stress has also been high on the College's agenda. We cannot expect physicians to safely care for their patients if their own physical and mental health are compromised.

> *The College has become more sensitive to the issue of physician burnout, without abdicating our paramount duty to serve the public interest.*

Dr. Whitmore said that when she began at the College in June 2018, the issue of burnout came up regularly in conversations she had with physician groups. "And it became quickly clear to me, that many doctors working within our stressed system were finding that the regulatory environment was further adding to their challenges," she said.

To counteract this, the College has become more sensitive to the issue of physician burnout, without abdicating our paramount duty to serve the public interest. "I think our adoption of right-touch regulation will help achieve a much needed balance," Dr. Whitmore said.

Right-touch regulation, she explained, sees regulators intervene only when necessary and interventions are appropriate to the risk posed. "We needed to change our mindset and work to identify how much regulatory force was actually needed to achieve a desired effect," she said.

In too many cases, she said, we were targeting everything with an energy that was excessive for the circumstances. This regulatory overdrive created stress in situations that did not call for it. “And having medical practitioners that are stressed and burnt out is not in the best interests of anyone — including patients. It is a barrier to quality care,” she said.

How has the College addressed burnout?

Recognizing the extraordinary toll this pandemic is taking on Ontario’s doctors, the CPSO has created a physician wellness page on our website, where we share resources and other important information. We also encourage physicians to get in touch with the Physician Health Program (PHP) if they or a colleague needs support. During this challenging time, PHP is also offering MD-led virtual chats to provide peer support to physicians during COVID-19. Sessions are held daily and are led by a psychiatrist, who is an expert in group therapy. Here are some other steps we took prior to the pandemic to help improve:

- Introduced Alternative Dispute Resolution mechanism as an option for the handling of low-risk matters;
- Decreased the time to complete a complaint by 47% in 2019, compared to 2018;
- Promoted connectedness through the quality improvement’s (QI) emphasis on peer interactions;
- Encouraged professionalism to flourish by developing a QI framework that allows physicians to self-direct their learning;
- Redesigned policies that allow physicians to immediately understand and access College expectations.

The College’s *Practice Guide* also recognizes the importance of physician wellness as a critical component of the professional practice of medicine.

Good physical and mental health is necessary, it states, to provide high quality care to patients because physicians cannot serve their own patients if they are not well, physicians may have to put their own needs for wellness ahead of the needs of individual patients or the public as a whole in some circumstances.

The best interests of patients are served when physicians take time to meet their own needs and are continually aware of their own wellness. This means recognizing limits imposed by fatigue, stress or illness and taking care to ensure a healthy work-life balance.

This is not always easy, and certainly exceptional crises such as COVID-19 can make it nearly impossible for those on the front line.

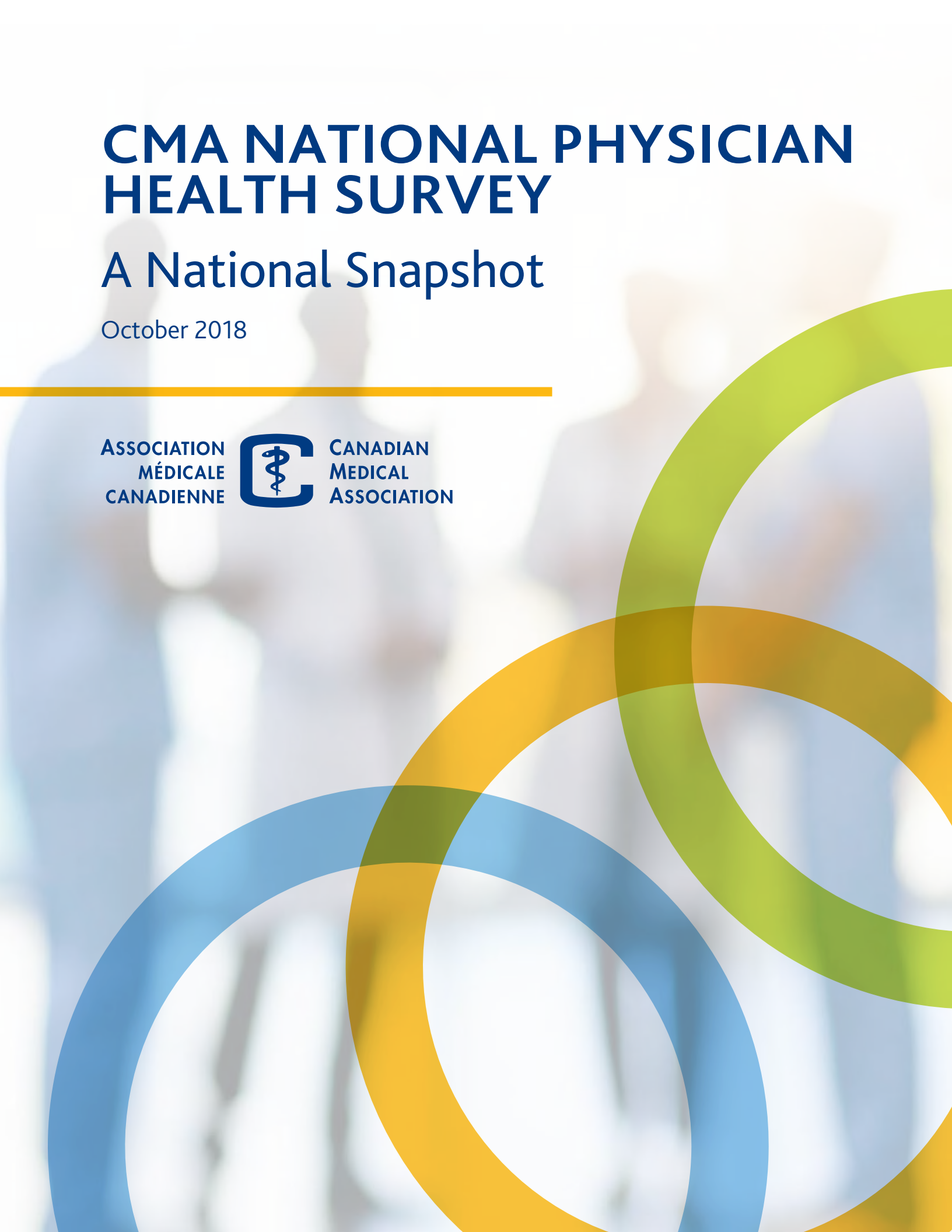
“I am grateful that we have, up to this point, been able to avoid a massive surge in critical care, and that our numbers in Ontario are improving. However, that does not mean that the weight of this pandemic won’t take a toll on many of you. It is now more important than ever that we take care of ourselves and our colleagues,” said Dr. Whitmore.

TAB 32

CMA NATIONAL PHYSICIAN HEALTH SURVEY

A National Snapshot

October 2018



ASSOCIATION MÉDICALE CANADIENNE
CANADIAN MEDICAL ASSOCIATION

"This national snapshot presents prevalence and demographic breakdowns for psychological variables."

EXECUTIVE SUMMARY

The Canadian Medical Association (CMA) has recognized physician health and wellness as an important priority. Physician health and wellness is an important issue and a growing concern within the medical profession. Despite an abundance of international data, recent national Canadian data on key indicators of physician health is limited – a critical gap in knowledge. It is important to acknowledge and assess specific issues, to properly refine, select and evaluate future initiatives. Indeed, the recently released CMA Policy on Physician Health recommends that national data for major health and wellness indicators be assessed at regular intervals to establish and compare norms and to better target and assess initiatives.

In line with this recommendation, we launched the **CMA National Physician Health Survey (NPHS)** to gain a deeper understanding of how physicians are being affected by a multitude of factors impacting their health and wellness. Our goals were to generate an up-to-date and relevant baseline dataset for use by other organizations, researchers, educators and stakeholders and to use this dataset to inform and advance physician health initiatives.

To ensure that the survey reflected the most relevant issues associated with physician health today, the CMA established an Expert Working Group to guide the process and content development. The survey received ethics approval and nearly 3,000 CMA members (residents and physicians) completed it online in 2017. Demographic questions pertaining to practice status, gender, primary province or territory of practice/residency, years of practice/years of residency, area of practice/residency, population served and primary work/residency setting allowed us to generate insightful descriptive statistics.

Overall results

A variety of psychological variables were explored. Nearly 60% of total respondents said their overall mental health was flourishing. Eighty-seven per cent said their emotional well-being was high, 81% said their psychological well-being was high and 65% said their social well-being was high. Moreover, 82% of participating residents and physicians said their resilience was high. The survey also revealed areas of concern, such as burnout, depression and lifetime suicidal ideation, with rates being higher among residents than physicians and higher among women than men.

"87% said their emotional well-being was high, 81% said their psychological well-being was high and 65% said their social well-being was high."

Other results highlighted that physicians with five or fewer years in practice were more likely to experience burnout and have low resilience than all other physicians. Physicians whose main practice setting was a hospital had increased odds of lower emotional well-being, lower social well-being and lower psychological well-being, compared with those working in other settings.

More than 80% of respondents said they are aware of physician health program available to them; however, 15% reported having accessed one. The main reasons for not accessing physician health programs were that they believed the situation is not severe enough, being ashamed to seek help and not being aware of the services available.

Looking ahead, the CMA will be releasing data on behavioural and occupational measures, as well as comparisons with other physician health datasets and with data on the general population.

Physicians and other stakeholders are encouraged to reflect on the results of the NPHS and refer to the new CMA Policy on Physician Health, which provides several recommendations related to individual- and system-level actions that should be pursued by stakeholders at all levels of the health system to promote a healthy, vibrant and engaged profession. We believe that strengthening the health and wellness of the physician workforce is a shared responsibility. Individual physicians must take steps to maintain their personal health and wellness, while system-level initiatives involving numerous institutions, organizations and communities are also necessary.

Poor physician health both affects physicians themselves and significantly influences the delivery of high-quality patient care. Indeed, the prevalence and impact of poor physician health render it not only an individual problem but also a public health concern. While our survey results identified many physician strengths, the health care community must engage in collaborative discussions and solutions to help enhance the health of Canada's physician workforce.

THE BURNING PLATFORM

Physician health and wellness is an important issue across medical training and practice, and it is a growing concern within the medical profession. Attributed to a myriad of personal, occupational and system-level factors, physicians continue to experience adverse outcomes such as burnout, and they are increasingly voicing distress and calling for resources and support. In recent decades there has been growing recognition of the impact of physician health on both individual and systemic outcomes, as well as on the quality of care provided to patients (Canadian Medical Association 2010; de Oliveira et al. 2013; Montgomery 2016; Shanafelt et al. 2016; West et al. 2016).

As defined by the CMA Policy on Physician Health (Canadian Medical Association 2017), physician health encompasses: the prevention and treatment of acute or chronic issues of individual physicians; the optimization of interconnected physical, mental and social factors to support health and wellness (World Medical Association 2015); as well as a set of risk-management practices aimed at shifting perceptions of health from being an individual matter to more of a shared resource (Albuquerque and Deshauer 2014).

Indeed, in Canada the profession has seen increasing use of strategies adapted from organizational psychology and occupational medicine to change physician behaviour, as well as intensified oversight by professional bodies and the inclusion of maintaining personal health as a core competency for physicians (Frank et al. 2015). Despite concerted efforts to promote and protect the health and wellness of physicians, the collective state of physician health remains a significant threat to the viability of Canada's health system (Canadian Medical Association 2010). Physician distress is emerging as an important quality indicator in medical practice (Albuquerque and Deshauer 2014; Wallace et al. 2009), and both individual- and system-level factors are well-established contributors to compromised physician health (Montgomery 2016; Shanafelt and Noseworthy 2017).

Decades of international research have demonstrated that adverse health outcomes among physicians are linked to a range of contributing factors, including intrinsic ones (e.g., personal characteristics) and extrinsic ones (e.g., heavy workloads, duty hours, lack of autonomy, disruptive behaviour, poor work-life integration, increasing demands with diminishing resources, financial issues, and the practice and training environment) (Lemaire et al. 2017; Montgomery 2016; Roman and Prévost 2015).

However, an overreliance on international data has led to a dearth of recent and relevant information on the health status of physicians in Canada on a national scale, which has created a critical gap in knowledge. The most recent national data available were reported from the CMA in 2008. In response to this, a key recommendation of the CMA Policy on Physician Health (CMA 2017) is that national and regional data for major health and wellness indicators be assessed at regular intervals to establish and compare norms and to develop, assess and refine initiatives.

As an important priority for the CMA, and in lock-step with the recent policy recommendations, the CMA developed and conducted a new National Physician Health Survey (NPHS), the primary objectives of which is to generate an up-to-date baseline dataset on a range of relevant intrinsic and extrinsic health and wellness indicators, for organizations (including the CMA), researchers, educators and other stakeholders to access — to help inform, target and enhance initiatives.

"Despite concerted efforts to promote and protect the health and wellness of physicians, the collective state of physician health remains a significant threat to the viability of Canada's health system."

METHODS

Survey design

A critical priority for the CMA in conducting the NPHS was to develop a survey that assessed a balance of the most relevant, contemporary and actionable factors for the profession. To achieve this, the CMA established an Expert Working Group to help guide the identification and prioritization of the survey. Members included representatives with physician health expertise from; the Forum of Canadian Physician Health Programs, the Royal College of Physicians and Surgeons of Canada, the College of Family Physicians of Canada, Resident Doctors of Canada and the Association of Faculties of Medicine of Canada. The group was led and supported by internal expertise from the CMA (content, survey design, and statistics).

THE FOLLOWING PROCESS WAS EMPLOYED IN DEVELOPING THE SURVEY:

1. **Comprehensive list of relevant and emerging demographic, individual, behavioural, occupational and system factors that could be assessed was developed (including those previously measured by the 2007-2008 CMA Canadian Physician Health Study).**
2. **Proposed factors were independently, and then collectively, rated for relevance and relative impact.**
3. **A list of preferred factors was developed.**
4. **Options for measuring each factor were identified (where relevant).**
5. **Prospective measures were independently, and then collectively, rated according to several criterion, including relevance and precedence for use with physician populations (e.g., "gold standard"), potential for comparatives, length (e.g., number of questions), validity and reliability.**
6. **Draft survey was developed, balancing the above criterion with logistical considerations (e.g., length).**
7. **Survey was finalized by refining and sequencing content.**

Participants and procedure

Ethics approval was obtained from the University of Ottawa Research Ethics Board. Eligible participants included medical residents and practicing physicians who are CMA members. Medical students and retired physicians were not eligible to participate. A random sample of CMA members from all provinces and territories was contacted via email and invited to respond to an online survey (N = 34,517). While the sample was representative of CMA membership, a low membership rate in Quebec resulted in Quebec physicians and residents being underrepresented relative to the Canadian physician population. The survey was open for four weeks, including two reminders, and was administered by the CMA using the secure online platform SurveyGizmo. A total of (n = 2,947) members completed the survey (400 residents and 2,547 physicians), for an 8.5% response rate. This is a typical response rate for online surveys, including those administered to medical professionals (e.g., Hughes et al. 2017), and on-par with previous CMA surveys of similar scope and scale. The respondent sample was generally representative of the CMA membership, but certain demographics were underrepresented relative to the Canadian physician population (e.g., males, Quebec physicians and residents). The sample was sufficient to achieve statistical power.

MEASURES

Refer to Appendix A for a complete version of the NPHS and Appendix B for in-depth descriptions of the scales used to assess the psychological variables presented in this report.

Demographics

Participants were asked demographic questions pertaining to their practice status, gender, primary province or territory of practice or residency, years of practice or residency, area of practice or residency, population served, and primary work or residency setting.

Psychological variables

Valid and reliable scales were used to assess a variety of psychological variables, including: mental health (social, psychological and emotional well-being), resilience, burnout, depression and suicidal ideation (lifetime and in the last 12 months). These scales have been used frequently in large-scale surveys administered to medical professionals.

Seeking help

Participants were asked questions pertaining to their awareness of available physician health services, use of such services and barriers to access.

Analyses

Descriptive statistics, divided according to demographics (e.g., practice status, gender, specialty), were generated. Significant between-group differences were assessed using chi-square tests of independence. When significant differences were found with more than two groups, post-hoc tests using Bonferroni correction were used to further define where these occurred, and odds ratios were generated to indicate the increased risk associated with the outcomes.

RESULTS

Prevalence of psychological variables

OVERALL MENTAL HEALTH (N = 2693):

WELL-BEING (N = 2693):

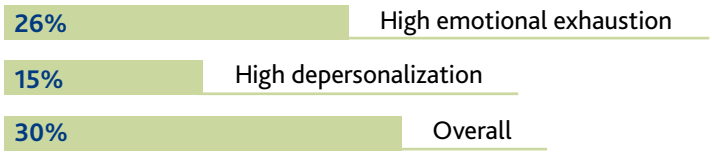
Emotional:

Social:

Psychological:

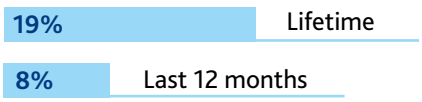
Resilience (n = 2693):

BURNOUT (HIGH) (N = 2744):

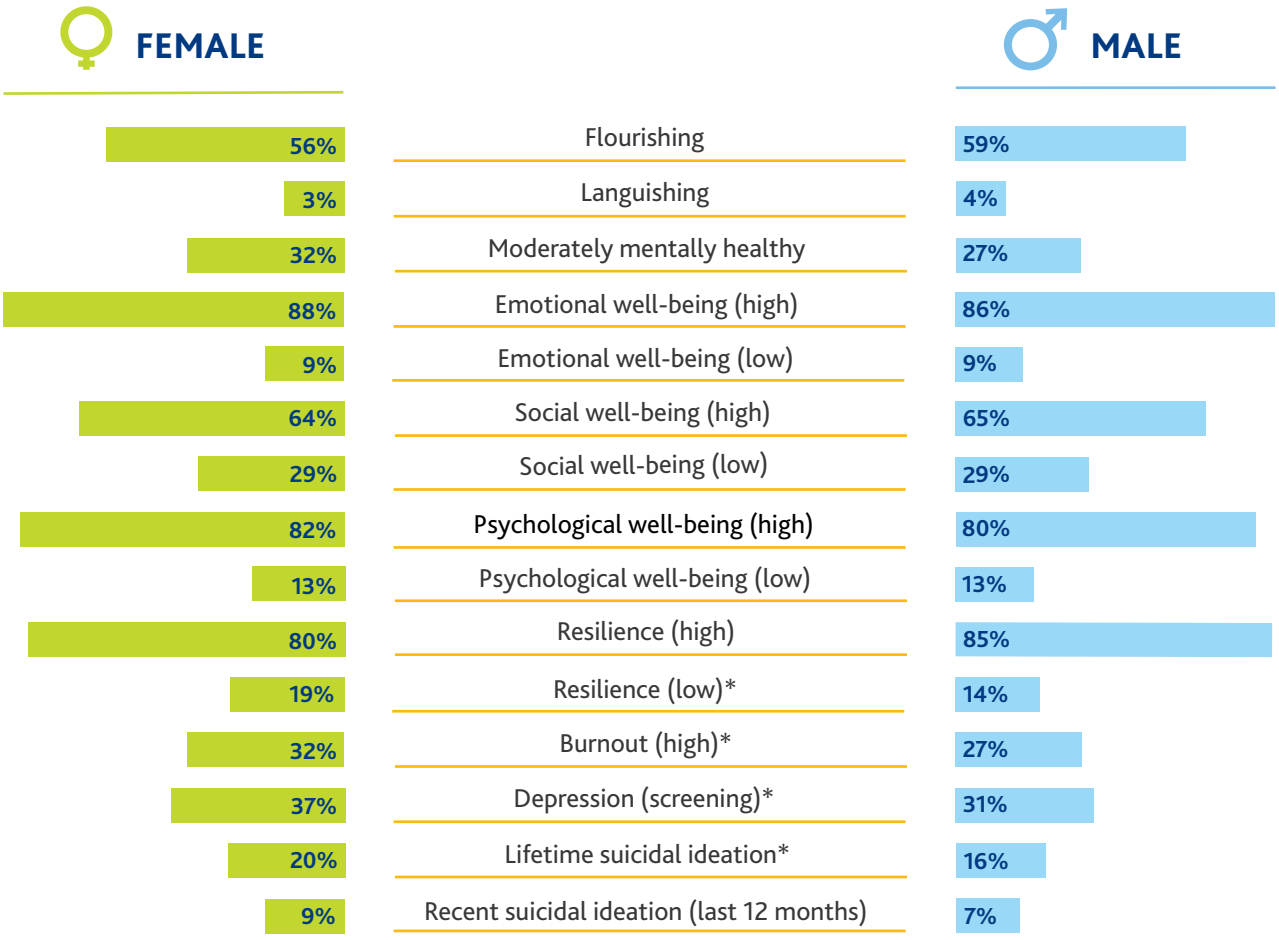


DEPRESSION (SCREENING) (N = 2740):

SUICIDAL IDEATION (N = 2735):

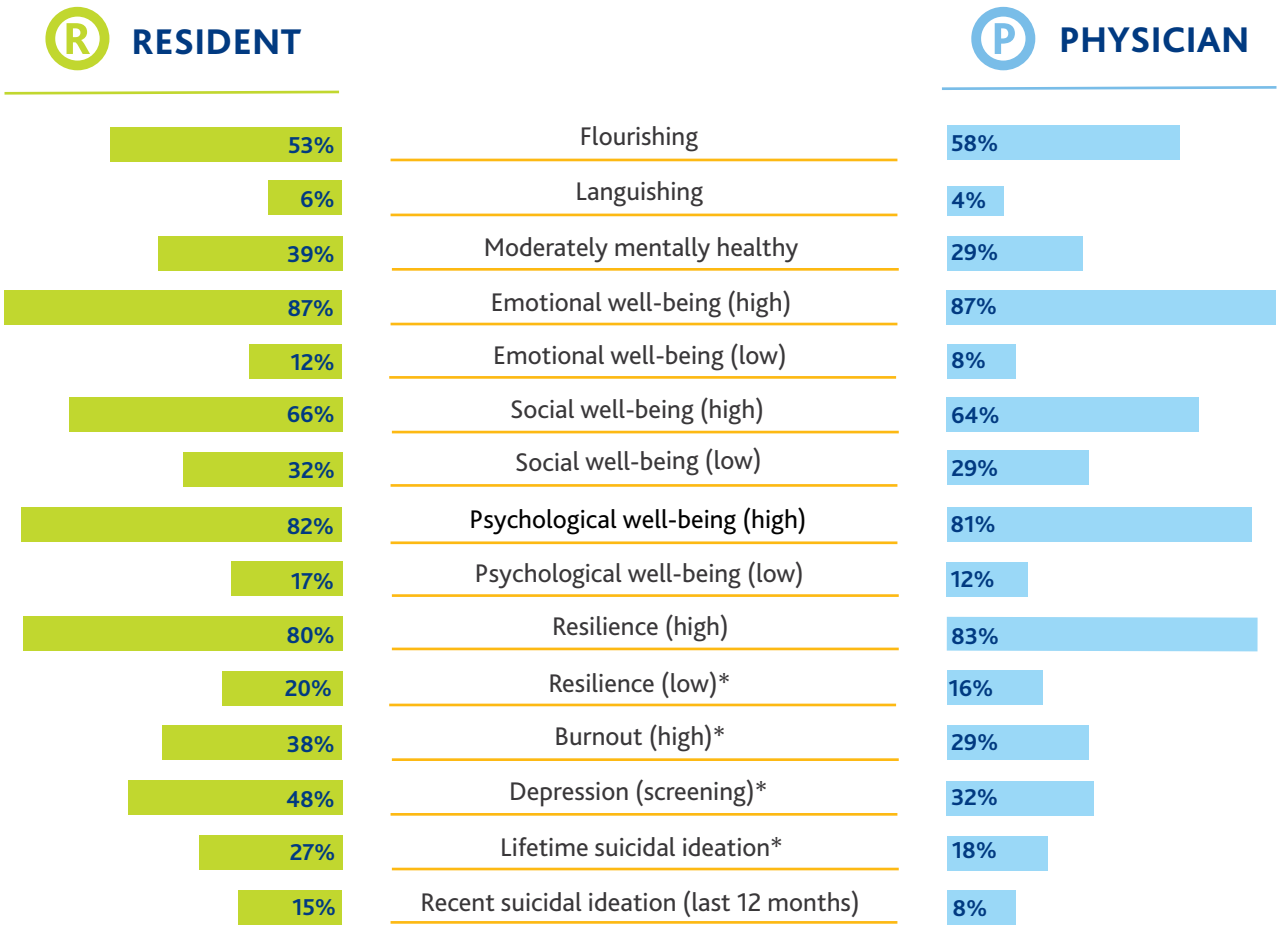


Breakdowns of psychological variables by gender and practice status



Women had 1.43 higher odds (or 43% increase in odds) of having low resilience than men. Significantly more women reported burnout, depression and lifetime suicidal ideation than men. Women also had 1.23 higher odds (or 23% increase in odds) of experiencing burnout, 1.32 higher odds (or 32% increase in odds) of experiencing depression and 1.31 higher odds (or 31% increase in odds) of engaging in suicidal ideation at some point during their life than men.

"Significantly more women reported low resilience than men."



"Significantly more residents reported burnout, depression and lifetime suicidal ideation than physicians."

Significantly more residents reported burnout, depression and lifetime suicidal ideation than physicians. Residents had 1.48 higher odds (or 48% increase in odds) of experiencing burnout, 1.95 higher odds (or 95% increase in odds) of experiencing depression and 1.72 higher odds (or 72% increase in odds) of engaging in suicidal ideation at some point during their life.

Note. Those who did not respond to the demographic questions were excluded from the sample for chi-square tests.
Note. *Significant difference at $\alpha = 0.05$.
Note. Results of chi-square tests of independence. Practice status and burnout: $\chi2(1) = 10.13$, $p < 0.01$. Practice status and depression: $\chi2(1) = 32.43$, $p < 0.001$. Practice status and lifetime suicidal ideation: $\chi2(1) = 16.42$, $p < 0.001$. Gender and burnout: $\chi2(1) = 6.13$, $p < 0.05$. Gender and depression: $\chi2(1) = 11.32$, $p < 0.01$. Gender and lifetime suicidal ideation: $\chi2(1) = 7.14$, $p < 0.01$. Gender and resilience: $\chi2(1) = 11.41$, $p < 0.01$

Breakdown of psychological variables by years in practice

PSYCHOLOGICAL VARIABLES (%)	≤5	6 to 10	11 to 20	21 to 30	≥ 30
Overall mental health:					
Flourishing	56	57	57	58	62
Languishing	4	4	5	4	3
Moderately mentally healthy	35	36	31	28	20
Emotional well-being					
High	89	92	87	84	**88***
Low	9	6	9	11	5
Social well-being					
High	64	65	64	61	**68***
Low	32	32	31	30	22
Psychological well-being					
High	82	83	79	82	**81***
Low	15	14	16	11	8
Resilience					
High	77	83	82	85	86
Low	**22***	17	17	14	**12***
Burnout					
High emotional exhaustion	29	27	30	26	16
High depersonalization	20	18	16	12	5
Overall	**35***	32	32	30	**18***
Depression					
Screened positive	35	33	36	31	28
Suicidal ideation					
Lifetime	21	16	16	18	16
Recent *(last 12 months)*	12	6	8	8	**4***

Note. *Significant difference at $\alpha = 0.005$

Note. Results of chi-square test of independence: $\chi 2(4) = 23.37$, $p < 0.001$. Post-hoc tests indicated physicians in practice for five or fewer years had significantly lower resilience than physicians in practice for 31 or more years.

Note. Results of chi-square test of independence. Years in practice and emotional well-being: $\chi 2(4) = 15.09$, $p < 0.01$, post-hoc tests indicated a significant difference for physicians in practice for 31 or more years. Years in practice and social well-being: $\chi 2(4) = 12.71$, $p < 0.05$, post-hoc tests indicated a significant difference for physicians in practice for 31 or more years. Years in practice and psychological well-being: $\chi 2(4) = 15.65$, $p < 0.01$, post-hoc tests indicated a significant difference for physicians in practice for 31 or more years. Years in practice and suicidal ideation (last 12 months): $\chi 2(4) = 15.50$, $p < .01$, post-hoc tests indicated a significant difference for physicians in practice for 31 or more years.

Emotional, social and psychological well-being was significantly higher among physicians in practice for 31 or more years. Physicians in practice for 31 or more years had 1.85 higher odds (or 85% increase in odds) of having high emotional well-being, 1.51 higher odds (or 51% increase in odds) of having high social well-being and 1.73 higher odds (or 73% increase in odds) of having high psychological well-being than all other physicians.
There were significant differences in resilience according to years in practice, with physicians in their first five years of practice reporting lower resilience than physicians working for 31 or more years.

Conversely, physicians in practice for 31 or more years had 1.62 higher odds (or 62% increase in odds) of having high resilience than all other physicians. However, there were no significant differences in resilience between physicians in the first five years of practice and the other groups; resilience is generally stable from ≤5 to 30 years in practice.

There were significant differences in burnout according to years in practice, with physicians in their first five years of practice reporting greater burnout than physicians working for 31 or more years.

Physicians in practice for 31 or more years had 2.20 higher odds (120% increase in odds) of not experiencing burnout than all other physicians.

There were significant differences in suicidal ideation (last 12 months) according to years in practice, with physicians working for 31 or more years engaging in less suicidal ideation than all other physicians. Physicians in their first five years of practice had 1.74 higher odds (or 74% increase in odds) than all other physicians to have engaged in suicidal ideation during the past 12 months. Conversely, physicians working for 31 or more years had 2.36 higher odds (or 136% increase in odds) than all other physicians to have not engaged in suicidal ideation during this time. Recent suicidal ideation (last 12 months) is generally stable from ≤5 to 30 years in practice.

- **There were no significant differences for any of the psychological variables according to residency years.**
- **Physicians in practice for five or fewer years had 1.68 higher odds (or 68% increase in odds) of having low resilience than all other physicians.**
- **Physicians in practice for five or fewer years had 1.45 higher odds (45% increase in odds) of experiencing burnout than all other physicians.**
- **However, there were no significant differences in burnout between physicians in the first five years of practice and the other groups; burnout rates were similar from the first year to 30 years in practice.**

Breakdown of psychological variables by area of practice/residency

BY AREA OF PRACTICE	Family medicine/ general practice	Internal medicine	Medical specialty	Surgical speciality	Laboratory speciality	Admin position
Overall mental health:						
Flourishing	58	60	57	56	47	74
Languishing	4	3	4	5	9	2
Moderately mentally healthy	30	29	31	32	38	12
Emotional well-being						
High	88	90	87	82	84	95
Low	8	6	9	**13***	16	3
Social well-being						
High	66	67	64	60	54	76
Low	28	27	30	34	41	17
Psychological well-being						
High	83	83	81	79	71	86
Low	12	11	13	17	**27***	5
Resilience						
High	82	82	83	84	77	93
Low	17	17	16	15	22	5
Burnout						
High emotional exhaustion	28	27	25	24	25	19
High depersonalization	15	17	12	18	19	10
Overall	32	31	29	29	28	19
Depression						
Screened positive	35	33	32	29	40	19
Suicidal ideation						
Lifetime	20	15	18	16	22	19
Recent *(last 12 months)*	9	7	8	7	10	3

"There were no significant differences in overall mental health, resilience, burn-out, depression and suicidal ideation according to area of practice/residency."

Results revealed that surgical specialists had 1.74 higher odds (or 74% increase in odds) to have low emotional well-being, compared to all other areas of practice/residency, and laboratory specialists had 2.44 higher odds (or 144% increased odds) to low psychological well-being than respondents in all other areas of practice/ residency.

Note. Those who did not respond to the demographic questions were excluded from the sample for chi-square tests.
Note. *Significant difference at $\alpha = 0.004$, adjusted for multiple comparisons.

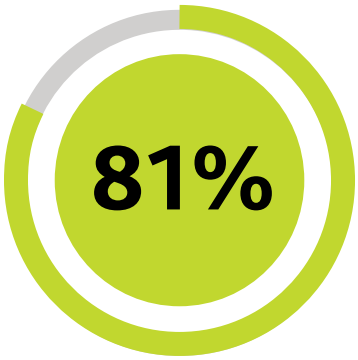
Breakdown of psychological variables by practice/residency setting

BY PRACTICE SETTING (%)	Hospital	Private office/ clinic	Academic	Admin/ corporate office
Overall mental health:				
Flourishing	57	60	55	75
Languishing	4	4	4	2
Moderately mentally healthy	33	29	34	14
Emotional well-being				
High	86	89	89	91
Low	**11***	8	8	4
Social well-being				
High	62	66	69	74
Low	**33***	28	28	21
Psychological well-being				
High	81	84	81	90
Low	16*	11	14	4
Resilience				
High	82	81	84	91
Low	17	18	14	9
Burnout				
High emotional exhaustion	25	28	23	25
High depersonalization	16	15	14	11
Overall	29	31	28	25
Depression				
Screened positive	36	34	31	33
Suicidal ideation				
Lifetime	21	16	16	18
Recent *(last 12 months)*	8	8	9	2

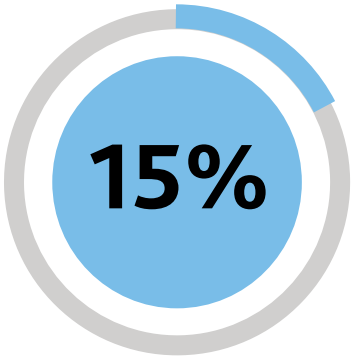
Physicians whose main setting was a hospital had 1.48 higher odds (or 48% increase in odds) of having low emotional well-being, 1.30 higher odds (or 30% increase in odds) of having low social well-being and 1.39 higher odds (or 39% increase in odds) of having low psychological well-being than all other practice settings. However, there were no significant differences in overall mental health, resilience, burnout, depression and suicidal ideation, according to practice/residency setting. Moreover, there were no significant differences in any of the psychological variables according to population served (i.e., Urban/suburban and rural/ isolated)

Note. Those who did not respond to the demographic questions were excluded from the sample for chi-square tests.
Note. *Significant difference at $\alpha = 0.006$, adjusted for multiple comparisons.
Note. Results of chi-square tests of independence. Practice area and emotional well-being: $\chi2(3) = 8.76$, $p < 0.05$, post-hoc tests indicated significant differences for physicians whose main setting was a hospital. Practice area and social well-being: $\chi2(3) = 9.71$, $p < 0.05$, post-hoc tests indicated significant differences for physicians whose main setting was a hospital. Practice area and psychological well-being: $\chi2(3) = 11.74$, $p < 0.01$, post-hoc tests indicated significant differences for physicians whose main setting was a hospital.

Seeking help



Reported being either aware or somewhat aware of what Physician Health Program services are available to them.



Reported accessing a Physician Health Program in the last 5 years

TOP REPORTED REASONS FOR SEEKING HELP:

1. Mental health and related issues (e.g., depression, burnout)
2. Personal stressors (e.g., relationships and family support)
3. Addictions and related disorders

TOP REPORTED BARRIERS TO SEEKING HELP:

1. Believing situation is not severe enough
2. Ashamed to seek help
3. Not aware of the range of services available

SURVEY LIMITATIONS

As with any research, there were a few limitations that should be taken into consideration. First, while the scales used to assess the psychological variables were carefully selected on the basis of a variety of criteria (e.g., validity, reliability, use with physician populations, potential for comparatives, etc.) these scales are not without limitations. Second, although the respondent sample was generally representative of the CMA membership, certain demographics were underrepresented relative to the Canadian physician population (e.g., men, Quebec physicians and residents). Moreover, there were no resident respondents from PEI, Northwest Territories, Yukon or Nunavut and relatively few physician respondents from these areas, which may limit generalizability.

CONCLUSIONS AND IMPLICATIONS

Although physician health and wellness has gained prominence within the medical profession, there is a lack of recent, national data in Canada to define specific areas of concern. It is important to acknowledge and assess specific issues to develop and evaluate initiatives. The CMA NPHS sought to generate such an up-to-date and relevant baseline data set. This national snapshot is the first output in a series of releases, which provides prevalence data and demographic breakdowns of psychological measures as well as data on physician health programs.

Similar concerns regarding the prevalence of these mental health issues have been reported in learners (e.g., Maser & Houlton 2017; Mata et al. 2015; Rotenstein et al. 2016) and other international physician datasets (e.g., Dyrbye et al. 2014; Peckham 2018; Shanafelt et al. 2012). For instance, using the same scales as the NPHS, Shanafelt et al. (2012) surveyed 7,288 US physicians and found that 35.2% were burned out, 37.8% screened positive for depression and 6.4% had thoughts of taking their own lives in the last 12 months. At a glance, this suggests that physicians in Canada and the US have a comparable prevalence of mental health issues, though more in depth statistical comparisons are required to further explore this.

"Findings from this survey highlighted burnout, positive screening for depression and suicidal ideation as important areas of concern among residents and physicians, among others, with rates being relatively higher among residents than physicians, higher among women than men and higher among physicians in the first five years of practice than among all other physicians."

Also in line with these findings, a recent study which included over 15,000 US physicians across various specialties, showed higher rates of burnout in women (48%) than men (38%) (Peckham 2018).

Indeed, previous research has shown that women are at an increased risk of burnout (Dyrbye et al. 2011) and depression (Kumar 2016). In addition to being female, younger age has also been identified as a risk factor for burnout (Amoafo et al. 2014; Shanafelt et al. 2009; Soler et al. 2008). While this report reveals that residents, women and physicians in their first five years of practice are at an increased risk of poor physician health, we do not know specifically why.

Future analyses will identify individual and systemic predictors of these negative outcomes, including those specific to residents, women and physicians in their first five years of practice, which will highlight actionable factors to target and aim to improve.

Except for practice status, gender and years in practice, there were relatively few differences across the other demographics. Indeed, there were no significant differences in the prevalence of burnout, depression and suicidal ideation according to area of practice/residency, practice/residency setting, population served. This suggests that health and wellness issues occur across all segments of the medical profession.

The findings revealed that respondents were generally aware of physician health program services (e.g., provincial programs). However, while physician health programs have been demonstrated to produce positive outcomes (Brewster et al. 2008; Dupont and Skipper 2012), many physicians remain reluctant to access them. Among the highest rated reasons in the NPHS dataset, "believing the situation is not severe enough" and "not aware of the services available" suggest that perhaps physicians are not aware of

the range of services offered by physician health programs. Finally, "ashamed to seek help" indicates that the stigma associated with mental health issues remains a relevant issue within the profession. Indeed, stigma has been consistently identified as a barrier

"Building on the foundation from this national snapshot, future analyses will focus on behavioural and occupational predictors of the psychological measures presented in this report, as well as deeper analyses into the relationships between these factors."

to help-seeking behaviours (Canadian Medical Association 2010; Kay et al. 2008; Knaak et al. 2017). The background document to the CMA Policy on Physician Health has a section outlining the landscape of physician health services in Canada, the Policy offers several related recommendations around the provision and enhancement of access to, and support for, physician health services.

Future analyses will compare the present data with existing physician datasets as well as data from the general population. The data across all three series will be taken into consideration in a discussion of overall interpretations, implications and future directions. In line with recommendations put forth in the CMA Policy on Physician Health, the CMA encourages collaboration among relevant stakeholders to identify priorities and coordinate efforts to promote physician health. Looking ahead, major indicators (personal, behavioral, and occupational) of physician health and wellness should be assessed at regular intervals to identify relevant changes, grow our understanding, and help inform and refine actions in promoting a healthy, vibrant, and engaged profession.

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APPENDICES

Appendix A: CMA National Physician Health Survey

Demographics

1) What is your status?
( ) Student (not eligible)
( ) Medical resident
( ) Practicing physician (including if an administrative position only)
( ) Retired

2) Are you…?
( ) Male
( ) Female
( ) Neither applies to me. I identify as (please specify if you wish):

3) Are you currently working on a full or part-time basis?
( ) Full Time
( ) Part-Time

4) Please indicate your primary province or territory of practice/work/residency rotation:
( ) British Columbia
( ) Alberta
( ) Saskatchewan
( ) Manitoba
( ) Ontario
( ) Quebec
( ) New Brunswick
( ) Nova Scotia
( ) Prince Edward Island
( ) Newfoundland & Labrador
( ) Northwest Territories
( ) Yukon
( ) Nunavut

5) Which option best describes the main area in which you currently practice/work/are doing your residency?
( ) Family medicine, general practice
( ) Internal medicine specialty
( ) Medical specialty
( ) Surgical specialty
( ) Laboratory specialty
( ) Administrative position

6) Do you provide patient/clinical care (either direct or indirect)?
( ) Yes
( ) No

7) For how many years have you been practicing medicine or working in a medically-related administrative field?
( ) 5 or less years
( ) 6 to 10 years
( ) 11 to 15 years
( ) 16 to 20 years
( ) 21 to 25 years
( ) 26 to 30 years
( ) 31 years or more

8) Please indicate your current status:
( ) I am a 1st year medical resident
( ) I am a 2nd year medical resident
( ) I am a 3rd year medical resident
( ) I am a 4th year medical resident
( ) I am a 5th year medical resident
( ) Other (please specify):

9) Are you in your final year of your residency?
( ) Yes
( ) No
( ) Don't know/Haven't decided

10) With respect to your main patient care/ practice setting, describe the population PRIMARILY served by you in your practice
( ) Urban/Suburban
( ) Small town
( ) Rural
( ) Geographically isolated/remote
( ) Cannot identify a primary geographic population

11) Which best describe(s) your primary work/ residency setting?
( ) Hospital
( ) Private office/Clinic
( ) Academic (e.g., university, research unit)
( ) Administrative office/Corporate office
( ) Other (please specify):

Work Hours

12) Excluding on-call activities, how many hours do you usually spend working in an average week (including direct patient care, indirect patient care, teaching/education, committee work, administration, research, managing your practice, continuing medical education/ professional development):_____ hours/week

13) Do you provide on-call services?
( ) Yes
( ) No

14) Estimate your average number of on-call work hours per month: _____hours/month

15) Estimate how many of your on-call hours each month are spent in direct patient care (e.g., phone, email, face-to-face):_____ hours/month

Professional satisfaction and workplace collegiality

16) Please rate your degree of satisfaction with each of the following workplace dimensions.

	Very Dissatisfied	Dissatisfied	Neither	Satisfied	Very Satisfied
Workload and job demands					
Control and flexibility					
Work-life integration (meeting personal and professional obligations)					
Efficiency and resources					

17) To what extent do you agree with the following statements?

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Overall, I am satisfied with my career in medicine					
In general, I find my colleagues to be supportive					
People treat each other with respect in my work group					
A spirit of cooperation and teamwork exists in my work group					
Disputes or conflicts are resolved fairly in my work group					

Personal health

18) Do you believe it is important for physicians to have their own primary care physician?
( ) Yes
( ) No

19) Do you have a regular primary care physician?
( ) Yes
( ) No

20) What are your reasons for not having a primary care physician? (Check all that apply.)
( ) Worried illness might be trivial
( ) Worried about imposing on another busy colleague
( ) Concerns about confidentiality
( ) Can't find a neutral physician
( ) No time to see one
( ) No need for one, I can monitor and diagnose my own condition
( ) Other (please specify):

21) Who is this physician? (Check all that apply.)
( ) Close colleague
( ) Friend
( ) Family member
( ) Independent physician (e.g., not a friend or close colleague)
( ) Yourself

22) When did you last see this physician?
( ) Within the last year
( ) Over a year ago, less than 3 years ago
( ) Over 3 years ago, less than 5 years ago
( ) Over 5 years ago

Physical Activity

23) During a typical 7-day period (a week), how many times on average do you do the following kinds of exercise for more than 15 minutes?(Write the appropriate number on each line.)
a. STRENUOUS EXERCISE (heart beats rapidly) (e.g. running, hockey, football, soccer): _____

b. MODERATE EXERCISE (not exhausting)
(e.g. fast walking, baseball, tennis, volleyball):

_____

c. MILD EXERCISE (minimal effort)
(e.g. easy walking, yoga, bowling, golf) :

_____

24) What are the barriers preventing you from being more physically active? (Check all that apply.)

( ) None, I am getting enough physical activity
( ) Lack of access to facilities
( ) Lack of time
( ) Lack of energy
( ) Fear of injury
( ) Physical condition, injury or disability
( ) Being active is not important to me
( ) Other reason (please specify):

Diet

25) How often do you believe you eat healthily?

( ) Never
( ) Rarely
( ) Sometimes
( ) Often
( ) Always

26) What are the barriers preventing you from eating healthily more often? (Check all that apply.)

( ) Lack of access to healthy food choices
( ) Fast food options are more convenient
( ) Lack of time to grocery shop, cook, meal prep, etc.
( ) Other priorities (e.g. sleep, young children)
( ) I don't know how to cook
( ) Stressful work environment
( ) I have a dietary restriction that restricts my options
( ) Healthy eating is not a priority for me
( ) Other (please specify):

Fatigue

27) How many hours do you usually spend sleeping each night?

Scale: 0 – 11+

28) Which of the following barriers contribute to your lack of sleep?

( ) No barriers. I generally get sufficient sleep.
( ) Shiftwork (e.g., inadequate recovery periods between shifts, frequent sleep interruptions)
( ) Scheduling (e.g., long work hours)
( ) Heavy workload (e.g., patient care and administrative duties)
( ) No post-call day
( ) Psychological distress
( ) Personal commitments (e.g., children)
( ) Other (please specify):

29) How often do you feel your level of fatigue (physical, mental, etc.) negatively impacts your capacity to function at a desired level, due to incomplete recovery from occupational demands and other activities?

( ) Never
( ) Rarely
( ) Neutral
( ) Sometimes
( ) Always

Presenteeism

30) In the last 12 months, how frequently did you come to work when you were physically ill or distressed to a degree that you would recommend a patient or colleague under similar circumstances stay home?

( ) Never
( ) 1 time
( ) 2 times
( ) 3 times
( ) 4 times
( ) 5 or more times

Burnout

31) Please indicate how often you have the following feelings about your work:

	Everyday	A few times a week	Once a week	A few times a month	Once a month or less	A few times a year	Never
"I feel burned out from my work"							
"I have become more callous towards people since I took this job"							

Depression (Screening)

32) During the past 12 months:

Was there ever a time lasting 2 weeks or more when you lost interest or pleasure in most things like hobbies, and/or work activities that usually give you pleasure?
( ) Yes
( ) No

Was there ever a time when you felt down, depressed, or hopeless for 2 weeks or more in a row?
( ) Yes
( ) No

Suicidal Ideation

33) Have you ever thought about taking your own life?
( ) Yes
( ) No

34) Have you had these thoughts in the last 12 months?
( ) Yes
( ) No

Substance Use

35) During the past month, on about how many days did you drink alcoholic beverages?
Scale: 0 – 31

36) On the days when you drank, how many drinks did you drink, on average?
(A drink is 1 can/bottle of beer or wine cooler, 1 glass of wine, 1 cocktail, or 1 shot of liquor).
Scale: 0 – 9+

37) How often in the past month did you have 5 or more drinks on one occasion?
Scale: 0 – 9+

38) How often have you used the following substances to meet daily demands?

	Never used	Used, but not in the past 12 months	Used, but not in the past 30 days	Used in the past 30 days
Stimulants: (e.g., Ritalin, Dexedrine, Adderall, Vyvanse)				
Tobacco				
Marijuana (recreational)				

Patient care

39) To what degree do you feel your health and wellness (physical, psychological) affects the quality of care provided to your patients?
( ) Not at all
( ) Little
( ) Somewhat
( ) A fair amount
( ) A great deal

Physician health services

40) Are you aware of what Physician Health Program (PHP) services are available to you?
( ) Yes
( ) Somewhat
( ) No

41) In the past 5 years, have you accessed a PHP?
( ) Yes
( ) No

42) For what reasons do you think physicians should contact Physician Health Programs? (Check all that apply.)( ) Mental health and related issues
(e.g., depression, burnout)
( ) Physical illness
( ) Non-practice-related workplace issues (e.g., Disruptive colleagues, workplace discord)
( ) Practice related issues (e.g. difficult medical cases, working with the health system)
( ) Personal stressors (e.g., relationships and family support)
( ) Financial strain
( ) Addictions and related disorders
( ) Health promotion and primary prevention
( ) Crisis in my workplace (e.g., suicide of a colleague)
( ) Other (please specify)

43) What are the main reasons you believe that physicians have for NOT consulting a Physician Health Program?
( ) Not aware of the services available
( ) Professional supports already in place
( ) Confidentiality
( ) No time
( ) Ashamed to seek help
( ) Concerns about quality of care
( ) Service not required
( ) Believing situation is not severe enough to warrant a PHP consultation
( ) Other (please specify)

44) If you believed a colleague was in distress, what would you do? (Check all that apply.)
( ) Suggest they consult a PHP
( ) Suggest an issue-specific consultant (e.g., counsellor, financial advisor)
( ) Nothing, my colleagues are able to make appropriate decisions themselves
( ) Other (please specify)

Resilience

45) For each item, please indicate how much you agree with the following statements as they apply to you over the last month. If a particular situation has not occurred recently, answer to how you think you would have felt.

	Not true at all	Rarely true	Sometimes true	Often true	True nearly all of the time
I am able to adapt when changes occur					
I tend to bounce back after illness, injury or other hardships					

Mental health

46) How often in the past month did you feel:

	Everyday	Almost every day	About 2 or 3 times a week	About once a week	Once or twice	Never
Happy?						
Interested in life?						
Satisfied with your life?						
That you had something important to contribute to society?						
That you belonged to a community (like a social group, your veighbourhood, your city, your school)?						
That our society is becoming a better place for people like you?						
That people are basically good?						
That the way our society works makes sense to you?						
That you liked most part of your personality?						
Good at managing the responsibili-ties of your daily life?						
That you had warm and trusting relationships with others?						
That you had experiences that challenged you to grow and become a better person?						
Confident to think or express your own ideas and opinions?						
That your life has a sense of direction or meaning to it?						

Appendix B: Descriptions of psychological measures

Mental health

The Mental Health Continuum Short Form (MHC-SF; Keyes 2002) was used to measure mental health. The MHC-SF is a valid and reliable scale consisting of 14 items that correspond to three facets of well-being: emotional well-being (three hedonic items), social well-being (five eudaimonic items) and psychological well-being (six eudaimonic items). Responses are measured on a scale ranging from 0 ("never") to 5 ("every day"). Continuous scoring was used for each facet of well-being, for a maximum score of 15 for emotional well-being, 25 for social well-being and 30 for psychological well-being. Overall scores of mental health were also calculated and scored according to three categories: flourishing, languishing and moderately mentally healthy. An individual is classified as flourishing if they felt one of the three hedonic items "every day" or "almost every day" and felt six of the 11 eudaimonic items "every day" or "almost every day" in the past month. An individual is classified as languishing if they felt one of the three hedonic items "never" or "once or twice" and six of the 11 eudaimonic items "never" or "once or twice" in the past month. Individuals who are not categorized as flourishing or languishing are categorized as moderately mentally healthy.

Resilience

The two-item Connor-Davidson Resilience Scale (CD-RISC 2; Vaishnavi et al. 2007) was used to measure resilience. The CD-RISC 2 includes two questions pertaining to adaptability and the ability to bounce back from hardships. Responses are measured on a scale ranging from 0 ("not true at all") to 4 ("true nearly all of the time"), for a maximum score of 8. The mean resilience score in the general popula- tion is 6.91 (Vaishnavi et al. 2007). Given this positive skew, scores were coded into two categories: low resilience (score 0–5) and high resilience (score 6–8).

Burnout

The two-item Maslach Burnout Inventory (MBI 2; Dyrbye et al. 2014; West et al. 2009) was used to measure burnout. This scale has been deemed reliable and valid in physician populations (West et al. 2012). The MBI 2 is recommended as an appropriate alternative to the full MBI-22 for large-scale and multifaceted national surveys where space is an important consideration (West et al. 2012). The two questions assess emotional exhaustion ("I feel burned out from my work") and depersonalization ("I have become more callous towards people since I took this job"), which are indicators of burnout. Responses are measured on a scale ranging from 0 ("never") to 6 ("everyday"). To be classified as burned out, an individual must experience high levels of emotional exhaustion and/or depersonalization. High levels on these subscales are defined as occurring at least weekly.

Depression

The two-item Primary Care Evaluation of Mental Disorders (PRIME-MD 2; Whooley et al. 1997) was used to screen for depression. This scale screens for minor depressive disorder using DSM-IV-TR criteria (Tamburrino et al. 2009). Participants were asked, "During the past 12 months: was there ever a time lasting 2 weeks or more when you lost interest or pleasure in most things like hobbies, and/or work activities that usually give you please?" and "During the past 12 months: was there ever a time when you felt down, depressed, or hopeless for 2 weeks or more in a row?" To screen positive for depression, an individual must answer "yes" to at least one of these questions.

Suicidal ideation

Participants were asked, "Have you ever thought about taking your own life?" If they answered "yes," a follow-up question asked, "Have you had these thoughts in the last 12 months?" These two questions have been used to assess suicidal ideation in several national surveys (e.g., Canadian Community Health Survey 2011; CFMS-FMEQ National Medical Student Health and Well-Being Survey 2016).

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TAB 33

'Death by 1000 Cuts': Medscape National Physician Burnout & Suicide Report 2021

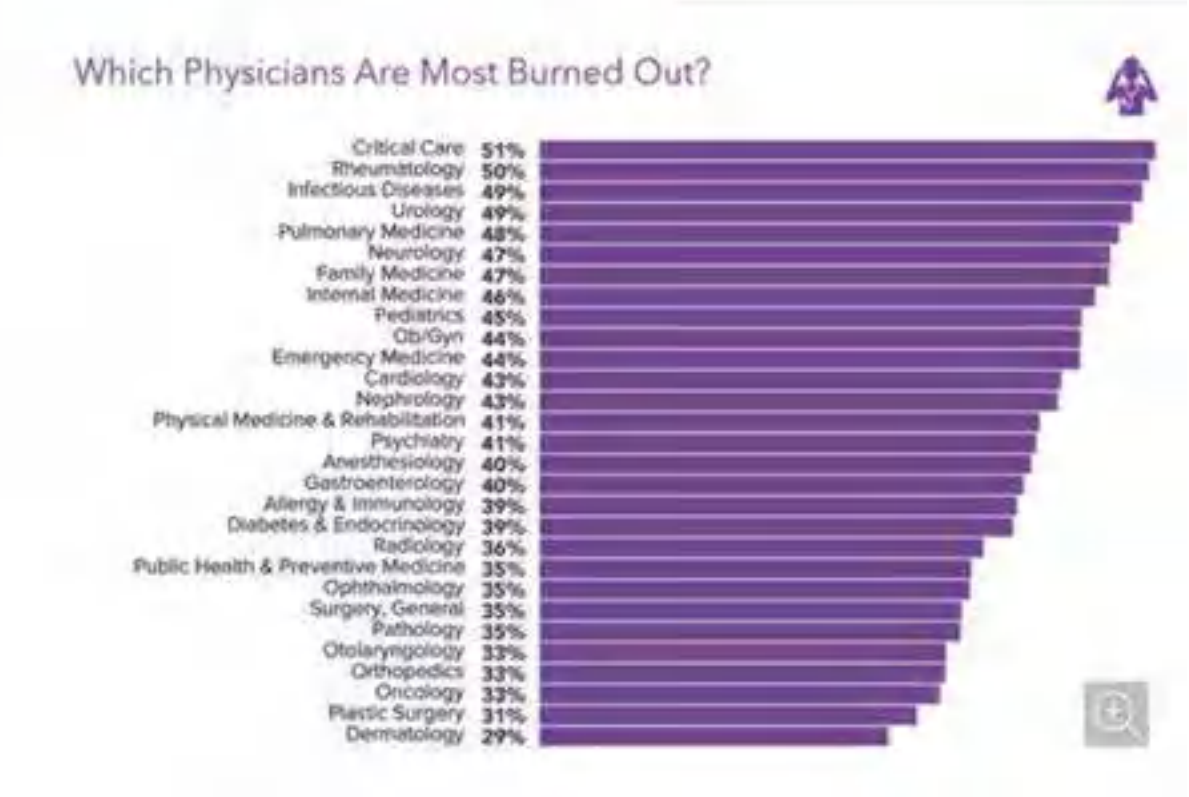
Leslie Kane, MA | January 22, 2021

Source: https://www.medscape.com/slideshow/2021-lifestyle-burnout-6013456

Physicians have struggled with burnout for some time, but it has become worse during the pandemic, influencing happiness, relationships, career satisfaction, and patient care. Tragically, burnout and depression have led to a number of physician suicides, deeply affecting families and the medical profession.

In this year's report, Medscape explores how physicians are coping with burnout and how it affects their view of their profession. More than 12,000 physicians in over 29 specialties responded to our survey. Data were collected from August 30 through November 5, 2020.

Some totals in this presentation do not equal 100% due to rounding.



Burnout is still at a critical level. This year, 42% of physician reported that they are burned out, similar to last year. But COVID-19's influence seems to have affected some specialties more than others.

Last year, the five specialties ranked highest on burnout were urology, neurology, nephrology, endocrinology, and family medicine.

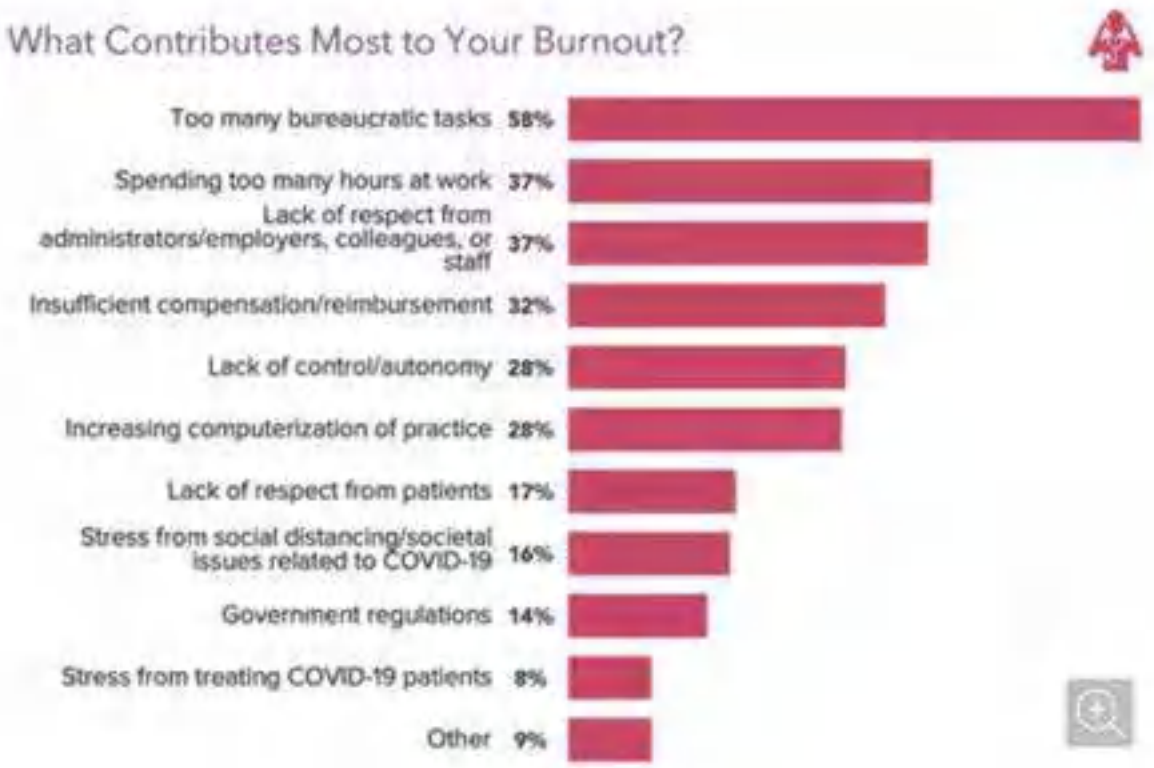
The lineup is different this year; the specialties ranked highest include critical care (44% in 2020), rheumatology (46% in 2020), and infectious diseases (45% in last year's report).

Are More Women or Men Physicians Burned Out?

Women have consistently reported higher percentages of burnout than men over the years, but this year the disparity was greater than usual. (The smallest difference was seen in our 2013 report, when 37% of men and 45% of women said they were burned out.)

"Many women physicians are in families with children at home," says Carol Bernstein, MD, psychiatrist, Montefiore Medical Center, Bronx, New York. "It's already known that women assume more responsibilities in the home than do men. The pressures have increased during COVID-19: having to be their child's teacher during homeschooling; no childcare; and the grandparents can't babysit. Those all bring enormous pressure and burdens. In addition, all doctors and nurses are worried about bringing the virus home to their families."

The lack of personal protective equipment (PPE), difficult conditions, long hours, grief over losing patients, and watching patients' families suffer added a layer of extreme stress and exhaustion for many frontline workers.



One physician summed it up as: "It's all of these causes; it's death by 1000 cuts." The chief causes of burnout remain consistent from past years and are pushing physicians to the bursting point. The top causes of burnout in our 2016 report look familiar: too many bureaucratic tasks; too many hours at work; increasing computerization of practice; and insufficient compensation. (Respondents could choose more than one answer.)

What Contributes Most to Your Burnout?

"I'm working 6 days a week, nights, weekends, holidays!"
Internist

"Being forced to see four patients an hour when complicated patients and procedures are involved."
General surgeon

"There is a dangerous lack of timely personal protective equipment."
Emergency physician

How Severe Is Your Burnout?

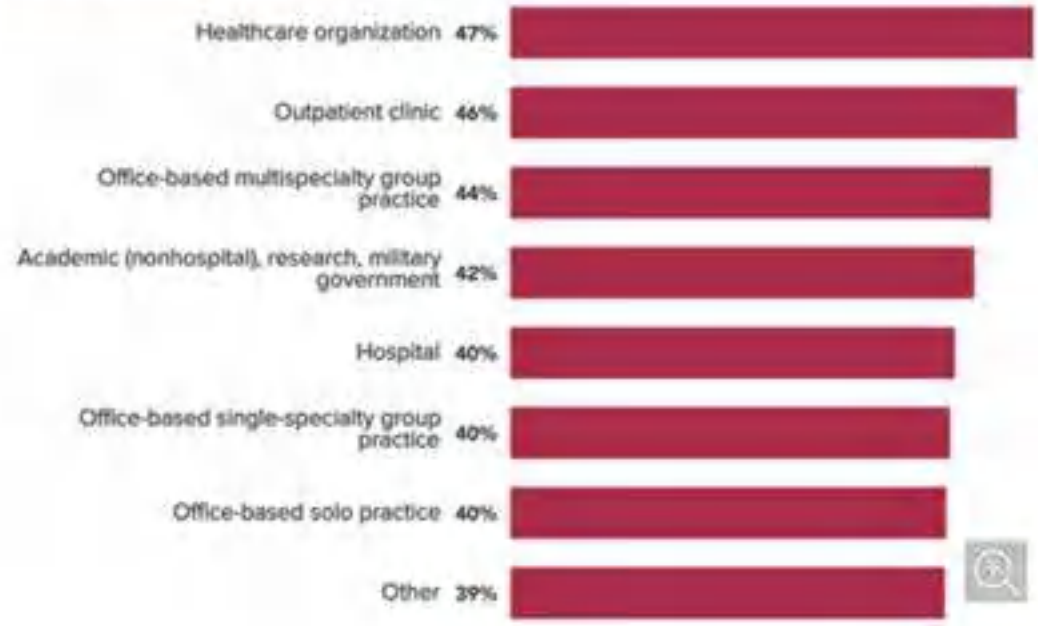
29% Has little or no impact on my life

24% Has moderate impact on my life

47% Has strong/severe impact on my life

Over 70% of respondents who reported burnout consider it serious enough to have at least a moderate impact on their lives. One tenth consider it severe enough to consider leaving medicine, an unexpected outcome after having spent so many years in training to become a physician.

Burnout by Work Setting



Healthcare organizations and outpatient clinics were among the top work locations for burnout in our 2019 survey report as well as this year.

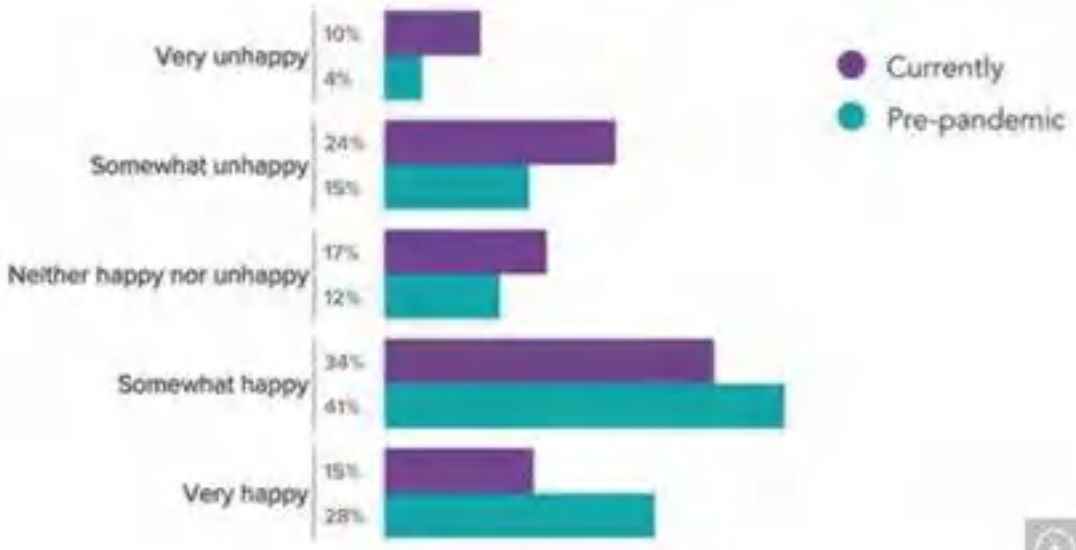
How Has Burnout Affected Your Life?

"I get angry easily; I dread every shift, I'm frustrated and cynical about patients. I find myself becoming a doctor and person I don't want to be."
Emergency physician

"I often feel despair. I have severe anxiety and PTSD. I have severe self-doubt, and I have lost the strong sense of self and values that I once had."
Ob/Gyn

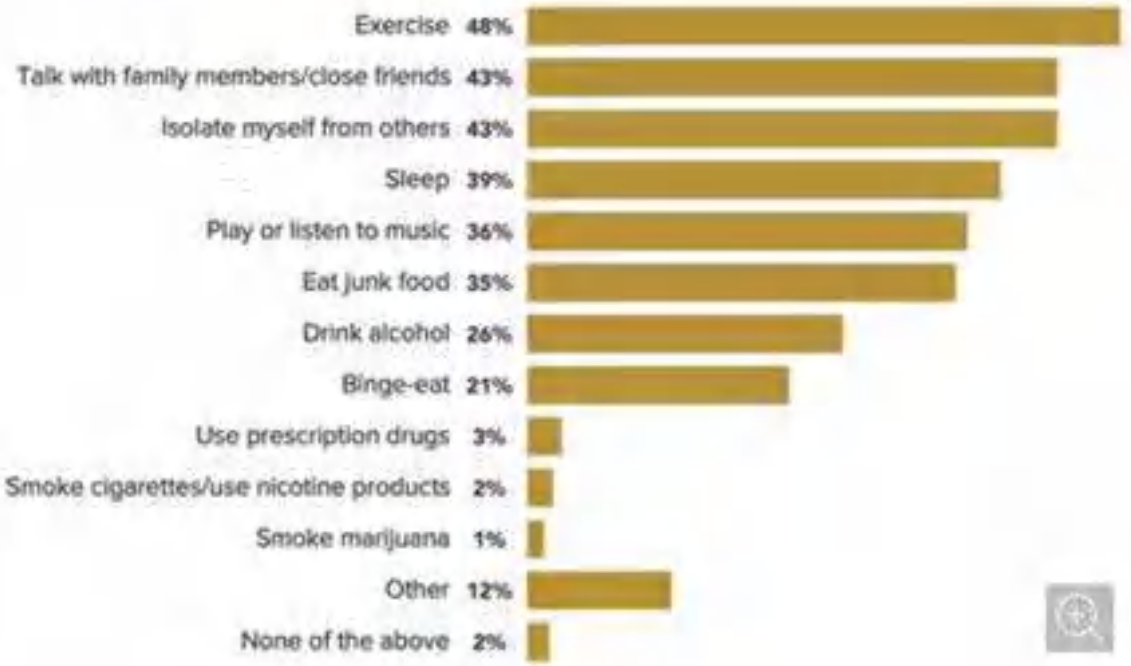
"I'm tired and discouraged. It stresses my marriage. I have a hard time getting out of bed in the morning. I count the days until Friday."
Psychiatrist

How Has COVID-19 Affected Your Worklife Happiness?



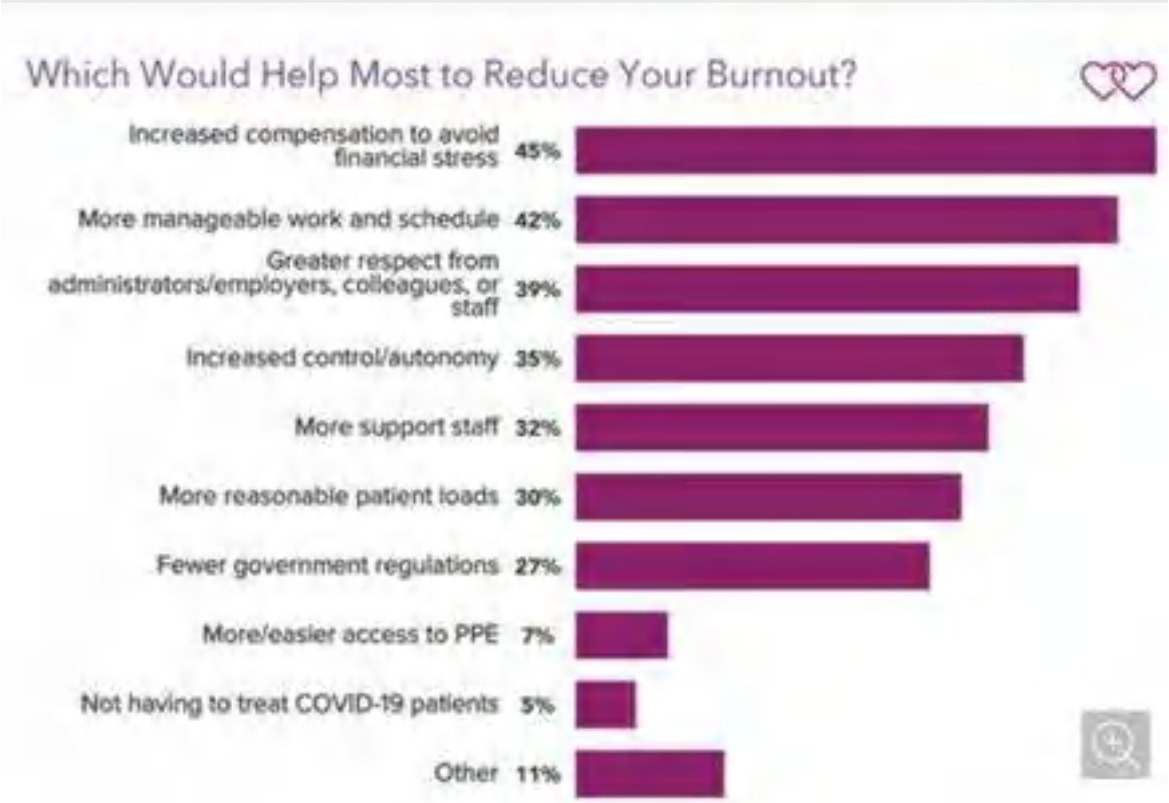
Happiness among physicians took a huge plunge since the onset of the pandemic, from 69% pre-COVID-19 to 49% now (those responding very happy/happy). Stresses, risks, social distancing, and future uncertainty have contributed to declining happiness.

How Do Physicians Cope With Burnout?



Exercise continues to be a popular way to cope with burnout (45% chose exercise last year). However, drinking alcohol and overeating junk food have slightly increased since last year (24% and 33%, respectively, in 2020).

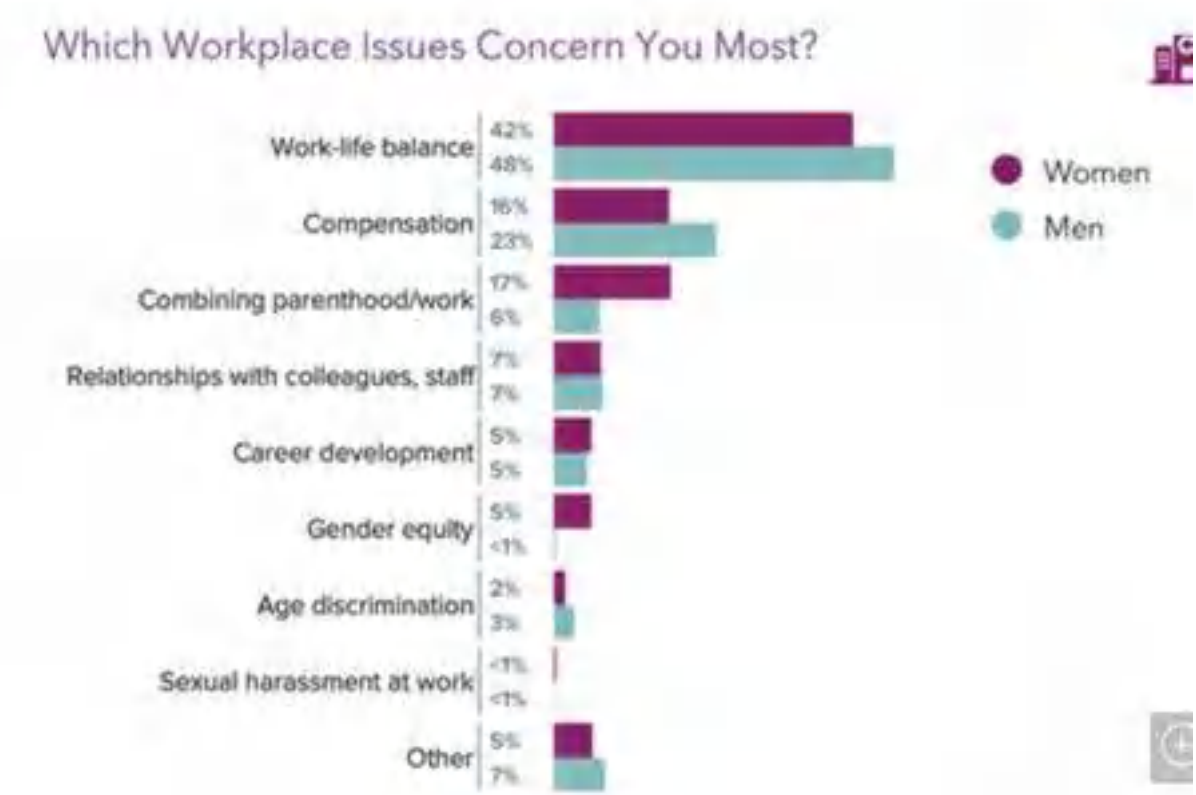
"Doctors are inherently very resilient people; maintaining our resilience is important and it's just as vital to keep up good habits and behaviors as it is to avoid getting into bad habits, which unfortunately some people do," says Peter Yellowlees, MD, MBBS, professor, Department of Psychiatry, University of California, Davis, and author of *Physician Suicide: Cases and Commentaries*.



"Get rid of insurance company interference with treatment, such as excessive prior authorization processes and denial of standard-of-care practices." –*Neurologist*

"Less charting/billing tasks, an EHR that actually works right, and time off for exams!" –*Gastroenterologist*

"Patients' families having reasonable expectations." – *Pulmonologist*



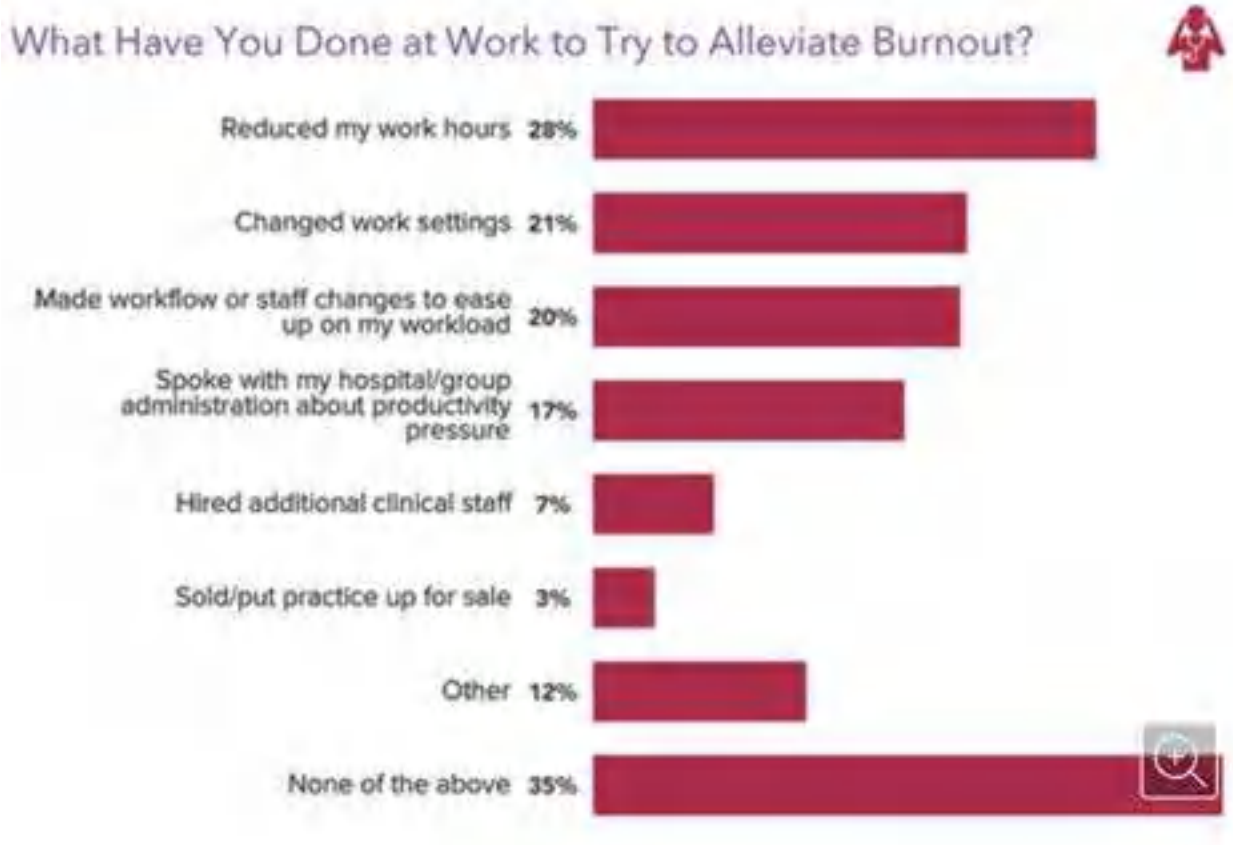
Work-life balance is clearly the most pressing issue for physicians, followed by the related issue of combining work and parenthood. Compensation is a more frequent issue of concern for men than for women. In Medscape's 2020 report Women Physicians: The Issues They Care About, work-life balance was women's top concern, followed by compensation and then combining parenthood and work.

Work problems don't stay at work: Burnout from work spills over into every aspect of a physician's life.

"I find my conversations with my family to be very negative, and it leads to friction and arguments with them." –*Anesthesiologist*

"I have no energy when I get home and I feel like I'm ignoring my family, but I need time to decompress and process what I dealt with during the day." –*Oncologist*

"I'm more withdrawn, and I'm taking the stress out on my wife and kids." –*Family medicine*



"Physicians certainly try to improve their situations," says Wendy K. Dean, MD, psychiatrist and president and co-founder, Moral Injury of Healthcare. "Most physicians are as efficient as possible, limited primarily by the inefficiencies of the systems in which they work. We should exhaust every other strategy for making the environment more sustainable — better tools, better processes, better workflows, better administrative support at every level — allowing doctors to work smarter instead of harder."

Are Physicians Depressed?

20% Clinical depression (severe depression lasting some time, not caused by a normal grief event)

69% Colloquial depression (feeling down, blue, sad)

11% Other

Of the 20% of physicians overall who said that they were depressed, more than two thirds consider it colloquial depression (feeling down, blue, sad). Many have noted that burnout is a major contributor to their depression.

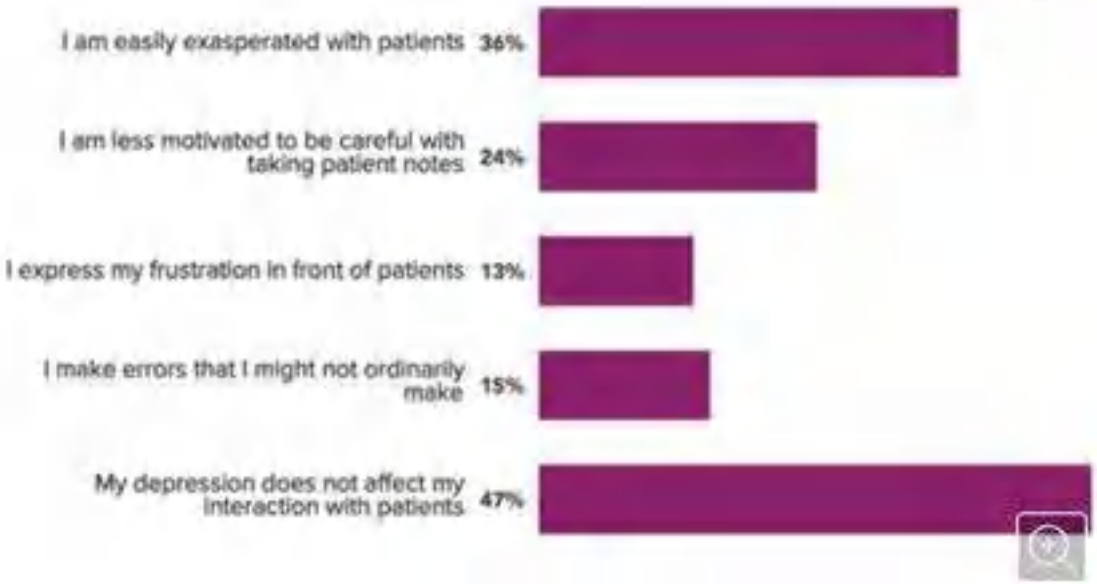
Physicians Describe Their Depression

"I'm gaining weight, angry, and not sleeping."
ER physician

"I can't do the things that I enjoy to relieve stress, such as traveling. My hair is falling out because I can't de-stress."
Ob/Gyn

"I'm now on depression meds. My depression and anxiety are hurting my work and personal relationships."
Neurologist

Does Your Depression Affect Your Patient Relationships?



Almost half of depressed physicians say their depression has no impact on patients, but more than half reported some notable effect on their interactions with patients.

Bernstein notes that these results are possibly less alarming than one might think. "In my experience, physicians are very hard on themselves. While no one should become careless with patient care, it's likely that they are doing a better job than they think," said Bernstein. "It's pretty important to acknowledge that we are human. We are all incredibly stressed; doctors try to have compassion and forgive patients, but we need to have compassion for ourselves, too. Doctors don't give themselves enough of a break."

Have You Ever Felt Suicidal or Attempted Suicide?

13% Yes; I've had thoughts of suicide but have not attempted suicide

1% Yes; I've attempted suicide

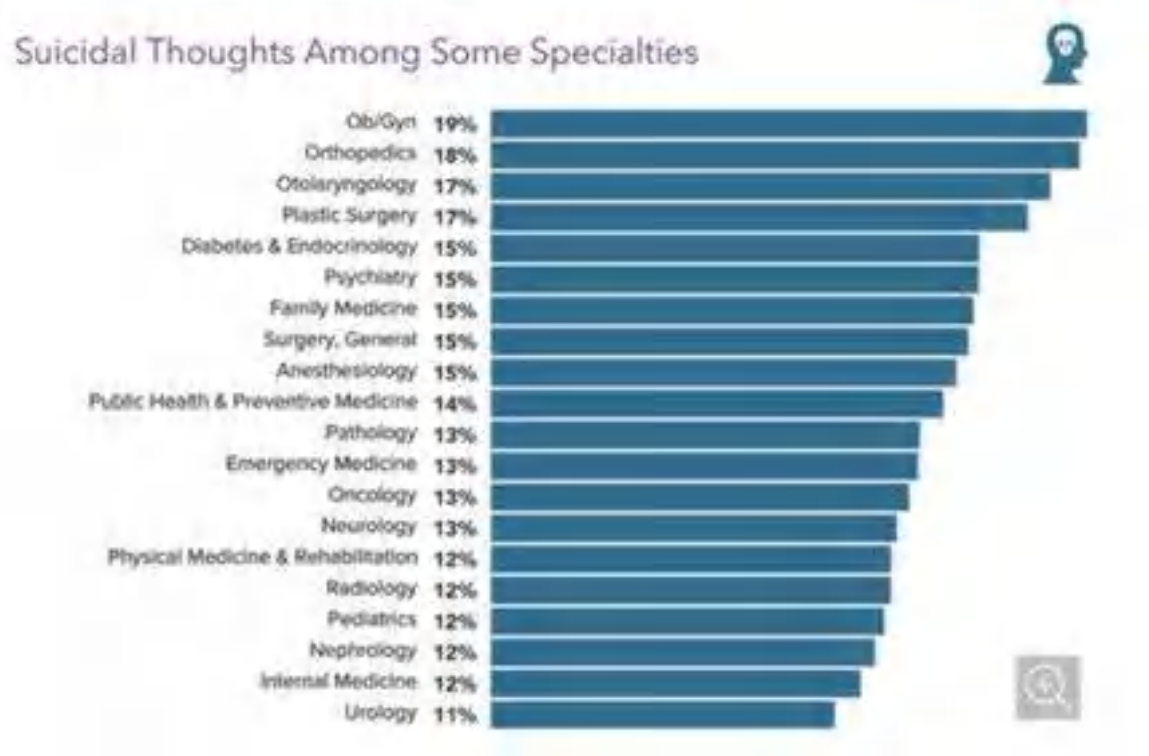
81% No

5% Prefer not to answer

It's been estimated that about 300 physicians commit suicide each year. In 2018, suicide was the tenth leading cause of death among the general population in the United States.

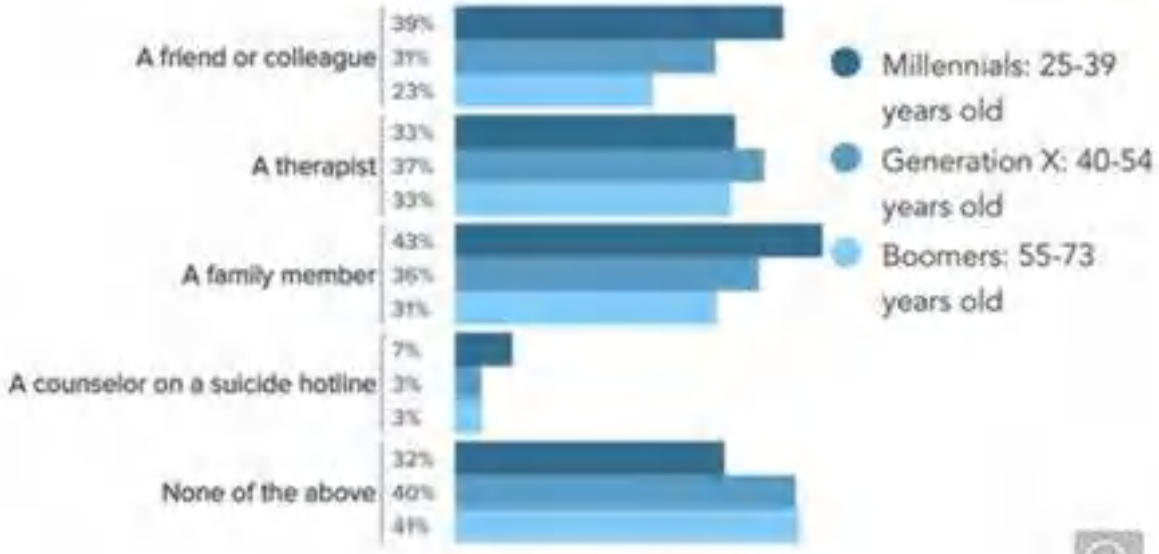
Our survey showed that 1% of physicians have attempted suicide, a frightening and sad statistic. "Anyone who has made suicide attempts is at greater risk at some point of completing the act," says Bernstein.

One internist who admitted to having had suicidal thoughts, said, "I yell all the time. I am angry and frustrated all the time. I think about quitting all the time. No one in my organization cares about doing the right things for patients as much as I do."



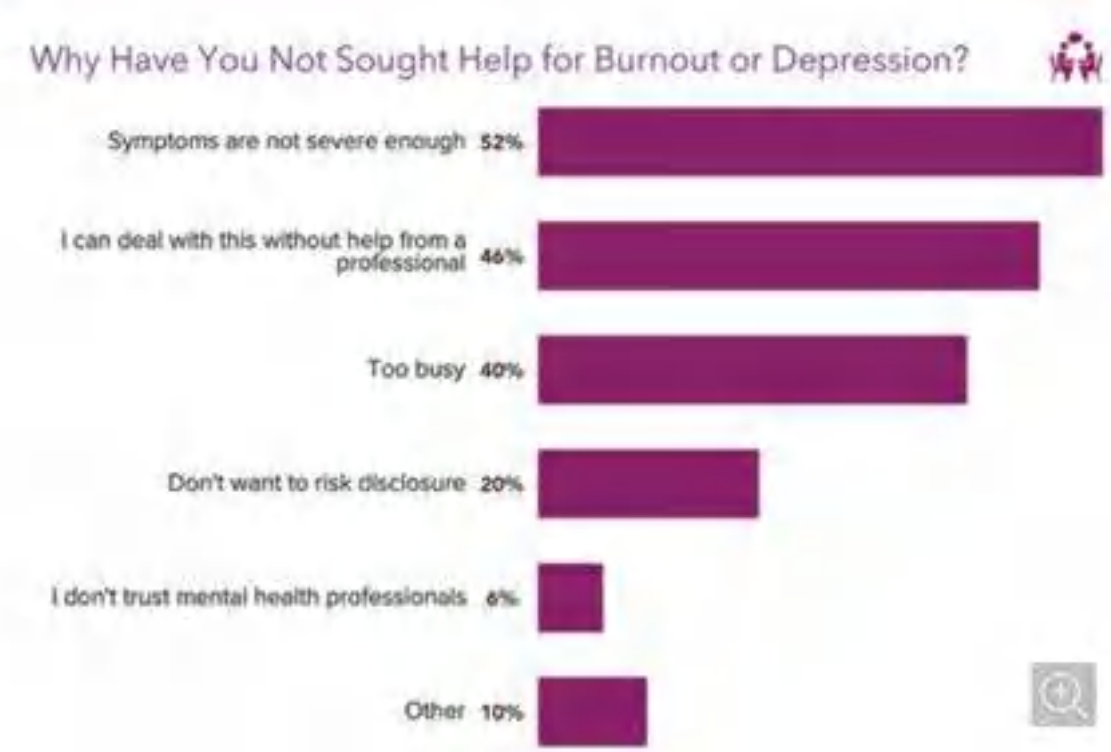
Thirteen percent of physicians have had thoughts of suicide. Our chart shows those specialty groups with among the highest rates (specialties with over 10% responding "yes"). Some specialties may be prone to more stress, greater danger from caring for COVID patients, and higher levels of burnout and depression, all of which could be factors in having suicidal thoughts.

Whom Did You Tell About Your Thoughts of Suicide?



One of the dangers of the depression spiral is that the person suffering doesn't share their thoughts and therefore doesn't have anyone to encourage them to get help. (Respondents could choose more than one answer to the survey question.)

"Unfortunately, many physicians don't seek help, even when they know they should," said Yellowlees. "There are many reasons for this, but the most important is that many physicians probably perceive an inherent stigma and shame of seeking mental health treatment. There's also a level of internal denial; they are ashamed and see themselves as failures if they seek help, and they believe that if they keep working hard, all obstacles should eventually be overcome."



A variety of privacy concerns keep physicians from getting mental health assistance. Risk of being reported to the medical board, fears of one's colleagues finding out, and other potential repercussions are factors that perpetuate the climate of burnout and depression.

Does Your Workplace Offer a Program to Reduce Stress and/or Burnout?

35% Yes
47% No
18% Don't know

Smaller groups and practices are less likely to have programs designed to help with physician burnout and stress. A research study published by the Mayo Clinic noted: "The most efficacious strategy to alleviate physician burnout will target organization-directed changes rather than the level of the individual."

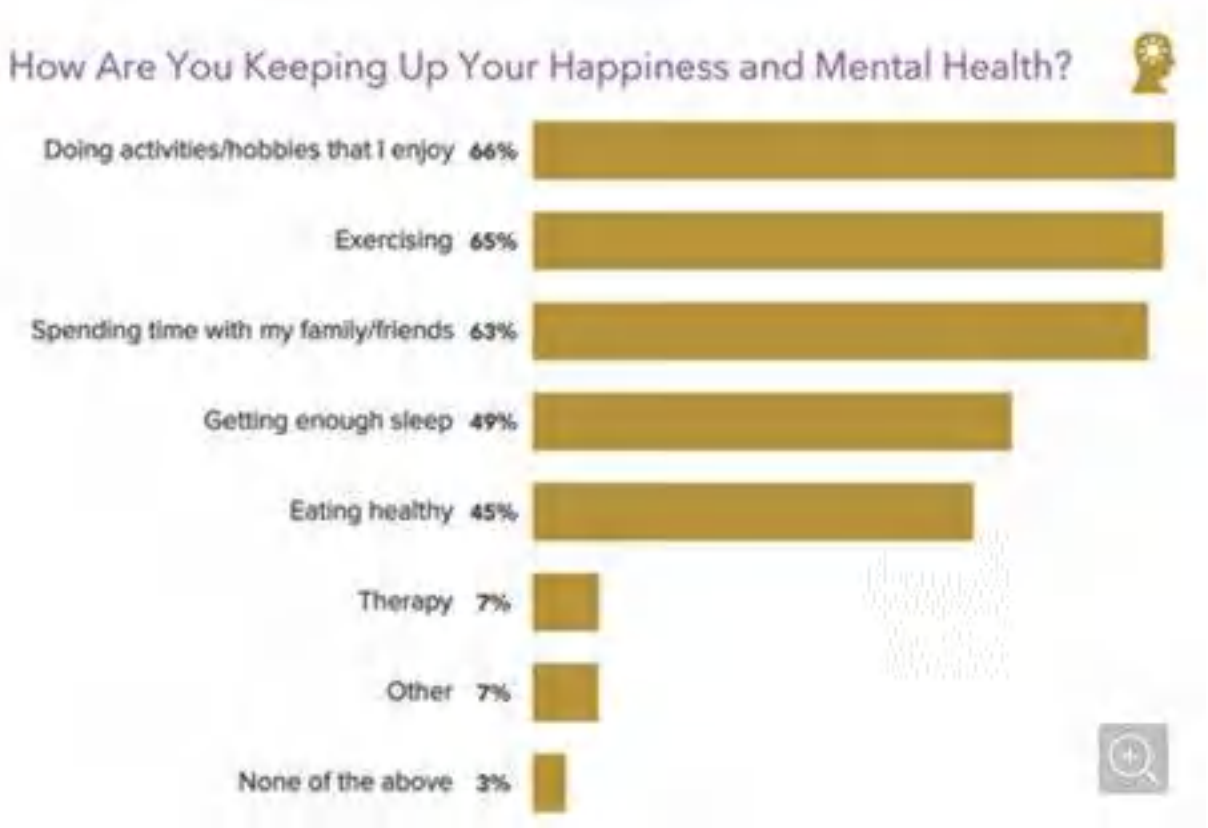
How Likely Are You to Participate in This Program?

42% Very unlikely

28% Neither likely nor unlikely

30% Very likely

Employer programs tend to have a fairly low level of participation, for a variety of reasons. "Anti-stress/burnout programs focus on individual approaches to much larger problems," says Dean. "The programs offer temporary symptomatic relief rather than lasting systemic change. Many physicians are frustrated by these approaches."

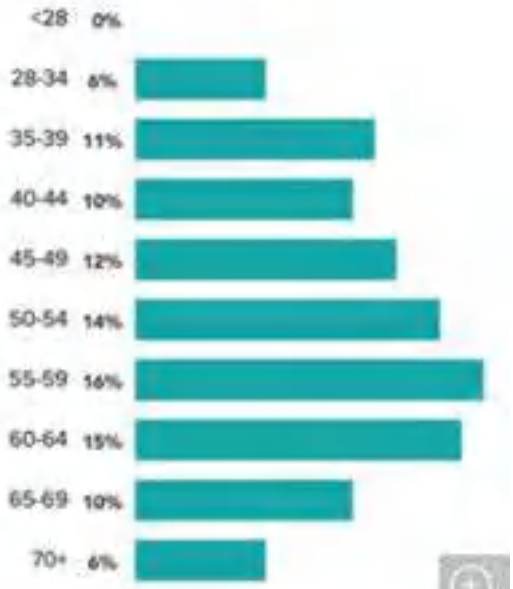


Physicians named some activities that help them remain in better spirits: playing ice hockey, spirituality and religion, revisioning their career, meditating, taking antidepressants, getting a puppy, focusing more on self-care, daily Bible study, spending time with their spouse, listening to New Age music, drinking alcohol, and writing.

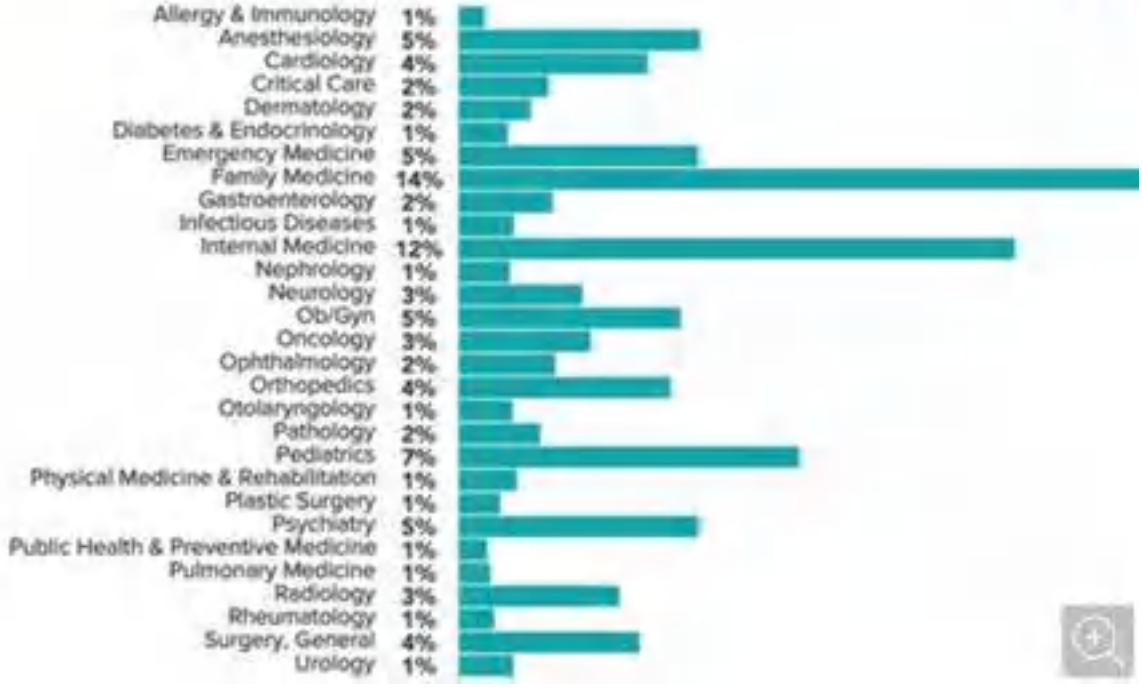
Demographics

BY GENDER

BY AGE



Demographics by Specialty



Methodology

- Survey Method: **Medscape member physicians** were invited to participate in a 10-minute online survey.
- Screening Requirements: **Respondents were required** to be practicing US physicians.
- Sample Size: **12,339 physicians** across 29+ specialties met the screening criteria and completed the survey, weighted to the American Medical Association's physician distribution by specialty and state.
- Recruitment Period: **August 30 through November 5, 2020**.
- Sampling Error: The sampling error for the survey was +/- 0.88% at a **95% confidence level** using a point estimate of 50%.

TAB 34

BMJ Open

Impact of the COVID-19 pandemic upon self-reported physician burnout in Ontario, Canada: evidence from a repeated cross-sectional survey

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ABSTRACT

Objectives To estimate the impact of the SARS-CoV-2 (COVID-19) pandemic on levels of burnout among physicians in Ontario, Canada, and to understand physician perceptions of the contributors and solutions to burnout.

Design Repeated cross-sectional survey.

Setting Active and retired physicians, residents and medical students in Canada's largest province were invited to participate in an online survey via an email newsletter.

Participants In the first survey wave (March 2020), 1400 members responded (representing 76.3% of those who could be confirmed to have received the survey and 3.1% of total membership). In the second wave (March 2021), 2638 responded (75.9% of confirmed survey recipients and 5.8% of membership).

Key outcome measure Level of burnout was assessed using a validated, single-item, self-defined burnout measure where options ranged from 1 (no symptoms of burnout) to 5 (completely burned out).

Results The overall rate of high levels of burnout (self-reported levels 4–5) increased from 28.0% in 2020 (99% CI: 24.3% to 31.7%) to 34.7% in 2021 (99% CI: 31.8% to 37.7%), a 1-year increase of 6.8 percentage points (p<0.01). After a full year of practising during the COVID-19 pandemic, respondents ranked 'patient expectations/patient accountability', 'reporting and administrative obligations' and 'practice environment' as the three factors that contributed most to burnout. Respondents ranked 'streamline and reduce required documentation/administrative work', 'provide fair compensation' and 'improve work–life balance' as the three most important solutions.

Conclusions During the first 12 months of the COVID-19 pandemic in Ontario, prevalence of high levels of burnout had significantly increased. The contributors and solutions ranked highest by physicians were system-level or organisational in nature.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ The physician burnout survey was launched at the outset of the COVID-19 pandemic in Ontario, Canada, in March 2020, and repeated 1 year later, offering a unique opportunity to estimate the impact of the pandemic on levels of burnout.
⇒ The study population comprised the entire membership of the Ontario Medical Association, including active and retired physicians, as well as medical students and residents.
⇒ In an effort to minimise response burden among physicians in the midst of the pandemic, a simple, unidimensional scale was used to measure burnout level; it was therefore not possible to analyse the dimensions of burnout.
⇒ The survey was advertised using email newsletters and social media, rather than being targeted to a selected sample of members, and this made it impossible to calculate an accurate response rate or to follow up with individuals to encourage participation.

INTRODUCTION

Burnout is defined by the WHO as 'chronic workplace stress that has not been successfully managed',[1] and is characterised by three dimensions—emotional exhaustion, depersonalisation and a reduced sense of personal accomplishment.[2 3] In physicians, burnout has been associated with depression, suicidal ideation, substance use, motor vehicle crashes, reduced productivity, increased turnover and early retirement.[2 3] It has also been associated with poor patient outcomes, including lower quality of care and increased medical errors.[2] Even before the COVID-19 pandemic, healthcare worker burnout was identified as a public health crisis in the USA.[4] However a pre-pandemic review highlighted significant variability in burnout rates in the USA measured through various tools, making it difficult to accurately assess the scale of the issue.[5]

The SARS-CoV-2 (COVID-19) pandemic created major disruptions in physician services. Between mid-March and late-May 2020, healthcare providers and organisations in Ontario, Canada were directed to stop or substantially reduce the provision of elective and non-emergent services as the health system was reconfigured to manage the influx of patients with

COVID-19 admitted to hospitals and intensive care units. Simultaneously, temporary virtual care billing codes were introduced to facilitate telephone and video visits. Over half of family medicine physicians and approximately two-thirds of physicians in other specialties in Ontario are compensated mainly via fee-for-service (FFS) billings or in primary care models of which FFS billings are a significant component. FFS physicians who could not practise at normal capacity in the virtual environment were subject to financial strain.

Physicians on the front line of the COVID-19 response, and others who were called upon to provide essential care, experienced stress related to the risk of contracting, and potentially spreading, COVID-19. This was exacerbated during the first wave by shortages of respirators and other vital personal protective equipment. While healthcare workers were lauded as heroes early in the pandemic, they too often became the targets of frustration and anger as the public wearied of pandemic restrictions.

These are just a few examples of ways in which the pandemic may have exacerbated stressors experienced by physicians, above and beyond increased demands placed upon the healthcare system by COVID-19. Healthcare workers have experienced unprecedented stressors during the pandemic, leading many to hypothesise that the problem of burnout has worsened since its onset. However, data to assess the issue during this period have been generally lacking.

The purpose of this study was to estimate the prevalence of burnout among Ontario physicians, evaluate the impact of the COVID-19 pandemic on rates of physician burnout, and canvas Ontario physicians about the factors that they believe contribute to burnout and the interventions that they believe would be effective to address it.

METHODS

Study design and population

A repeated cross-sectional survey was used to evaluate baseline levels of physician burnout at the onset of the COVID-19 pandemic in Ontario and the impact of the pandemic after 1 year. The entire membership of the Ontario Medical Association (OMA), including all active and retired physicians, residents and medical student members, were eligible to participate by completing an online survey.

Questionnaire design and data collection

At the behest of the OMA Burnout Task Force, a survey instrument was constructed to assess overall feelings of burnout and solicit opinions about possible causes and solutions (online supplemental appendix 1). Physicians were asked to rate their own level of burnout on a 5-level scale, ranging from 1 (no symptoms of burnout) to 5 (completely burned out) based on a single-item, non-proprietary, validated self-defined burnout measure that was developed by Schmoldt and colleagues and has been used in physician populations since 1994 (online supplemental appendix 2).[6 7] A self-defined measure was chosen to allow respondents the latitude to report on burnout as they experienced it, and a widely accepted definition of burnout was provided in the survey instrument preamble for reference (online supplemental appendix 1).[3 8]

Physicians were then asked to rank a list of the top 10 contributors to burnout from 1 (most contribute to physician burnout) to 10 (least contribute to physician burnout) and rank a list of the top 10 solutions to burnout from 1 (would most like to see implemented) to 10 (would least like to see implemented). The set of contributors and solutions was selected based on those most commonly mentioned in the literature.[2 9–11] An open-text question allowed physicians to identify other contributors or solutions to physician burnout that, in their opinion, the supplied lists did not capture. Sociodemographic data were also collected on gender, age, years of practice, career stage, primary practice setting, location and degree of rurality.

The survey was conducted in two waves. An online survey link was included in the President's Update email communication, which was made available to the entire population of physicians, retired physicians and trainee members, who had not previously opted out of email communications, on 9 March 2020. Responses were accepted through 22 March 2020 (14 days). With only minor modification (ie, rewording without a change in meaning to the 'solutions' ranked options), the same survey instrument was redeployed on 12 March 2021, via an OMA News email communication, and remained open until 4 April 2021 (24 days). Between the two survey waves, the OMA redesigned its email communication mechanisms to merge the President's Update with the OMA's other newsletters to create a single newsletter called OMA News, delivered to the same recipients as the former President's Update. Reminders to complete the survey were included in the weekly OMA News email communications for the duration. The invitation to participate was also shared on social media platforms. Respondents were anonymous.

Definition of burnout

Some degree of burnout was indicated for respondents who rated themselves as either '(3) I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion', '(4) The symptoms of burnout that I'm experiencing won't go away. I think about frustration at work a lot', or '(5) I feel completely burned out and often wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help'. Those reporting levels 4–5 were determined to be experiencing a high degree of burnout.

Statistical analysis

Survey participants were considered 'respondents' if they answered the first question (Q1) of the survey (ie,

the burnout level scale measure), regardless of whether or not the survey was completed. Hence, there were different numbers of respondents reported for different parts of the survey.

Since survey participation was entirely voluntary, personal characteristics such as age and gender may be associated both with the propensity to respond and with risk of experiencing burnout. Assuming equal probability to respond, the number of respondents in each of the groups should follow a hypergeometric distribution or, for large populations, a binomial distribution, whose cumulative distribution functions, containing probabilities between 0 and 1, can be used to test for the representativeness of demographic groups. Where the probability for a group falls below 0.005, there is evidence of under-representation, and where the probability exceeds 0.995, there is evidence of over-representation.

Results on the sample proportion of respondents who indicated that they were experiencing a high degree of burnout were weighted to reflect the demographic composition of the entire membership. We then calculated weighted odds of reporting high levels of burnout among subgroups of physicians using bivariable logistic regression. Results for subgroups with fewer than five respondents were not reported. Finally, for respondents who provided information on demographics, career stage, practice setting and rurality of location, multivariable logistic regression was used to examine the characteristics associated with a high degree of burnout in each wave of the survey.

Overall rankings of the top 10 contributors to burnout and solutions to burnout were obtained by summing individual rankings. The option with the lowest aggregate score was considered the most important contributor/solution and the option with the highest aggregate score was the least important.

Analyses were conducted using SAS software V.9.4 (SAS Institute).

Patient and public involvement

The study was designed with input and oversight by the OMA's Burnout Task Force, an advisory group of physicians with expertise in physician burnout. The survey was validated with a larger Burnout Advisory Group, comprised of Ontario physicians interested in burnout. Recruitment was facilitated by peer physicians in various ways. In the first wave of the study, the survey was shared through the OMA President's Update, a newsletter from the membership's elected physician representative. In the second wave of the study, the survey additionally was shared through peer physicians' communication channels, for example, the Twitter accounts of the OMA President and the Chair of the Burnout Task Force. Preliminary results were made available to participants via a white paper, shared through OMA member and public communication channels.

RESULTS

Of 37 335 members who were sent email newsletters that included an invitation to provide information on physician burnout in March 2020 (survey wave 1), 1836 clicked on the survey link and 1400 provided a response to Q1 (representing 76.3% of those who could be confirmed to have received the survey, 3.8% of those who were sent the email newsletter and 3.1% of the total association membership). In March 2021 (survey wave 2), 40 052 members were sent email communications with the invitation to 'complete a survey on the impact of COVID-19 on burnout', 3475 clicked the survey link and 2638 responses were received (75.9% of those who were confirmed to have received the survey, 6.6% of those who were sent the email newsletter and 5.8% of members).

Female physicians were over-represented, making up more than half of survey respondents in both waves (59% in 2020 and 56% in 2021) vs approximately 43% of OMA members (table 1). Physicians aged 35–64 years were over-represented, while the younger and older cohorts were under-represented. This was particularly the case for the second wave when physicians under 35 and 65+ years each made up over one-fifth of the membership but accounted for only 13% of respondents.

Prevalence of burnout

The unweighted prevalence of burnout, measured as the percentage of respondents who reported either persistent symptoms of burnout (level 4) or feeling completely burned out (level 5), increased from 29.0% in 2020 to 34.6% in 2021 (p<0.001; figure 1). Respondents experiencing some degree of burnout (levels 3–5 combined) increased from 66.0% in 2020 to 72.9% in 2021 (p<0.001). After weighting survey responses to reflect OMA membership demographics, the overall rate of high levels of burnout (levels 4–5) among physicians in Ontario increased from 28.0% in 2020 (99% CI: 24.3% to 31.7%) to 34.7% in 2021 (99% CI: 31.8% to 37.7%), a 1-year increase of 6.8 percentage points (p<0.01). This corresponds to an OR for reporting high levels of burnout in 2021 vs 2020 of 1.37 (95% CI: 1.15 to 1.63; p<0.001). The odds of having some degree of burnout (levels 3–5) in 2021 vs 2020 were 1.43 (95% CI: 1.19 to 1.71; p<0.001).

There were significant differences in the weighted odds of experiencing burnout among certain subgroups of physicians in each wave of the survey in adjusted analyses that accounted for all variables simultaneously (table 2). Although female physicians reported lower odds of burnout in 2020 (OR: 0.90; 95% CI: 0.86 to 0.95), women were significantly more likely to report burnout in 2021 (OR: 1.093; 95% CI: 1.05 to 1.14).

Significant differences were also found based on age cohort. Compared with physicians aged 35–44 years, those who were under 35 years old, 55–64 years old and 65+ years all had lower odds of burnout in 2020, whereas those aged 45–54 years had higher odds (OR: 1.21; 95% CI: 1.13 to 1.30). However, in 2021, physicians aged 45–54 years were less likely to report burnout (OR: 0.84;

Table 1 Representation of survey respondents* versus population, by physician demographic characteristics, 2020 and 2021

		Survey respondents			Population		Cumulative distribution function†	
		Number of respondents	Respondent percentage	Burnout rate	Population	Population percentage	Hypergeometric	Binomial	Representation
Gender 2020	Female	658	58.7	30.5%	19458	42.3	1	1	Over
	Male	463	41.3	29.6%	26550	57.7	0	0	Under
	Total	1121			46008				
Gender 2021	Female	1117	56.4	39.0%	19688	42.6	1	1	Over
	Male	862	43.6	33.6%	26484	57.4	0	0	Under
	Total	1979			46172				
Age cohort 2020	Under 35 years old	221	19.0	22.6%	10819	23.5	0.00011	0.00013	Under
	35–44 years old	292	25.2	31.2%	9704	21.1	0.99967	0.99961	Over
	45–54 years old	265	22.8	35.5%	8487	18.4	0.99994	0.99992	Over
	55–64 years old	269	23.2	34.9%	7491	16.3	1	1	Over
	65 years or older	114	9.8	17.5%	9507	20.7	0	0	Under
	Total	1161			46008				
Age cohort 2021	Under 35 years old	260	12.8	36.5%	10219	22.1	0	0	Under
	35–44 years old	493	24.2	43.2%	10043	21.8	0.99736	0.9968	Over
	45–54 years old	520	25.6	41.2%	8525	18.5	1	1	Over
	55–64 years old	504	24.8	34.3%	7503	16.3	1	1	Over
	65 years or older	256	12.6	21.1%	9882	21.4	0	0	Under
	Total	2033			46172				

*Only survey respondents with known gender or age cohort were included in the calculation of weighted results.
†Cumulative Distribution Function tests for hypergeometric and binomial distributions produce probabilities between 0 and 1. If the value is between 0.005 and 0.995, then the respondent group is representative of the overall population; if not, the group is over-represented or under-represented (statistically significant at the α=0.005 level).

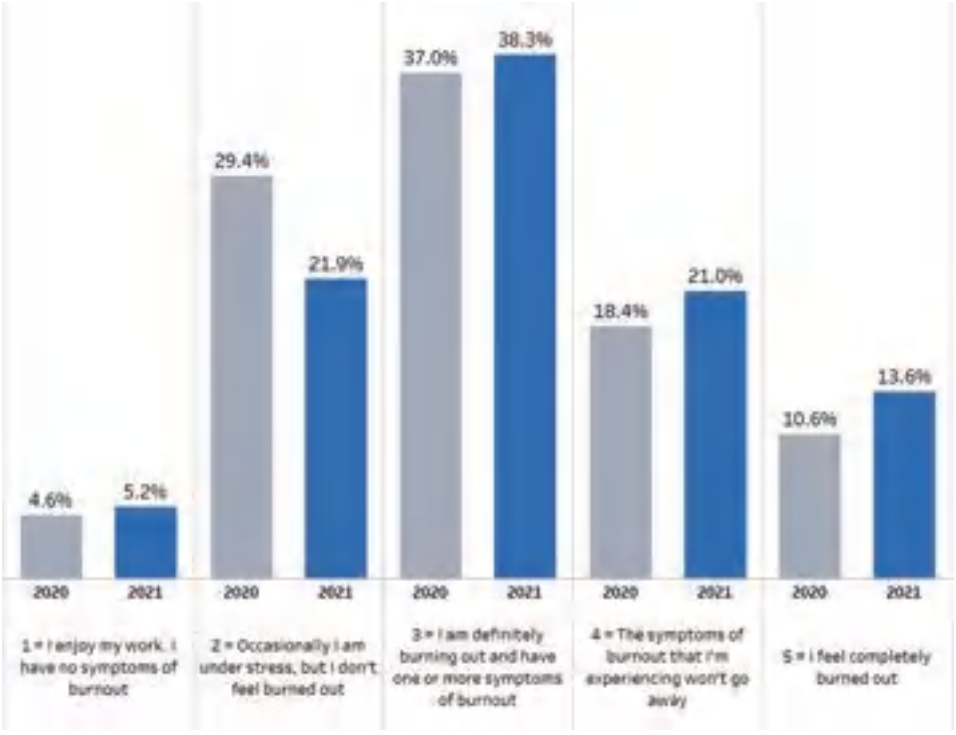

Figure 1 Overall levels of burnout reported by survey respondents (2020: n=1400; 2021: n=2638).

95% CI: 0.79 to 0.90), while those under age 35 years were more likely (OR: 1.24; 95% CI: 1.14 to 1.35).

In 2020, physicians in the middle, established phase of their career had lower odds of burnout than any other category. That changed during the pandemic, when only late career physicians were at higher risk of reporting burnout than mid-career physicians (OR: 1.45; 95% CI: 1.34 to 1.57). Physicians working in community-based group practice had some of the lowest risks of burnout in 2020, but experienced higher odds compared with most other settings by 2021. Finally, there were shifts in effect by location, with physicians practising in the Greater Toronto Area having lower odds of experiencing burnout than those in most other regions in 2020 but higher or not significantly different odds by 2021. Controlling for region, a similar shift was found for rurality (table 2). Unadjusted odds of burnout for physician subgroups are presented in online supplemental appendix 3.

Contributors and solutions to burnout

Respondents ranked 'patient expectations/patient accountability', 'reporting and administrative obligations' and 'practice environments' as the three factors that contributed most to burnout in 2021 (figure 2). Rankings were generally stable across both waves of the survey, with only 'practice environment' rising to third place, and displacing 'health system sustainability', from 2020 to 2021.

Respondents ranked 'streamline and reduce required documentation/administrative work', 'provide fair compensation' and 'improve work–life balance' as the three solutions most requested in both 2020 and 2021 (figure 3). Again, the overall distribution of rankings was generally stable across waves.

There were no differences in the top two most highly ranked contributors or solutions to burnout for male versus female physicians. However, the third highest ranked contributor for women was 'health system sustainability' versus 'practice environment' for men. There were also a few differences based on age/career stage with younger members prioritising organisational changes to improve work–life balance and older physicians suggesting better integration of digital health tools (online supplemental appendix 4).

A qualitative analysis of the responses to the open-text questions that offered respondents the opportunity to add additional contributors and solutions yielded themes largely consistent with the provided options. An exception was a theme related to the pandemic that emerged as a burnout contributor in the 2021 survey. Responses related to this theme included lacking personal protective equipment, impacts of isolation, and public and social media criticisms.

DISCUSSION

One year following the onset of the pandemic, prevalence of burnout among respondents had significantly increased. Nearly 35% of Ontario physicians were experiencing high levels of burnout by March 2021.

The prevalence of high levels of burnout pre-pandemic (28%) was consistent with prior research from the Canadian Medical Association, which reported high levels of burnout among 30% of Canadian physicians in a 2017

Table 2 Adjusted weighted odds of high degree of burnout, by physician characteristics, 2020 and 2021

Variable	Category	Reference group	2020				2021			
			OR	95% CI LB	95% CI UB	Sig	OR	95% CI LB	95% CI UB	Sig
Gender	Female	Male	0.904	0.864	0.946	*	1.093	1.047	1.141	*
Age cohort	Under 35 years old	35–44 years old	0.514	0.473	0.560	*	1.242	1.142	1.350	*
	45–54 years old		1.212	1.131	1.300	*	0.840	0.788	0.896	*
	55–64 years old		0.679	0.620	0.745	*	0.490	0.450	0.533	*
	65 years or older		0.336	0.302	0.373	*	0.256	0.231	0.284	*
Career stage	Medical student	Established physician	n/a	n/a	n/a		0.303	0.263	0.349	*
	Resident/fellow		1.837	1.650	2.045	*	0.978	0.852	1.122	
	Starting career physician		1.147	1.050	1.252	*	0.529	0.486	0.575	*
	Late career physician		1.589	1.464	1.725	*	1.452	1.341	1.572	*
	Retired physician		n/a	n/a	n/a		n/a	n/a	n/a	
Practice setting	Academic hospital	Community-based group practice	1.148	1.072	1.230	*	1.010	0.946	1.078	
	Community hospital		0.956	0.888	1.028		0.755	0.710	0.804	*
	Community-based interprofessional practice		1.541	1.422	1.671	*	0.752	0.696	0.813	*
	Community-based solo practice		1.785	1.669	1.909	*	0.931	0.876	0.989	*
Practice location	Central Ontario	Greater Toronto Area	1.088	1.004	1.178	*	1.068	0.993	1.148	
	Eastern Ontario		1.122	1.059	1.189	*	0.854	0.807	0.904	*
	Northern Ontario		1.281	1.160	1.416	*	1.024	0.940	1.116	
	Western Ontario		0.721	0.676	0.769	*	0.716	0.673	0.762	*
Geographical setting	Remote area	Urban	n/a	n/a	n/a		n/a	n/a	n/a	
	Rural		0.969	0.874	1.076		1.032	0.943	1.129	
	Semirural		1.421	1.312	1.539	*	1.058	0.980	1.141	
	Suburban		1.223	1.153	1.298	*	1.028	0.974	1.086	

n/a: results not reported for cells containing fewer than 30 respondents.
*=significant at α=0.05 level.
LB, lower bound; UB, upper bound.

members survey.[12] We are not aware of any studies reporting on burnout during the pandemic for the general population of physicians in Canada. However, a weekly repeated panel survey found no significant increase in burnout among Canadian emergency medicine physicians during the first 10 weeks of the pandemic.[13] This finding is not necessarily contradictory to our results since burnout is developed through chronic stress over time, and our study period was significantly longer (1 year vs 10 weeks). A prospective repeated cross-sectional study of physicians working in COVID-19 hub hospitals conducted in May 2020 and May 2021 in central Italy found an increase in self-reported burnout levels.[14] A similar upward trend in burnout was reported among US critical care physicians in a Medscape survey conducted in the early Autumn of 2020 and 2021.[15 16] However, that survey found no significant change in the overall percentage of physicians experiencing burnout (42%). It is difficult to compare findings from the Medscape studies with ours, since the time period and survey instrument were different, but it is concerning that rates of overall physician burnout in Ontario appear to be moving closer to those experienced in the USA.

It is too early to draw conclusions about whether the increase in burnout reported in the first year of the coronavirus pandemic in Ontario will persist, or even worsen, in the coming years as the acute phase of the pandemic subsides, care backlogs begin to be addressed and the healthcare system adapts in various ways. An umbrella review of systematic reviews and meta-analyses on healthcare worker burnout in coronavirus epidemics found that during the SARS and Middle East respiratory syndrome epidemics, prevalence of burnout among healthcare workers was actually similar to that during non-epidemic periods for certain studied healthcare workers in settings with high risk factors for burnout.[17] As the authors point out, additional research on burnout during the SARS-CoV-2 pandemic will be necessary to determine whether the magnitude, scope and duration of this pandemic have triggered an evolution of the disorder beyond that found

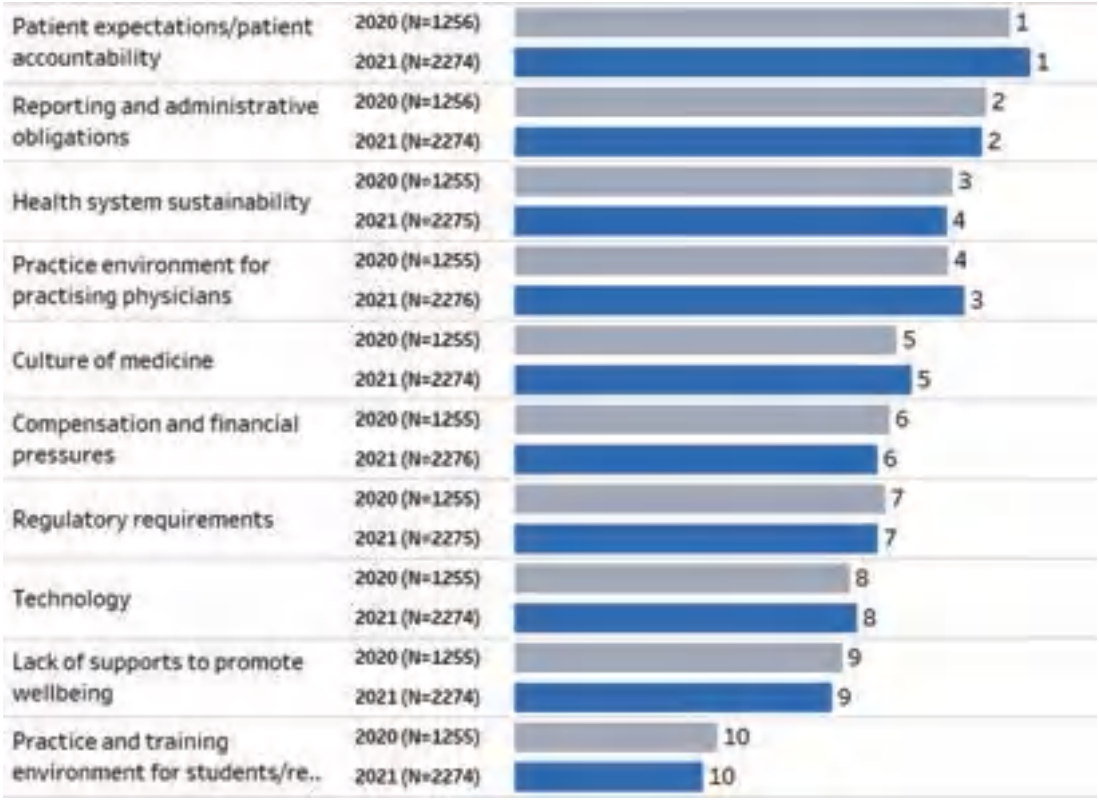

Figure 2 Top 10 ranked contributors to burnout as reported by participants in 2020 and 2021.

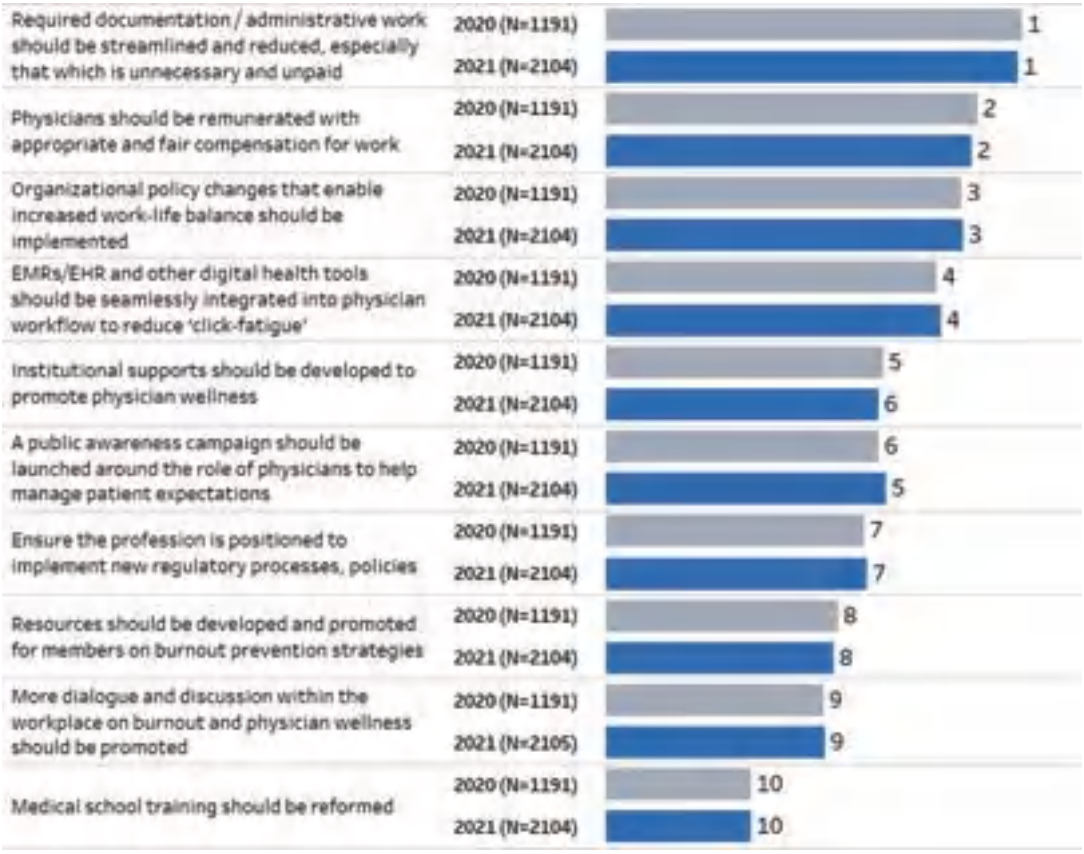

Figure 3 Top 10 ranked solutions to burnout as reported by participants in 2020 and 2021. EMRs/EHR, Electronic Medical Records/Electronic Health Record.

in non-pandemic times among high-risk subcategories of physicians and other healthcare workers. In any event, it is clear from the findings presented here that the widespread impact of the pandemic has created a reckoning that health system leaders cannot afford to ignore. Our data on the perceived causes of burnout and solutions pointed out by physicians are timely.

Both 2020 and 2021 Medscape surveys found that more than half of respondents reported 'too many bureaucratic tasks' as contributing most to burnout, by far the most cited issue.[15 16] Contributors and solutions to burnout in the present study are not directly comparable with the Medscape survey, owing to different choice lists and rating methodology. However, alleviating administrative burden was the top ranked solution by Ontario physicians despite the Ontario Health Insurance Plan providing a far more streamlined billing system compared with that in the USA.

Burnout has been identified as a system-level, workplace issue.[15] A systematic review found organisational-level interventions were more effective than individual-level approaches.[10] Consistent with this, the solutions ranked highest by physicians in Ontario were system-level or organisational in nature; individual-level contributors and solutions related to promoting well-being were ranked lower. This is an important consideration for those interested in implementing interventions to address physician burnout. However, system-level solutions tend to involve significant complexity, being targeted at various stakeholders in the healthcare system including multiple levels of government, medical regulators and healthcare organisations. As a result, it is difficult to design and implement such solutions and to evaluate their implementation. While there is much literature outlining what system-level solutions could look like, there is relatively limited evidence evaluating such interventions.

In terms of the top ranked solution, 'streamline and reduce required documentation/administrative work', the majority of evidence has focused not on the actual reduction of required work but rather on the shifting of certain documentation requirements to medical scribes. Scribes were found to reduce administrative burden and were among the most effective burnout interventions of those identified in two systematic reviews.[18 19]

Evaluations of the impact of physician compensation changes upon burnout are lacking in the literature. Research specifically evaluating the impacts of various compensation policy changes on burnout is needed. Such areas could include moving compensation structures away from piece-work models (eg, FFS), as the literature theorises that such models incentivise higher workloads,[20] as well as addressing the gender pay gap, which has been documented among Ontario physicians.[21] Research exploring the relationship between the gender pay gap and burnout among physicians is lacking, but a 2016 study of 22 581 US adults found that women were significantly more likely to experience depression and anxiety when they were paid less than their equally qualified male counterparts, including among the subset of high-income women.[22]

Interventions to increase work–life balance include organisational policy changes to normalise flexible work arrangements such as part-time work or job sharing (ie, two part-time physicians sharing a full-time position),[23 24] as well as exploring innovative strategies such as a time banking programme, where credits are given to participants for time spent on unpaid or under-recognised responsibilities—such as providing last minute clinical coverage or mentoring—and can be redeemed for home or work support services, including meal delivery or grant writing.[25]

The solutions identified here and in the US Medscape research represent physician opinions or beliefs. Further research is needed to determine whether implementing these solutions reduces the prevalence of burnout and whether different subgroups of physicians (eg, by gender, cohort, specialty, hospital vs community setting, etc) require different types of interventions to address burnout effectively.

LIMITATIONS

Burnout was measured using a unidimensional scale, rather than the 22-item Maslach Burnout Inventory (MBI) that has been used extensively to differentiate the emotional exhaustion, depersonalisation and personal accomplishment aspects of burnout.[26] The measure used has been validated as a substitute to the MBI emotional exhaustion subscale.[7] Although it would have been desirable to obtain more nuanced data on symptoms of burnout, it was judged that the trade-off in terms of survey participation was prohibitive. As it was, survey participation may have been subject to self-selection bias. The surveys were advertised using email newsletters and social media, rather than via targeted mailings. It was not possible to follow up with non-respondents via mail or telephone modes, which might have increased the number of responses. If physicians experiencing symptoms of burnout were less likely than others to read the email newsletters, we may have underestimated physician burnout. On the other hand, if those experiencing burnout were more motivated to submit a response, we may have overestimated its prevalence. Further, the merger of the OMA's newsletters, which occurred between survey waves, necessitated inconsistencies in the dissemination approach for the two surveys. However, all former recipients of the 2020 President's Update became recipients of the unified OMA News. The dissemination approach was also modified with the addition of social media for the 2021 survey, which was leveraged to attempt to reach physicians, recognising the significant volume of email communications physicians received during the pandemic. Even in the absence of selection bias, results may not be generalisable beyond Ontario physicians and trainees. Strict public health measures enforced in Ontario during the first year of the pandemic may have

reduced the strain on the healthcare system and healthcare workers, compared with the situation in other jurisdictions internationally. Hence, our findings on physician burnout during COVID-19 may be conservative.

CONCLUSION

This study demonstrates increased prevalence of burnout among Ontario physicians 1 year following the onset of the COVID-19 pandemic. This is perhaps unsurprising given that healthcare workers were subject to unprecedented stressors over this period. The implications of burnout are even more concerning given the clinical backlog of services, the worsening of health conditions through diagnostic delays and service deferrals, the putative increases in mental health and substance use disorders and the anticipated but as yet unknown impacts of long-COVID. Remediating burnout for physicians and all healthcare workers will be critical to support health system recovery efforts post-pandemic and create a sustainable healthcare system. Our findings provide a starting point for evaluating key priorities for system-level solutions to address physician burnout in Ontario.

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Contributors JG, NP and JGW conceived the study. JG, NP, SW and JGW developed the analysis plan. JG and NP acquired the data. YL analysed the data. JG, NP, SW and JGW drafted the manuscript. All authors contributed to the interpretation of the data, revised the manuscript for important intellectual content and approved the final version. JGW is the guarantor.

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Disclaimer Interpretation and opinions expressed are those of the authors and do not necessarily reflect the views of the Ontario Medical Association.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not required.

Ethics approval Ethical approval was not required because the study was conducted as part of OMA business operations and survey data were collected anonymously.

Provenance and peer review Not commissioned; externally peer reviewed.

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TAB 35

AUGUST 17, 2023

TRANSFORMING CARE

Responding to Burnout and Moral Injury Among Clinicians

▲ A nurse at Three Rivers Asante Medical Center waits for her next COVID-19 case to be brought from the emergency room on Sept. 9, 2021, in Grants Pass, Ore. Even before the pandemic overtook U.S. hospitals, many nurses and physicians reported experiencing symptoms of burnout, which can result from having too much work and not enough time or resources to do it. Photo: Nathan Howard via Getty Images

TOPLINES

Many initiatives seeking to reduce clinician burnout and moral injury are focused on restoring a sense of agency

Systemic responses will require engaging health care leaders, insurers, government, technology vendors, and patients themselves

AUTHORS

Martha Hostetter, Sarah Klein

As the COVID-19 pandemic wore on, multiple surveys and news reports described rising levels of burnout and fatigue among clinicians on the front lines. Among the many nurses and physicians reporting they were stressed out and overwhelmed, some said they were ready to leave their jobs. While it's unclear how many clinicians have quit practicing, workforce shortages continue in some regions.

Burnout can be defined as having too much work and not enough time or resources to do it. In the context of health care, researchers often ascribe it to factors such as increased patient acuity, heavier caseloads, and having insufficient time with patients. The burdens of documentation and performance reporting and barriers like prior authorizations — what are sometimes referred to as administrative harms — can also leave clinicians feeling exhausted and unwilling to continue.

But, increasingly, clinicians are rejecting the term "burnout." They say they're not overworked or frustrated, but are instead demoralized by a health care system that puts profits ahead of patients. Nearly every day since Wendy Dean, M.D., and Simon Talbot, M.D., published an op-ed describing physicians' distress as a form of "moral injury" in *Stat*, in 2018, they've heard from physicians who've faced systemic problems that keep them from helping patients. One, an emergency department (ED) physician, had for years warned hospital administrators about the dangers of understaffing. Eventually, a patient died in the ED while he was covering an emergency in an inpatient ward.

Eric Reinhart, M.D., who published "Doctors Aren't Burned Out From Overwork. We're Demoralized by Our Health System" in the *New York Times,* in February, says some clinicians have begun to question the role they play in a health care system that accepts inequitable access to care and fails to address the root causes of disease. "Many physicians are now finding it difficult to quash the suspicion that our institutions, and much of our work inside them, primarily serve a moneymaking machine," he writes. Discontent is now bubbling up among health care providers in ways not seen since the spread of managed care — including efforts to unionize by physicians and medical trainees.

In this issue of *Transforming Care*, we explore the manifold causes of burnout and moral injury among clinicians and identify ways in which health care leaders have begun to respond. "Burnout, demoralization, and administrative harm are much more than hot topics of the day," says Joseph Betancourt, M.D., the Commonwealth Fund's president and a practicing physician. "They are a clear and present danger to the future of health care, and we ignore them at our own peril."

Factors associated with burnout among health workers

- Politicization of science and public health
- Structural racism and health inequities
- Health misinformation
- Mental health stigma
- Unrealistic expectations of health workers

- Limitations from national and state regulation
- Misaligned reimbursement policies
- Burdensome administrative paperwork
- Poor care coordination
- Lack of human-centered technology

- Lack of leadership support
- Disconnect between values and key decisions
- Excessive workload and work hours
- Biased and discriminatory structures and practices
- Barriers to mental health and substance use care

- Limited flexibility, autonomy, and voice
- Lack of culture of collaboration and vulnerability
- Limited time with patients and colleagues
- Absence of focus on health worker well-being
- Harassment, violence, and discrimination

Office of the U.S. Surgeon General

Source: Martha Hostetter and Sarah Klein, *Responding to Burnout and Moral Injury Among Clinicians* (Commonwealth Fund, Aug. 2023). https://doi.org/10.26099/k72x-t469

Burnout, Moral Distress, and Moral Injury

Burnout, moral distress, and moral injury are related but not the same, says Cynda Rushton, Ph.D., M.S.N., R.N., a professor of clinical ethics and nursing at Johns Hopkins Berman Institute of Bioethics and the School of Nursing.

Rushton sees burnout as a mismatch between the demands placed on people and the resources they have to meet them in their workplace. Researchers have been tracking burnout among clinicians for decades, often using the Maslach burnout inventory, which measures clinicians' levels of emotional exhaustion, depersonalization, and personal accomplishment. Before COVID-19 overtook U.S. hospitals, 40 percent of nurses and 38 percent of physicians reported experiencing some symptoms of burnout. By 2022, 50 percent of nurses and 63 percent of physicians did.

▲ Cynda Rushton, Ph.D., M.S.N., R.N.

By contrast, moral distress is experienced when clinicians "struggle to do what they believe is ethically correct and for whatever reason aren't able to enact it," says Rushton. "A family member may be asking you to do things you think are harmful to a patient at the end of their life, for example," she says. "Nurses have to implement that decision, and they see the results firsthand. They're there, watching, thinking: 'I'm doing these things to this person's body. The body is disintegrating in front of me, and I feel like I am an agent of harm, not healing.'" Clinicians may also feel moral distress when they learn a patient's insurance won't cover a treatment or procedure they need.

Over time, repeated feelings of moral distress can lead to moral injury, a profound sense that you've betrayed your own ethical code (or were unable to follow it because of external factors), or that people you trusted have betrayed some fundamental obligation. The term was originally used to describe situations experienced by people in the military, but began appearing in the health care literature around 2018. Moral injury among health care workers has been linked to feelings of guilt, shame, and anger and can lead to

depression, post-traumatic stress disorder, and suicidality. “It’s a more corrosive form of moral suffering,” Rushton says.

Surfacing Problems and Developing Peer Supports

From long nights of training to long days treating patients, clinicians pride themselves on their ability to shoulder heavy workloads and thrive amid stressful situations. But this can work against them if they fail to care for themselves or unfairly blame themselves for problems. “Everyone goes into health care knowing that they're going to work long hours, that they're going to see really hard things. You see people on the worst days of their lives,” says Dean, a psychiatrist who cofounded Moral Injury in Healthcare, a nonprofit that, alongside education, research, and advocacy, works with health systems to identify and address moral injury in their workforces. “But understanding what those unavoidable situations are and separating them from what the avoidable situations are is what's critical.”

Some health systems have developed programs to help clinicians care for themselves — and to identify problems that may be avoidable and may require organizational or policy solutions.

Mayo Clinic’s COMPASS

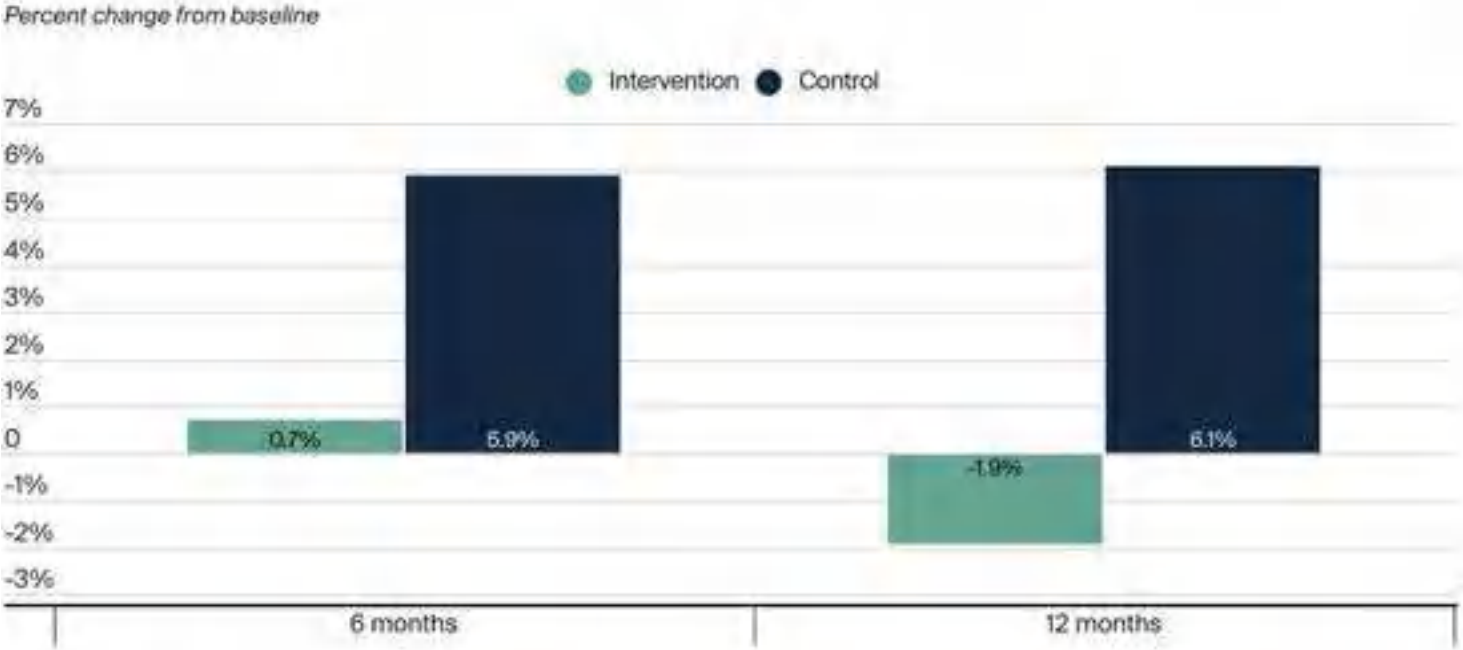
Colin West, M.D., Ph.D., directs the Mayo Clinic Program on Physician Well-Being in Rochester, Minn., and has been researching clinician burnout and its causes for two decades. Together with colleagues at Mayo, West developed COMPASS (Colleagues Meeting to Promote and Sustain Satisfaction) as a way of encouraging clinicians to reflect on what gives their jobs meaning and share strategies for addressing job stressors and promoting work–life balance.

Over the course of six months, physicians meet in small groups (six to 10 people), typically over lunch, to explore the virtues and challenges of being a physician and to brainstorm solutions to common problems. Mayo provides a $20 voucher to cover meals, with the only stipulation that for the first 15 minutes participants discuss one of the suggested topics (e.g., using creativity to solve work-related problems — a format designed to prevent meetings from devolving into complaint sessions. “The groups have told us they’re surprised that doesn’t happen. What they find instead is that their colleagues have similar challenges but different ways of approaching them. Realizing they are not alone and learning from one another keeps the spark of the meetings going,” West says.

A randomized controlled trial found that participating in COMPASS groups helped reduce overall rates of burnout and some depressive symptoms, with participants reporting a lower likelihood of leaving their current practice within the next two years. Nearly half of Mayo's 5,000-plus physicians have taken part, and the approach has been promoted by the American Medical Association and adopted at many other institutions.

One study found physicians who participated in the Mayo Clinic's COMPASS groups were less likely to report that they were considering leaving their current practice.

Change in proportion of physician participants with at least moderate self-reported likelihood of leaving their current practice in the next two years



Data: Published in Colin P. West et al., "Colleagues Meeting to Promote and Sustain Satisfaction (COMPASS) Groups for Physician Well-Being: A Randomized Clinical Trial," *Mayo Clinic Proceedings* 96, no. 10 (Oct. 2021): 2606–14. Reproduced with permission from Elsevier, which holds the copyright (2021).

Source: Martha Hostetter and Sarah Klein, *Responding to Burnout and Moral Injury Among Clinicians* (Commonwealth Fund, Aug. 2023). https://doi.org/10.26099/k72x-1469

West's long-term goal is to expand Mayo's COMPASS groups as a way of strengthening the sense of community — within departments and across the institution — and reinforcing the importance of pursuing both individual and structural approaches to burnout. "In

framing solutions to promote well-being, we've got to have shared responsibility," West says. "Yes, we need to be able to bring our best selves to our work, not wallow in negativity. We also need to expect that our practice environments are places where an individual doesn't have to be a superhero to succeed."

OSU's Brief Emotional Support Teams

As a faculty member in the psychiatry department at Ohio State University's Wexner Medical Center, in Columbus, Kenneth Yeager, Ph.D., was frequently called in to support health care workers after traumatic events, such as the sudden death of a colleague on the job or the tragic loss of a patient on a medical floor. Once, he supported a housekeeper who was haunted by images of blood that drenched the walls and floors of a trauma bay. She'd been told to clean it up after the arrival of a college student who'd been hit by a dump truck.

Realizing he couldn't respond to the level of need in a health system as large as his, Yeager developed Brief Emotional Support Teams (BEST) to train more people to help. BEST team members are nominated by clinicians as well as administrators and receive a half-day of training on ways to offer basic comfort and practical advice. Among other supports, BEST staff provide education to help staff to recognize that hypervigilance, avoidance, and the exertion of control are all normal responses to trauma, and to know when to seek additional help.

In 2009, Yeager trained the first 12 BEST team members. In the years since, more than 1,000 staff have been trained for the role. They respond to an estimated 2,000 events each month, Yeager says. About a third involve the emergency department and other high-risk units, such as oncology and intensive care. After being debriefed by BEST teams, most people return to their shifts and about 7 percent to 10 percent receive follow-up counseling.

The health system's risk management teams have begun to lean on the program to determine the level of support a clinician may need when being interviewed about significant events that may, for example, involve a patient's death or severe harm. Such interviews are a critical part of a patient safety process, but when not accompanied by support they can be especially detrimental to clinicians who are inclined to blame themselves and may do so in an effort to recover a sense of control, Yeager says. The anesthesia department has found the teams so helpful that it built a tool in the electronic medical record to notify the BEST teams when there is an unforeseen event.

Johns Hopkins' Mindful Ethical Practice and Resilience Academy

Because nurses typically spend more time at a patient's bedside than physicians, many face prolonged exposure to complex ethical issues, patient suffering, and death. During one of the peak waves of the pandemic, in 2022, half of nurses said they'd experienced an extremely stressful, disturbing, or traumatic situation just in the past two weeks; many also said they'd experienced violence, bullying, or other harms.

At Johns Hopkins, Cynda Rushton cocreated the Mindful Ethical Practice and Resilience Academy in 2016 to give nurses tools to meet ethical challenges in ways that preserve their sense of integrity and well-being. The curriculum, a mix of experiential and didactic training, helps nurses develop moral resilience but also communication and ethical discernment skills. Rushton and colleagues found that the program, initially delivered to 192 frontline nurses from 2016 to 2018, enhanced nurses' ability to confront the ethical challenges they faced in clinical practice. "The goal is not to fortify nurses to tolerate what may be unacceptable conditions," says Rushton. "Instead, we want to help nurses develop protective resources so they can be agents of change in their workplaces."

"The goal is not to fortify nurses to tolerate what may be unacceptable conditions. Instead, we want to help nurses develop protective resources so they can be agents of change in their workplaces."

Cynda Rushton, Ph.D., M.S.N., R.N.
Professor of clinical ethics and nursing, Johns Hopkins Berman Institute of Bioethics and the School of Nursing

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Reducing Cognitive Load

In describing the pain points of their jobs, clinicians often point to electronic medical records, not just because the systems can be time-consuming and clunky but because documentation requirements get in the way of spending time with patients. One study found that physicians spent two hours every day on documentation for every hour spent with patients.

Ranjit Tamaskar, M.D., an internal medicine physician, is president of Atrium Medical Group, an independent physician group in Northeast Ohio. He practices in what he describes as the "traditional way," seeing patients in his office and following them into hospitals or nursing homes; since he's known many of his patients for years, they trust him when he recommends treatments or preventive procedures. Still, as performance measures

and reporting requirements have increased in number, he finds himself overwhelmed. “I’m interested in quality care, and these measures are important,” Tamaskar says. “But during visits I have split focus: I’m listening to what patients are telling me, but I’m also thinking about checking all the boxes in the short time I have with them.”

“I’m interested in quality care, and these measures are important. But during visits I have split focus: I’m listening to what patients are telling me, but I’m also thinking about checking all the boxes in the short time I have with them.”

Ranjit Tamaskar, M.D.
Internal medicine physician and president of Atrium Medical Group

James Innes, an adviser for the Institute for Healthcare Improvement’s Joy in Work initiative, an effort to address clinician burnout, and an improvement director for the U.K.’s National Health Service, describes the growing number of treatment protocols, documentation requirements, and other complex information as placing “cognitive burdens” on clinicians. “It swamps your brain,” he says. While clinicians in the U.K. struggle with similar issues, the payment system in America adds yet another layer of burden, he says.

Several projects are in place to reduce clinicians’ cognitive burdens, including the federal Meaningful Measures Initiative, which since 2018 has reduced the number of performance measurements reported for Medicare patients by 18 percent. The American Medical Informatics Association has released a toolkit to guide health care organizations in reducing the burdens of electronic medical records and is partnering with technology vendors to highlight priorities. In 2018, a Hawaii health system launched Getting Rid of Stupid Stuff (GROSS), an effort to reduce administrative burdens on clinicians by asking them to report things they do in the electronic medical record that they see as unnecessary or poorly designed. The approach has been used by health systems around the country to review documentation, training, risk management procedures, and other processes.

Using Ethics Committees to Resolve Conflicts

When looking for causes of burnout and moral injury, some point to the consolidation of health care organizations into mega systems, and the decision by many physicians to become employees of large and bureaucratic systems. “In larger organizations, a practicing

clinician could be five levels down from anyone who could make a difference," says Joseph J. Fins, M.D., professor of medical ethics and chief of the Division of Medical Ethics at Weill Cornell Medicine in New York City.

Fins says that ethics committees, which most large health systems convene, can be mechanisms for clinicians and health care administrators to work through conflicts and elevate problems that require systemic solutions, such as those relating to the allocation of scarce resources or efforts to respond to misinformation or mistrust.

Ethical conflicts may arise when physicians' professional autonomy runs up against workplace restrictions. For example, physicians may resent when their contractual obligations require them to refer patients to other clinicians within their health system, rather than to an outside specialist they think is best equipped to treat a particular patient. "What should prevail is what's best for the patient," says Fins, "but the doctor may have signed a contract or may be in an employment situation where it's stipulated that you refer inside. So, you put your doctor at moral jeopardy."

In these situations, Fins suggests that ethics committees could have a process in place whereby requests to refer patients out of the health system are assessed against agreed-upon criteria. "A good ethicist is aware of the contingencies and can be an agent for change within an institution," he says.

Creating Alliances Between Administrators and Clinicians

Rothman Orthopaedics is a private practice with 230 physicians, including 96 who have an ownership stake and thus a say in running the business. Founded in 1970, the practice has thrived by attracting physicians who want more control over their work lives than they'd get in most large health systems. But as the practice has grown to 40 locations across four states, it's had to strike a balance between being clinician-led and having a centralized administrative structure and some common protocols, says Ed Tufaro, Rothman's senior vice president of operations.

▲ Ed Tufaro

Tufaro describes his role as "building bridges" between clinicians and administrators. Every week, he visits a different office to hear in person from care teams. "Sometimes I hear about something very specific that requires a discrete

response," he says. "And sometimes I sense a pattern and an opportunity for us to think differently about what we're doing."

In 2019, Tufaro and the organization's physician leaders created a burnout committee to have a dedicated forum for clinicians to discuss their challenges and report them to the board directly. Frustration over prior authorizations for imaging services emerged as a significant problem. (Prior authorizations are used by health insurers that require approval and sometimes justification before covering certain services). Clinical teams were spending hours tracking down the status of authorizations, submitting documentation, arranging calls between insurers and physicians, and responding to frustrated patients. Rothman's surgeons also felt their professional judgment was being questioned. "It's a respect issue," Tufaro says, noting that authorization decisions were sometimes made by physician employees of health plans who had no orthopedic expertise. In response to clinicians' request, Rothman created a centralized team to manage imaging authorizations.

Rethinking the Need for Prior Approval

In a 2021 survey led by the American Medical Association, most physicians (88%) said having to apply to insurers for approval to treat patients led to harms, including avoidable hospitalizations. In 2022, Texas passed the Gold Card bill, which exempts physicians for whom 90 percent or more of their prior authorization requests were approved over a six-month period from having to get authorizations for those services in the future. Similar legislation is in development in 30 other states.

Implications

While the volume has been turned up on conversations around clinician burnout and moral injury, there is still much to learn about the causes and potential ways to respond. But it's clear that we need much more than culture change within individual health care institutions to address the problems. In his advisory on clinician burnout, U.S. Surgeon General Vivek Murthy called for systemic responses, involving governments, health care leaders, insurers, technology vendors, training programs, and patients themselves.

The examples above suggest ways for health systems to act now.

Develop structured processes for soliciting input from clinicians.

In convening the "burnout committee" at Rothman Orthopaedics, Tufaro said he and other leaders needed to be willing to have uncomfortable conversations. "Sometimes it's hard to acknowledge that we're imperfect as an organization. In health care, we don't want to believe that we may be creating these scenarios that are challenging for patients and providers," he says. "You have to really be open to where the conversation goes."

"Sometimes it's hard to acknowledge that we're imperfect as an organization. In health care, we don't want to believe that we may be creating these scenarios that are challenging for patients and providers."

Ed Tufaro
Rothman's senior vice president of operations

While the era of health care consolidations has resulted in a reduced number of physician-led organizations, there may be ways to embed this approach into large health systems. In her book *If I Betray These Words: Moral Injury in Medicine and Why It's So Hard to Put Patients First*, Dean calls for more widespread use of the dyad model of health care management, in which physician leaders are paired with administrators to promote joint decision-making grounded in patients' needs.

Organizations may also need ground rules when asking clinicians to identify problems and advocate for change. Many physicians are at-will employees, carrying large student loan debts, and speaking up can risk job loss, while admitting to mental health struggles may put their credentialling at risk. Nurses, too, may feel disempowered and need peer and leadership supports.

Make it easier for clinicians to seek mental health support.

The Dr. Lorna Breen Health Care Provider Protection Act of 2022, named after an emergency medicine physician who died by suicide in 2020, aims to expand access to mental health care and treatment for health care providers, in part by funding health care organizations to develop and spread programs that promote mental health and resilience. It also funds the Workplace Change Collaborative, a technical assistance center that supports 44 organizations — among them health care systems, universities, professional associations, and nonprofits — that are testing a wide array of individual- and system-level strategies for creating more supportive workplaces and learning environments in the

health care and public safety fields. Some are focused on expanding access to mental health care and reducing suicide risk within their institutions.

But persuading clinicians to take advantage of professional help can be a challenge because it requires people to disclose on credentialling forms that they've sought mental health treatment. To get around this, Ohio State University's employee support programs are purposefully defined as wellness activities.

Acknowledge the inequities of the health care system and advocate for change.

Clinicians risk moral injury when they prescribe medications or treatments their patients can't afford, see the high costs of treatment causing suffering on top of disease, or do things like repeatedly discharge unhoused patients back to the street. A 2022 survey found that 61 percent of U.S. physicians feel they have little to no time and ability to address their patients' social determinants of health.

In a *Health Affairs* blog post, Elliott Fisher, M.D., M.P.H., director of the Dartmouth Institute of Health Policy and Clinical Practice, and George Isham, M.D., a senior fellow at the HealthPartners Institute, exhorted clinicians to consider their role in a health care system that prioritizes financial interests over public good. "The public impression that health care is largely about making money undermines the legitimacy and trust upon which we depend," Fisher and Isham say.

They and other advocates point to a range of policy changes that could help, from Medicaid expansion to deploying teams of community health workers and building up addiction treatment and social services. But they also suggest that clinicians start within their own institutions, wielding the power they have by taking on leadership roles and engaging in collective action to advocate for things like fair billing practices and meaningful use of community benefit dollars.

"As health care changes, as it inevitably will change, we need to figure out ways to perpetuate the ethos of service to the patient that was so important to medicine from the beginning," says Fins of Weill Cornell Medicine. "When that doesn't happen, that leads to the moral tension, the burnout, and the stress."

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AREA OF FOCUS

Improving Health Care Quality

TOPICS

Behavioral Health,
Mental Health

TAB 36

PERSPECTIVE

Moral Injury in Health Care: Identification and Repair in the COVID-19 Era

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Frontline health-care workers experienced moral injury long before COVID-19, but the pandemic highlighted how pervasive and damaging this psychological harm can be. Moral injury occurs when individuals violate or witness violations of deeply held values and beliefs. We argue that a continuum exists between moral distress, moral injury, and burnout. Distinguishing these experiences highlights opportunities for intervention and moral repair, and may thwart progression to burnout.

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INTRODUCTION

The COVID-19 pandemic traumatized health-care workers. During its first 18 months, nearly 20% of the medical workforce left their jobs.[1] The reasons are many, including shortages of staff and personal protective equipment, as well as shortages of critical care beds and equipment that potentially harmed patients.[2–6] Clinicians felt distressed by their roles in allocating limited resources and in adjudicating which patients would receive treatment in inferior makeshift settings.[3,6–8] During the Omicron wave, some health-care workers who tested positive for COVID-19 were required to return to work without isolating or further testing, potentially spreading the virus to patients.[9] These scenarios amplified anguish among frontline workers, inflicting a kind of harm known as "moral injury."

DEFINING MORAL INJURY

"Moral injury" is a term used in the military veteran literature to define a wound that results from "doing something that violates one's own ethics, ideals, or attachments."[10] The term was introduced by Veterans Affairs psychiatrist Jonathan Shay to describe an experience not adequately captured by post-traumatic stress disorder (PTSD). Whereas PTSD originates from a frightening or dangerous event, Shay identifies moral injury as a psychological trauma resulting from (1) a betrayal of what is morally correct, (2) by someone who holds legitimate authority, (3) in a high-stakes situation.[11] The perpetrator of moral wrong is an authority figure, but the injury is inflicted on a subordinate who is required to carry out the morally violative action.

Brett Litz broadens the definition of moral injury to include "the lasting psychological, biological, spiritual, behavioral, and social impact of *perpetrating, failing to prevent, or bearing witness* [emphasis added] to acts that transgress deeply held moral beliefs and expectations."[12] Accordingly, moral injury can result from both acts of commission and acts of omission. Litz also utilizes a framework in which the individual is himself the actor of wrongdoing, as opposed to an authoritative figure or structure. In all cases, regardless of who commits the act in question, moral injury ruptures self-identity and can lead to feelings of guilt, shame, and social withdrawal.

Moral injury plagued medicine long before the current pandemic. Economic, legal, and institutional pressures frequently forced clinicians to treat patients in ways they found morally reprehensible, whether by rushing them through clinic visits or hospital stays, or by continuing aggressive treatments for dying patients. As Talbot and Dean put it, "The moral injury of health care is not the offense of killing another human in the context of war. It is being unable to provide high-quality care and healing in the context of health care."[13] Intractable morally violative acts have anguished clinicians, inducing moral injury.

THE RELATIONSHIP OF MORAL INJURY TO MORAL DISTRESS AND BURNOUT

Moral injury is distinct from, yet related to, two other concepts common in medical discourse: moral distress and burnout. (See Table 1.) Although individual experiences may not always fit neatly into one category, their differences remain important for distinguishing methods for intervention and repair.

Andrew Jameton coined the term "moral distress," characterizing it as "1) psychological distress of 2) being in a situation in which one is constrained from acting 3) on what one knows to be right."[14] Moral distress is the immediate result of

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Table 1 Distinguishing Moral Injury from Moral Distress and Burnout

	Moral distress	Moral injury	Burnout
Definition	"Psychological distress of being in a situation in which one is constrained from acting on what one knows to be right"[14]	"The lasting psychological, biological, spiritual, behavioral, and social impact of perpetrating, failing to prevent, or bearing witness to acts that transgress deeply held moral beliefs and expectations"[12]	"A syndrome of emotional exhaustion, loss of meaning in work, feelings of ineffectiveness, and a tendency to view people as objects rather than as human beings"[18,44]
Symptoms	Unease, discomfort, frustration, anger, feelings of powerlessness, palpitations	Guilt, shame, anger, disgust, social withdrawal, ruptured identity, existential crisis	Numbness, carelessness, disengagement, exhaustion, depersonalization
Duration	Acute	Chronic	Chronic
Methods for repair	Removal of inciting situation, systems reform, strengthening moral identity through community, cultivating moral resilience	Institutional-level structural reform; community- and peer-based interventions	Sabbatical; intensive therapy for addiction or depression; change of career
Potential consequences	Moral injury	Burnout	Medical error, malpractice, dissatisfied patients, staff turnover, addiction, suicide

participating in or witnessing a morally troubling situation. For example, a nurse might experience it when a doctor asks her to administer a treatment she finds objectionable. Moral distress might linger a few hours after the inciting event, but if her individual sense of the good remains intact, it often resolves.[15] However, repeated or severe violations may leave a moral residue, which can accumulate and lead to moral injury.[16,17]

Whereas the nursing literature often focuses on moral distress, physicians commonly describe their work-related exasperation as "burnout." Definitions vary somewhat, but burnout is generally understood as a combination of emotional exhaustion, depersonalization or cynicism, and a sense of reduced personal accomplishment.[18,19] The prevalence of burnout among doctors varies widely, with more than half of U.S. physicians reporting at least one symptom.[18,20]

The diagnosis of burnout is not made uniformly; a recent meta-analysis found wide heterogeneity across indices used, as well as across score cutoffs within the same tool.[20] Although moral distress and moral injury are not the only causes of burnout, moral injury can contribute to its core symptoms. The inability to practice medicine in a way that coheres with one's moral expectations is distressing. Doubts about one's abilities to carry out the good can lead to ineffectiveness and a reduced sense of personal accomplishment. Perhaps most significantly, moral injury can lead to cynicism, depersonalization, and disengagement.

But moral injury is not itself burnout. The fact that so many doctors are *concerned* about the possibility of burning out suggests that they are not yet emotionally numb. By contrast, physicians who burn out are no longer distressed at the violation of deeply held moral beliefs, because they are beyond feeling. The detachment and depersonalization associated with burnout can be viewed as the *absence* of distress or moral investment altogether.

We offer a heuristic describing the interplay among moral awareness, distress, injury, and burnout. (See Fig. 1.) We argue that they exist on a spectrum. Moral distress, if sustained, is a common cause of clinician moral injury. If unchecked, moral injury may lead to burnout.[21] In practice, the progression is often uneven, and there can be movement back and forth along the continuum. A singular morally distressing event may be so injurious that it leads swiftly to burnout.[22] In others, the same event might trigger only moral distress. While not perfect, this continuum is helpful for considering interventions *before* burnout. Moral distress can be mitigated and moral injury thwarted if the inciting circumstance or event is removed. Addressing moral injury to prevent burnout is more difficult. It requires attending both to the organizational climates and structures that lead to ethical violations and to the clinician's ruptured moral identity.

IDENTIFYING MORAL INJURY

Objective tools have been proposed for diagnosing moral injury. Koenig and colleagues adapted their scale for military veterans to a 10-item version specific for the health-care workforce, the MISS-HP.[23] When administered to a cohort of clinicians in early 2020, the estimated prevalence of moral injury was 41%. An additional study used the 9-item Moral Injury Events Scale (MIES) to evaluate psychiatric symptoms and moral injury among U.S. health-care workers during the COVID-19 pandemic.[24] Nineteen percent of respondents answered "yes" to the question "I acted in ways that violated my own moral code or values," and 45% answered "yes" to the question "I feel betrayed by leaders who I once trusted." Higher MIES scores were associated with higher rates of depression and anxiety.[25]

Although objective, easy-to-administer scales can be useful in identifying moral injury, clinicians and researchers emphasize that such metrics risk pathologizing moral injury, which ought not be considered a disorder.[7,26,27] Moral emotions, as identified by the aforementioned screening tools, are proper and understandable responses to moral violation.[28] By

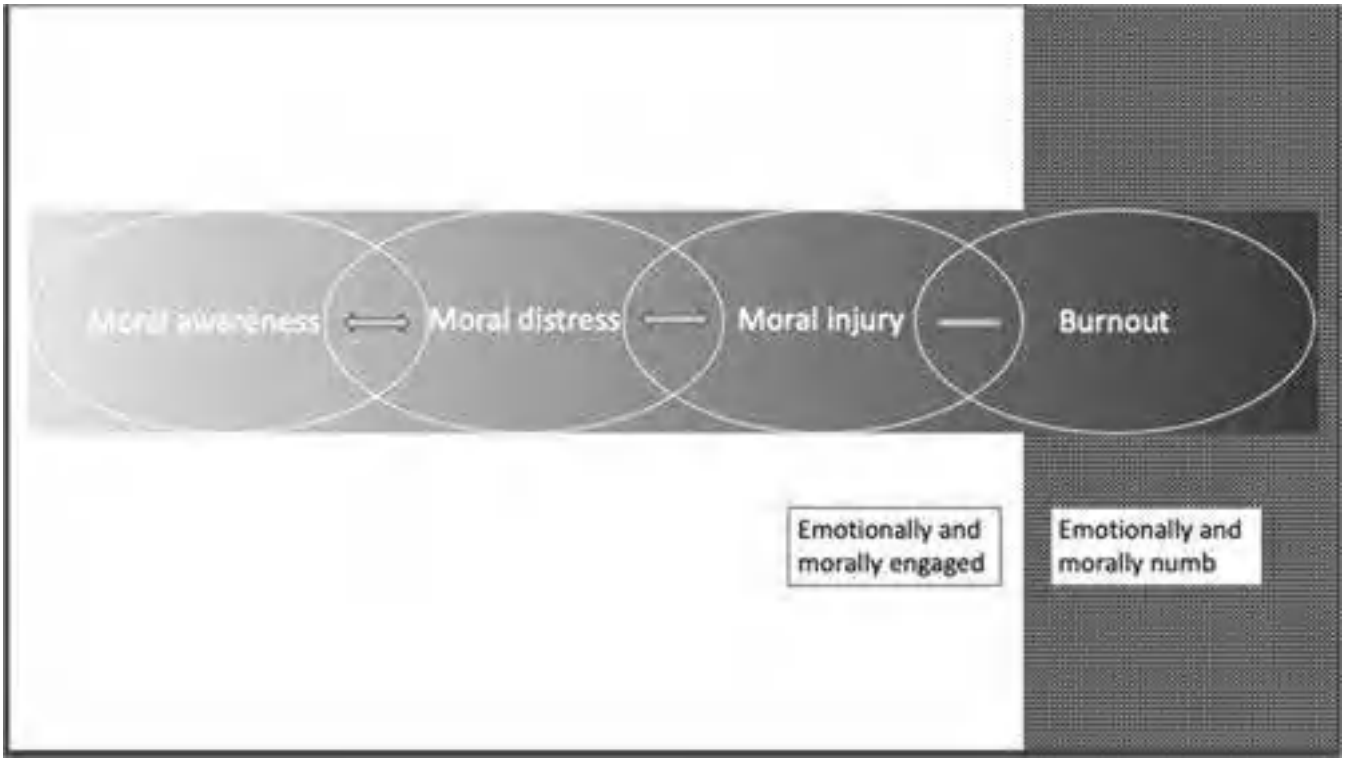

Figure 1 Interplay among moral awareness, distress, injury, and burnout.

contrast, the locus of pathology is the set of circumstances that gives rise to moral violations—not the injured individual—which is why mindfulness or yoga sessions alone cannot fix moral injury. A context-driven problem requires context- and community-based solutions.[29]

PREVENTING AND REPAIRING MORAL INJURY

Although moral distress may be unavoidable in health care,[21] moral injury and burnout are not. To prevent and repair moral injury and thwart its progression to burnout, health-care leadership must acknowledge that the problem is not individual weakness but rather systems and contexts in need of reform. Cultivating moral resilience allows clinicians to overcome moral obstacles in their practice and mitigate downstream effects of moral distress.[30] However, clinicians, no matter how resilient, cannot indefinitely sustain excess workloads with paltry resources. Hospital administrators must therefore prioritize staffing and supply shortages as matters of first importance. Insufficient staffing was a key cause of nursing distress pre-COVID-19.[31] Moreover, during the pandemic, some hospitals innovated by incorporating medical students and non-clinical staff into aspects of direct patient care, offering signing and retention bonuses, and cross-training clinical staff.[32] Such measures can mitigate moral dissonance by reassuring clinicians that management is uncompromisingly dedicated to high-quality patient care.

Structural reforms are also necessary. Health-care settings can be highly chaotic, and chaotic work environments have been associated with stress and a desire to leave practice.[33] Many institutions have experienced a substantial rise in patient volume over decades without a proportionate increase in staff or workspace, which translates into compromised care of patients. Twenty-five percent of patients who do not trust their doctors say it is because their doctors spend too little time with them.[34] Permitting more patient-facing time by reducing patient volume and offloading non-medical tasks to support staff reinforce a culture committed to the well-being of both patients and clinicians. Furthermore, although admittedly difficult to come by, providing a sufficient quiet work space promotes a healthy environment in which clinicians can concentrate on practicing high-quality, ethical medicine.[21]

Clear communication from leadership is essential for rectifying the morally injurious sense among health-care workers that executives prioritize revenue over patient and clinician health. Only about half of physicians say they trust health-care leaders and executives[34]; this is a sobering statistic and creates a challenge for health-care leadership attempting to address clinician distress. Hoert and colleagues show that when employees trust that leadership is committed to their well-being, they report less job stress, greater wellness activity participation, and greater levels of health behavior.[35] Health-care administrators and leadership have the responsibility to engage clinicians through transparent communication, and empower all members of the health system to raise questions and concerns toward the goal of improving institutional and personal well-being.[36]

In addition to addressing the circumstances and contexts that give rise to moral injury, health-care leadership and communities must work toward repairing the wounds of the morally injured themselves. During the COVID-19 pandemic, physician groups developed concrete approaches to building a community among frontline health-care workers. Fins and Resnick propose a model for peer support that promotes conversation among colleagues who have shared traumatic experiences, emphasizes bearing witness and normalizing clinicians' reactions, and employs frequent expressions of gratitude.[7] Psychiatrists at the University of Minnesota deployed a peer support model based on a U.S. Army framework, which assigns combatants a "Battle Buddy" capable of understanding their specific stressors. Similarly, the Minnesota program paired buddies within clinicians' units and encouraged mutual contact 2 to 3 times per week. The goal was to promote clinicians' sense of purpose and hopefulness—both critical for preventing moral injury.[37] Additional promising resources for fostering supportive communities among health-care workers include Schwartz Rounds, Unit Based Ethics Conversation, the Moral Distress Map, and integrating chaplains trained in helping individuals process moral injuries.[38–42]

CONCLUSION

The COVID-19 pandemic has taken an enormous toll on health professionals who repeatedly have been forced to participate in and bear witness to situations that violate their deeply held beliefs. Some have progressed to burnout or have left the profession. However, most clinicians have stayed in their jobs and continue to care—both for their patients and for the moral integrity of their work. By reframing burnout as downstream of moral distress and moral injury, this paper offers hope to health-care professionals and leadership. Interventions that reduce moral distress and injury also diminish the likelihood of physician burnout.

The term moral injury reminds us of the profound moral questions involved in the practice of medicine. Clinicians are not simply tired after working long hours or physically strenuous shifts; they are taking great personal risk to care for their fellow human beings. As the U.S. Surgeon General's Advisory on Addressing Health Worker Burnout insists, "we have a moral obligation to address the long-standing crisis of burnout, exhaustion, and moral distress across the health community. We owe health workers far more than our gratitude. We owe them an urgent debt of action."[43] To avoid widespread clinician burnout, moral injury must be identified and addressed before the wounds of health care result in permanent and irreversible loss.

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TAB 37

BETWEEN

THE ONTARIO MEDICAL ASSOCIATION
(The "OMA")

- and -

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO, AS REPRESENTED BY THE MINISTER OF HEALTH AND LONG -TERM CARE
(The "MOHLTC")

1. The parties have agreed to the attached amendments to the Representation Rights Joint Negotiation and Dispute Resolution Agreement. The "Framework Appendix For Negotiation, Mediation and Arbitration" will become the new Appendix A and will replace the previous Appendix A known as "Joint Process".

2. Both negotiating teams unanimously agree to recommend acceptance of the "Framework Appendix For Negotiation, Mediation and Arbitration", together with the additional agreed matters, for ratification to their principals.

Dated at Toronto, Ontario, this 16th day of May, 2017

For the OMA

For the Government

FRAMEWORK APPENDIX FOR NEGOTIATION, MEDIATION AND ARBITRATION (HEREAFTER THE "FRAMEWORK APPENDIX")

(Note: This will be the new Appendix A to the Representation Rights and Joint Negotiation and Dispute Resolution Agreement (RRJNDRA))

BILATERAL NEGOTIATIONS

1. Unless the parties agree otherwise, each Physician Services Agreement (PSA) will be for a term of four years. The arbitration board will not have authority to change the four-year term, unless the parties agree otherwise.

2. The parties will commence bilateral negotiations for renewal of a PSA at least 180 days before the expiry of the PSA, or as otherwise agreed to by the parties.

3. The parties may propose such terms and conditions for renewal, with or without modifications, of the PSA then in effect, without restrictions on the scope of matters the parties may include in a PSA in the negotiation and mediation process outlined below. The terms and conditions of a PSA negotiated under this Framework Appendix, and any terms and conditions relating to a matter falling with the scope of arbitration under s. 21, will remain in full force and effect, and will not be altered, deleted or added to, without agreement of the parties.

4. Both parties will negotiate in good faith and make every reasonable effort to negotiate a PSA.

5. The parties will make timely disclosure to each other of any data, materials or other information that is reasonably relevant to the issues in dispute throughout the negotiation, mediation and arbitration processes outlined in this Appendix. Issues related to disclosure will be decided by the chair of the arbitration board, unless at the time of the referral of the dispute for determination, the chair has not been appointed, in which case it may be referred to and will be determined by the Referee.

6. Upon the expiry date of a PSA, the terms and conditions of the PSA, and any terms and conditions relating to a matter falling within the scope of arbitration under s. 21, will remain in full force and effect, and will not be altered, deleted or added to without the agreement of the parties, and unless changed as a result of the negotiation, mediation or arbitration of a renewal PSA.

SELECTION OF MEDIATOR/APPOINTMENT OF NOMINEES

7. Before the conclusion of 30 days from the commencement of negotiations, the parties will attempt to reach agreement on a mediator/arbitrator (who shall also be the chair of the arbitration board), unless the parties have agreed to separate individuals to serve as mediator and arbitration board chair respectively, in which case the parties will agree to both.

8. If at any time thereafter, the parties are unable to agree to a mediator/arbitrator (or to a mediator and arbitration board chair where they have agreed to use separate individuals), either party may request that the Chief Justice of Ontario, determine the mediator/arbitrator, or mediator and arbitration board chair. In such circumstances, both parties will provide 3 names to the Chief Justice for mediator/arbitrator, or three names for mediator and three names for arbitration board chair if the parties have agreed to use separate individuals). If the same individual(s) have been proposed by both parties, the Chief Justice will appoint one of the agreed upon individuals. If there is no overlap, after consulting with the parties in such manner as the Chief Justice sees fit, the Chief Justice will appoint an individual (or individuals) either from one of the lists provided by the parties, or such other individual(s) as the Chief Justice determines. The lists will remain confidential to the parties and the Chief Justice.

9. Each party will appoint its nominee to the arbitration board within 15 days of the commencement of mediation. A party may substitute another person to serve as its nominee at any time prior the commencement of any arbitration hearing.

10. Once the mediator/arbitrator, or mediator, have been agreed to or appointed, the mediator, in consultation with the parties, will schedule dates for mediation so as to ensure that the timeframes for mediation contemplated by this Framework Appendix are met to the extent reasonably possible. The mediator will conduct the mediation without nominees, unless otherwise agreed by the parties.

11. Once the arbitration board has been agreed to or appointed, the chair of the arbitration board, in consultation with the nominees and the parties, will schedule dates so as to ensure that the timeframes for binding interest arbitration contemplated by this Framework Appendix are met to the extent reasonably possible.

MEDIATION

12. Either party may give notice to the other to trigger the mediation process, after the parties have been bargaining for at least 60 days, unless the parties agree otherwise.

13. Where either party has given notice to trigger the mediation process, the mediator will meet with the parties in order assist them to reach a renewal PSA on all matters in dispute. The first mediation session will take place within 30 days of the referral to mediation.

14. The mediator will determine the procedures and rules governing the mediation process, after consulting with the parties. The mediator is not competent or compellable as a witness before an arbitration board, or any other court or tribunal, respecting any information or material furnished to or received by the mediator while involved in assisting the parties to reach a PSA.

15. The Parties will engage in mediation for no less than 60 days after the mediation commences, before either party may refer to the dispute to binding interest arbitration. However, if the mediator determines that the parties are at an impasse at any time, the mediator may declare an impasse, in which case the dispute will be immediately be referred to arbitration.

16. Where a matter is referred to arbitration**,** after consulting with each other, both parties will provide a list of issues in dispute to the other party, and to the arbitration board, within 15 days.

BINDING INTEREST ARBITRATION

17. The arbitration board shall be composed of the nominees of the parties, and the mediator/arbitrator (who will be the chair of the arbitration board), subject to any different agreement by the Parties.

18. Absent an agreement of the parties, the method of binding interest arbitration to be used shall not be final offer selection. In particular, unless the parties agree otherwise, the arbitration board may, on any issue or issues, select either party's proposal, choose a middle ground, or issue any award that it determines is appropriate in the circumstances.

19. (a) The board of arbitration will be deemed to be an arbitrator under the *Arbitration Act, 1991*, and this Appendix constitutes an agreement to arbitrate under the *Arbitration Act, 1991*.

    (b) The parties agree to contract out of the following provisions of the *Arbitration Act, 1991* and agree that these provisions do not apply to the binding interest arbitration process under this Framework:

    (i) ss. 10(4) (no election of chair);

    (ii) s. 35 (the arbitrator can also mediate);

    (iii) s. 45 (no appeal);

(iv) s. 54 (no power to award costs);

(v) s. 56 (no assessment of arbitrator costs by a party); and

(vi) s. 57 (no interest on arbitral awards).

20. The parties expect that the arbitration board will render its final award within 60 days after the last day of hearing. If the arbitration board determines that it requires additional time, the chair will advise the parties.

Scope of Arbitration

21. The following issues fall within the jurisdiction of the arbitration board for inclusion in a PSA:

(a) Any new or existing fee or payment (including any proposed change to a fee or payment) payable by the MOHLTC or other Ministry (or successor Ministry or government agency) to a physician for providing a service under the OHIP Schedule of Benefits, the Health Insurance Act, or under any other statute, regulation, arrangement, agreement or program providing for physician compensation for the delivery of medical services to patients.

This includes the detailed list of the payments currently made to physicians attached as Appendix A, and includes those payments made to physicians known as fee-for-service (FFS) payments, alternate payment plans (APPs) and alternate funding plans (AFPs), primary health care (including physician compensation in FHTs such as the blended salary model and FHT sessional fees), hospital on-call coverage (HOCC) and sexually transmitted disease (STD) services, compensation for CHC and AHAC physicians, flow-through top up for public health physicians, and physicians in divested psychiatric hospitals and assertive community treatment teams; and payments to physicians for services under the Ontario Telemedicine Network program.

(b) Subject to section 23(a), the requirements or conditions that a physician must meet in order to be paid for an insured service on a fee-for-service basis.

(c) Activities or accountabilities under a non-fee-for-service agreement (including any proposed change to an activity or accountability), and any amount to be paid for any such activity or accountability.

(d) With respect to the PSB:

(i) what components are to be included in the PSB, with the condition that all of the following components must be included in the PSB:

1. the detailed list of the payments currently made by the MOHLTC to physicians attached as Appendix A, including those payments made to physicians known as fee-for-service (FFS) payments, alternate payment plans (APPs) and alternate funding plans (AFPs), primary health care (including physician compensation in FHTs such as the blended salary model and FHT sessional fees), hospital on-call coverage (HOCC) and sexually transmitted disease (STD) services, compensation for CHC and AHAC physicians, and flow-through top up for public health physicians, and physicians in divested psychiatric hospitals and assertive community treatment teams;

2. Payments for clinical services paid by other ministries;

(ii) the "baseline" of the PSB, or of separate components of the PSB;

(iii) any changes to the PSB in each year of the agreement (in addition to any changes in physician payments as set out above) based on change in population number, ageing and other demographic changes including chronic disease prevalence, technological change, change in the numbers of physicians, change to the cost of new or changing programs/services/fees, impact of allied health professionals, and any other factors relevant to changes in expenditures for physician services. The parties recognize that these factors may be interrelated and these interrelationships must be considered in determining the overall change to the PSB, rather than considering each factor individually; and

(iv) determination of the consequences (if any) and of the extent to which either party should bear responsibility, if expenditures on physician services exceed the PSB or a component of the PSB (if any) in a given year.

(e) After 2023, payments to subsidize physicians for a portion of their fees to the Canadian Medical Protective Association (CMPA) or other malpractice insurance. The provisions in the 2012 PSA related to payments to subsidize physicians for a portion of their fees to the CMPA will continue to apply until the end of 2023.

(f) Electronic medical records (where required by legislation, government, a government agency or program, or the terms of a non-fee for service agreement);

g) Physician benefits and benefit programs, including physician health benefits and paid pregnancy or parental leave, which shall be part of the PSB as per section 21(d)(i)1.

(h) With respect to the existing, previously agreed to specialist or primary care boilerplate provisions the parties agree that if the Government proposes to change the specialist or primary care boilerplate provisions based on a change to generally applicable government financial or

accountability directives, and the parties cannot reach agreement about such changes, the arbitration board has jurisdiction to determine whether these provisions should be changed and, if so, on what terms. In addition, where either party claims that there has been a material change justifying an alteration of these provisions, the arbitration board will have jurisdiction to determine whether such material change has occurred, and if so, whether the provisions should be changed and if so on what terms.

Despite the foregoing paragraph, unless the parties agree otherwise, the arbitrator does not have jurisdiction to alter the termination provisions that are found in the specialist and primary care boilerplate provisions.

(i) Any matters set out in s. 5, s. 26, s. 27, s. 28, and s. 32.

22. Subject to those matters that are arbitrable under s. 21, the parties agree that the Government of Ontario has the right to make decisions about health care policy, which elements of the health care system will be funded on behalf of the people of Ontario, and how that system is organized, funded and delivers health care.

23. For greater certainty, the following matters do not fall within the scope of arbitration:

(a) The government's decision, after consultation with the OMA through the PSC:

(i) to add new fee codes under the OHIP Schedule of Benefits;

(ii) to delist a fee code (provided there is no "nil" billing code for such delisted fee code); or

(iii) to modify or restrict coverage or eligibility criteria for payment under a fee code, based on the government's determination that coverage or eligibility is not medically necessary (provided there is no "nil" billing code for such modified coverage or eligibility)

For clarity, the amount of the payment for new or modified fee codes would be arbitrable.

(b) Government funding for non-clinical services, except to the extent that the funding is provided as part of a non-fee for service alternate payment or funding model, in which case it is deemed to be arbitrable under s. 21;

(c) Government funding for non-physician services;

(d) Resident loan interest relief programs;

(e) Pensions;

(f) Physician compensation for the assisted reproduction program until March 31, 2021, at which time it shall be arbitrable under section 21;

(g) Physician services paid through the Workplace Safety and Insurance Board; and

(h) Subject to paragraph section 21, any issue related to the impact on a physician's compensation by a third party for which the government is not responsible.

24. The jurisdiction of the arbitration board set out in s. 21 above also applies in the period following the determination of the PSA, in circumstances where i) a new service is added to the OHIP Schedule of Benefits, ii) a new non-fee-for-service agreement (including an APP, AFP, primary care agreement or government program) is proposed, and an impasse is reached in negotiating the agreement, or iii) either party terminates an existing agreement in accordance with the terms and conditions of that agreement, and an impasse is reached in negotiating a successor or replacement agreement. For clarity, the parties agree that either party may terminate an agreement in accordance with the terms of that agreement.

Criteria for Arbitration

25. In making a decision or award on any matters falling within the scope of arbitration, the arbitration board shall take into consideration the following factors and any other factors it considers relevant:

(a) The achievement of a high quality, patient-centred sustainable publicly funded health care system;

(b) The principle that compensation for physicians should be fair (in the context of such comparators and other factors that the arbitration board considers relevant) and reasonable;

(c) Such comparators as the arbitration board considers to be relevant, including but not limited to, physician compensation;

(d) The economic situation in Ontario;

(e) Economic indicators that the arbitration board considers relevant, including, but not limited to, the cost of physician practice;

(f) Evidence-based relativity and appropriateness considerations; and

(g) Data sources agreed to by the parties to be reliable, or otherwise the most reliable data available.

Process of Arbitration

26. With respect to those issues within the scope of arbitration involving changes to physician compensation and the PSB, the arbitration board will proceed as follows, taking into consideration the factors outlined in section 25:

(a) Determine:

(i) any changes to physician compensation in each year of the agreement;

(ii) what components are to be included in the PSB, as set out in section 21(d)(i);

(iii) the baseline of the PSB or of separate components of the PSB, as set out in s. 21(d)(ii);

(iv) any changes to the PSB in each year of the agreement (separate and apart from any change to the PSB that results from the determination made under s. 26(a)(i)), as set out in s. 21 (d)(iii).

The parties agree that the total change to the PSB in each year of the agreement will be the compounded total of any changes determined under s 26(a)(i) (changes to physician compensation) and s. 26(a)(iv) (changes to PSB);

(b) Determine the consequences, if any, as set out in s. 21(d)(iv);

(c) If the arbitration board considers it appropriate, it may, in respect of any year of the agreement, determine an amount to be subject to distribution/allocation based on evidence-based relativity, evidence-based appropriateness, evidence-based value considerations, and any other factors set out in s. 25;

(d) If the arbitration board determines an amount in s. 26(c) to be distributed/allocated, the parties will meet to negotiate the distribution/allocation of that amount based on the factors set out in s. 26(c). Either party may give notice to the other party to trigger

mediation on this issue, at any time during this negotiation. Unless the parties agree otherwise, the mediator shall be the chair of the arbitration board;

(e) If the parties enter into a negotiation/mediation under s. 26(d), either party may refer the distribution/allocation issues that are unresolved to the arbitration board 60 days after negotiations commenced, or such other timeframe as the parties may agree. The arbitration board will determine the distribution/allocation of the amount determined under s. 26(c) based on the factors set out in s. 26(c).

Joint Oversight of the PSB for the term of the agreement

27. If a determination is made under section 26(b) that there is a limit on PSB expenditures in any year of the PSA for which the OMA is responsible, the parties will attempt to agree at the PSC on the steps to take to manage expenditures beyond those for which the government is responsible. If the parties cannot reach agreement, either party may refer their differences to the arbitration board, which will have authority to decide on the steps, if any, required to manage expenditures consistently with any such limit.

28. The parties agree that, separate and apart from any determination made under s. 26(a)(i) or s. 26(a)(iv), the parties will make changes to the PSB where:

(a) The Ministry makes a policy decision to change the scope of an existing service, or to provide a new or different service or program to Ontarians; or

(b) There is an unforeseeable event beyond the control of either party that materially impacts the PSB.

If the parties cannot reach agreement on the changes contemplated by this section, either party may refer the issue to the arbitration board, which will have authority to determine the changes.

Expert Advisors as a Resource

29. At any stage in the proceeding, the arbitration board may, on its own motion or at the request of either party, appoint an expert advisor to provide independent advice and report to it on specific issues.

29.1 The arbitration board may require the parties to give the expert advisor any relevant information and documents.

29.2 Any report prepared by the expert advisor for the arbitration board shall be given to the parties.

29.3 At the request of a party or the arbitration board, the expert advisor shall, after making the report, participate in a hearing and be questioned by the parties, who may also present evidence of any other expert on the subject matter of the report.

29.4 For clarity, the arbitration board will communicate to the parties any expert reports on which it may rely in making a decision.

Decision

30. A decision of the majority of the members of the arbitration board shall be the decision or award of the arbitration board. Absent a majority decision, the decision of the chairperson shall be the decision or award of the arbitration board.

31. Any decision or award rendered by the arbitration board is final and binding upon the Parties, and shall, together with any agreed items, constitute the PSA between the parties.

32. The arbitration board shall decide all matters in dispute between the parties falling within the scope of arbitration, and any other matter which in the opinion of the arbitration board is necessary to conclude a PSA in respect of those matters that have been submitted to arbitration, and shall remain seized to make findings or orders to give effect to its award, and if necessary to finalize the document which shall constitute the PSA.

33. The parties will share costs of the mediator/arbitrator (or chair of the arbitration board) equally, except that each party will be separately responsible for the cost of its nominees.

REFEREE AND ENFORCEMENT OF FRAMEWORK APPENDIX AND OTHER AGREMEENTS

34. The parties agree that the Referee under this Framework Appendix will be XX. If XX or any successor Referee to XX is unable or unwilling to serve, the parties will attempt to agree on a successor Referee, failing which the process for appointing the Chair of an arbitration board will apply, with any necessary modifications.

35. The Referee, once appointed, shall remain in place until a new PSA is concluded, will remain seized in respect of any dispute arising while the Referee was appointed, and may be reappointed for the term of the next PSA.

36. The Parties agree to submit any dispute or difference between them over the interpretation, application, administration or alleged violation of this Framework Appendix to the Referee, except for roles that are specifically described in this Framework Appendix framework as belonging to the mediator or arbitrator. For further clarity, the arbitrator will be responsible for issues relating to scope (under s. 21).

37. The Referee will be deemed to be an arbitrator under the *Arbitration Act, 1991*, and this Appendix constitutes an agreement to arbitrate under the *Arbitration Act, 1991*. The parties agree to contract out of s. 35 (arbitrator can also mediate), s. 45 (no appeal), s. 54 (no power to award costs), s. 56 (no assessment of arbitrator costs by a party), and s. 57 (no interest on arbitral awards).

38. The Referee will have the authority to order any remedy he or she deems just and appropriate, but has no jurisdiction to amend the provisions of any agreement between the parties or any award issued by an arbitration board. The parties expect that the Referee will render a final award within 30 days of the last day of the hearing. If the Referee determines that additional time is needed, the Referee will advise the parties accordingly.

39. Other than as specified above as falling within the authority of the arbitration board determining the PSA, the Parties agree to submit any dispute or difference between them over the interpretation, application, administration or alleged violation of the OMA Representation Rights and Joint Negotiation and Dispute Resolution Agreement, a Physician Service Agreement, or any other agreement falling within the scope of binding interest arbitration under this Framework Appendix, to the PSC. If the dispute or difference cannot be resolved by the PSC within 30 days, either party may refer the dispute or difference to the Referee, who will have all the powers and authority of an arbitrator under the Arbitration Act, 1991. The Referee will have the authority to order any remedy he or she deems just and appropriate, but has no jurisdiction to amend the provisions of any agreement between the parties or any award issued by an arbitration board.

NO STRIKE ACTION

40. The OMA, and its legally constituent elements, will not threaten, condone or encourage Strike Action by physicians for whom it has representation rights under this Framework Appendix.

41. No physician represented by the OMA will threaten or engage in Strike Action.

42. “Strike Action” is defined as any withdrawal, restriction or limitation of physician services to patients by two or more physicians undertaken in combination or in concert or in accordance with a common understanding for the purpose of pressuring the government with respect to any matters covered by this Framework Appendix or with respect to government funding, policy, legislation or regulatory measures.

“Strike Action” does not include a withdrawal, restriction or limitation of services to patients where the action was undertaken in the normal course of practice, or actions that involve expression of concerns about issues (such as petitions, letter writing campaigns, media campaigns, public protests, or information materials in the reception area of a physician’s office).

43. The MOHLTC may refer any alleged Strike Action to the Referee for a determination and remedy. If requested by the MOHLTC, the Referee shall conduct an expedited hearing.

TRANSITIONAL PROVISIONS

44. With respect to the first PSA under the Framework Appendix, the parties agree that:

(a) term will be 4 years, April 1, 2017 to March 31, 2021;

(b) in reaching its decision, the arbitration board cannot rely on the terms and conditions of the unratified 2016 tPSA, nor can either party rely on the unratified 2016 tPSA or on its terms and conditions in support of any proposal it may make with the mediator or to the arbitration board, but the parties can refer to the fact that a tPSA was negotiated in 2016 and that it was not ratified;

(c) bargaining will be in accordance with the Framework Appendix, and will commence the later of 30 days after ratification by both parties or by September 1, 2017, with any necessary modifications to the terms and timelines set out in the Appendix. Upon ratification of this Framework Appendix, the existing terms and conditions relating to a matter falling with the scope of arbitration under s. 21 will remain in full force and effect, and will not be altered, deleted or added to, without agreement of the parties, and unless and until changed as a result of the negotiation, mediation or arbitration of a the first PSA under this Framework Appendix.

ADDITIONAL AGREED MATTERS:

a) **Charter Challenge**

- the Charter litigation can continue.

- the parties can refer to the binding arbitration agreement in the litigation

- the OMA acknowledges that the government has granted the binding arbitration agreement to resolve bargaining disputes between the parties, and agrees that this does not constitute acceptance by the government of the claims in their litigation, and in particular, any claim to a right to binding arbitration under section 2(d) of the charter

- the government agrees that the binding arbitration agreement does not prejudice the OMA's position in its Charter litigation that there is a right to binding arbitration under section 2d of the Charter.

b) Remove the concept of “deemed OMA agreement” in the RRJNDRA, by removing last two sentences, so that paragraph 7 reads as follows in its entirety:

“All current template and ancillary agreements, any future template and ancillary agreements, will include the OMA as a party and signatory to such agreements (and any amendments thereto).

c) Amend paragraph 21 of the RRJNDRA, by adding the following:

“This agreement, including the Appendices, is perpetual.”

Appendix A – Detailed list of payments currently made by MOHLTC that must be included in the PSB

Fee-For Service (FFS)

i) Professional Fees and Technical Fees, Health Care Payment (HCP) Claims, Ontario Registered Physicians

- Automated FFS-Based Premiums Included

ii) Other Non-Claims Programs;

- Mental Health Psychiatric Stipend
- Paediatric Stabilization
- Rural Medicine Investment Program
- Physician On-Call Program
- Northern Physician Retention Initiative
- Clinical Decision Unit Pilot Project

Hospital On Call Coverage (HOCC) / Sexually Transmitted Disease (STD)

i) Hospital On Call Coverage (HOCC), including CPOC, POC and CCC on-call
ii) Sexually Transmitted Diseases

Primary Health Care

i) Primary Care Core Payments

- Family Health Network (FHN) Base Rate Capitation
- Family Health Organization (FHO) Base Rate Capitation
- Comprehensive Care Capitation Fee
- Family Health Group (FHG) 10% Comprehensive Care Premium
- Access Bonus
- Income Stabilization
- Office Practice Administration
- Physician Collaboration
- Rurality Gradient Premium
- General Practitioner Special Premiums
- House Calls
- Blended FFS Shadow Billing
- Q-Codes
- Special Premiums
- Group Management and Leadership Payment

ii) Other

- Special Patient Populations
- GP Focused Practice Models
- Rural and Northern Physician Group Agreements
- Group Health Centre
- First Nations Agreement
- Institutional Substitution Program
- Health Care Connect physician payments
- AHAC and CHC
- Other physician clinical services: sessional, stipend, stabilization, supplement or top-up payments to physicians
- Locum payments and payments to physicians under recruitment and retention programs for clinical services
- Flow-through top up for public health physicians

<u>Alternative Payment Plans (APP)/Academic Health Science Centres (AHSC), including all of their physician payment components</u>

- Specialist Physicians - APP Including ACT
- APPs for specialist services
- EDAFA
- Academic Health Science Centres
- Physician Benefit Programs (Physician Health Benefits and Pregnancy/Parental Leave Benefits)
- Top-up for Laboratory Physicians
- Shelter health APPs

TAB 38

Memorandum of Agreement

Between:

The Ontario Medical Association
("OMA")

-and-

Her Majesty the Queen in Right of Ontario
as Represented by the
Minister of Health and Long-term Care
("Minister")

WHEREAS the Minister is charged with responsibility for the administration and stewardship of health care in Ontario;

AND WHEREAS the OMA is recognized as the exclusive representative of physicians practicing in Ontario;

AND WHEREAS physicians in Ontario exercise their right to freedom of association under section 2(d) of the *Charter* through the OMA, and the OMA seeks an agreement with the Minister that would provide for a process of meaningful consultation and dialogue;

AND WHEREAS the Parties seek to describe how they will consult and negotiate meaningfully and in good faith with each other in respect of Physician Services Agreements and compensation for physician services;

AND WHEREAS the OMA and Minister wish to continue to work together in a relationship based upon mutual respect, trust, consultation and co-operation in order to improve health care in the Province of Ontario;

AND WHEREAS the Parties acknowledge that physicians are independent professionals who practice within a publicly funded health care system, and that the services that physicians provide are integral to the achievement of a high-quality patient-centered sustainable system;

The Parties have come to the following agreement:

General

1. The OMA is recognized as the exclusive representative of physicians practicing in Ontario.

2. This Agreement describes the OMA's representation rights with respect to the negotiation of physician compensation for physician services funded in whole or in part, directly or indirectly, by the Minister.

   It is understood that this Agreement does not apply to:

   (a) Physicians employed by or appointed to provide services directly to the Government of Ontario, including those represented by the Association of Physicians and Dentists in Public Service; or

(b) Physicians represented by The Professional Association of Internes and Residents of Ontario (PAIRO).

3. The Minister and the OMA will consult and negotiate in good faith with each other for the purpose of entering into Physician Services Agreements to establish physician compensation for physician services and related accountability in the publicly funded health care system. The Parties anticipate that any Physician Services Agreement would be based on shared objectives including a patient-centered sustainable health care system. The Parties will use the Joint Process set out in Appendix "A" to negotiate Physician Services Agreements or any periodic re-openers of such an agreement.

4. The Minister will negotiate all template agreements (and amendments) with the OMA. A "template agreement" is a funding agreement, as determined by the Parties, that the Minister intends to offer to more than one group of physicians for acceptance as a standard form of agreement.

5. The Minister may not deal directly with a Physician Group in respect of negotiating ancillary agreements (or amendments) if a majority of the Physician Group elects to have the OMA act as its representative in those negotiations.

   An "ancillary agreement" is either: (i) a unique agreement that provides funding to a specific group of physicians on a non-fee-for-service basis or blended model that is not a template agreement; or (ii) a template agreement when it is applied to and entered into with a specific group of physicians.

6. The Minister will notify the OMA of all expressions of interest that it receives from physicians respecting an ancillary agreement, or of any amendment to such an agreement, so that the OMA may contact the physicians to advise them of the availability of OMA representation.

7. All current template and ancillary agreements, any future template and ancillary agreements, will include the OMA as a party and signatory to such agreements (and any amendments thereto). The OMA will provide the Ministry with an executed copy of such an agreement no later than 7 days after receiving from the Ministry a copy of such an agreement that is ready for execution. The OMA would be deemed to have executed the agreement if it does not provide the Ministry with an executed copy no later than 7 days after receiving an agreement that is ready for execution.

8. The Minister acknowledges the role that the OMA plays on behalf of physicians in providing the Government of Ontario with advice about health care policy and system issues affecting physicians. The Minister will continue to consult with the OMA to seek its advice about significant health care policy and system issues that affect physicians.

   It is understood that this Agreement does not restrict the Government of Ontario from seeking advice from others about health care policy or health care system matters, nor does it restrict the Government of Ontario from setting its budget for the funding of the health care system or physician services.

Physician Services Committee

9. The OMA and Minister agree to continue the Physician Services Committee ("PSC"), and further agree that matters arising from this agreement and the continuing development and strengthening of their relationship will be considered at the PSC.

10. The PSC will continue to provide a broad and structured process for regular liaison and communication between the Ministry and the OMA.

11. The mandate and terms of reference of the PSC are set out at Appendix "B" to this agreement.

Dispute Resolution under this Agreement

12. If the OMA and the Minister have a disagreement regarding any of the following aspects of their relationship, either party may refer the disagreement to the PSC for consideration:

    - the interpretation or application of this agreement;
    - the interpretation or application of a Physician Services Agreement, or any proposed amendments to a Physician Services Agreement during the term of that agreement;
    - any proposed amendments to template or ancillary agreements; or
    - any other aspect of the parties' relationship that is not subject to a dedicated dispute resolution mechanism

13. In the event that a dispute is referred to the PSC in accordance with article 12 of this agreement, the PSC will make recommendations to the Parties respecting the resolution of the dispute.

14. The PSC may enlist the support of an agreed upon facilitator to assist it in its consideration of the dispute, and to help the parties reach a resolution in this regard.

15. (a) During the operation and administration of a Physician Services Agreement, the Parties may be called upon to make decisions which may adversely affect the specific interests of a particular group of physicians represented by the OMA. If that occurs, and bearing in mind that the OMA has an obligation to represent all physicians for the purpose of this Agreement, and the affected group believes that the OMA has not fulfilled its representation obligation, the matter will first be referred to the PSC for consideration. If the matter is not resolved, it will be referred to a qualified person appointed by the PSC after consultation with the affected group, as a fact finder and mediator to assist the Parties.

    (b) Failing resolution through fact-finding and mediation, the mediator will prepare a written recommendation for resolution that will be provided to the Parties and the affected group for their consideration. If the matter remains unresolved after two weeks from the date the recommendation was provided, the recommendation will be made public and the affected group may then use any other available dispute resolution process.

Amending Procedure

16. Either the OMA or Minister may seek to amend this agreement by providing the other party with written notice of its proposed amendment(s).

17. Upon receiving such notice, the parties will make every reasonable, good faith effort to promptly reach agreement respecting the proposed amendment.

18. If the parties are unable to reach an agreement respecting the proposed amendment within 60 days of the written notice, then either party may refer the dispute to a special committee of the PSC for consideration.

19. The special committee will make recommendations to the parties regarding the resolution of the dispute within 30 days of the referral.

20. The special committee may enlist the support of an agreed upon facilitator to assist it in its consideration of the dispute, and to help the parties reach a resolution in this regard.

Term

21. This agreement will come into force on the date that the Minutes of Settlement abandoning Ontario Superior Court of Justice (Divisional Court) Court File No. 344/12 are executed.

Appendix "A"

JOINT PROCESS

Phase One: Negotiation and Facilitation

1.1 The Parties will commence negotiations at least four months before the end of the term of a Physician Services Agreement or as otherwise agreed to by the Parties. The Parties will agree on a Facilitator and Conciliator for the purposes of this Joint Process prior to or at the beginning of the negotiation process.

The Parties will agree on a period of time that is no greater than 120 days during which they will negotiate bilaterally without assistance.

At any time after that period of time, either party may request the appointment of a Facilitator. The parties may also agree to appoint a Facilitator during the period of bilateral negotiations.

The Facilitator will be an individual with expertise in the Ontario health care system who will be able to advise and guide the parties in their negotiations.

1.2 The Facilitator will determine the procedures and rules governing the facilitation process in consultation with the parties. All proceedings with the Facilitator are to be strictly confidential.

1.3 On or before the 14th day (or a later date as determined by the Facilitator in consultation with the parties) following the Facilitator's appointment, if the parties have not reached an agreement, then the Facilitator will issue written recommendations ("Recommendations") to the parties. The Recommendations will be confidential between the parties and may not be disclosed by either party without the other party's express written consent or as otherwise provided in this Agreement.

1.6 The parties will reconvene within 14 days of receipt of the Recommendations to continue their negotiations and to seek to reach an agreement.

Phase Two: Conciliation

2.1 If the parties have not reached an agreement within 14 days (or such longer period as agreed to by the parties) of the receipt of the Recommendations, then either party may request the appointment of a neutral conciliator ("Conciliator") to assist in the resolution of all outstanding issues.

2.2 Following the appointment, the Conciliator may review and consider the Recommendations.

2.3 The Conciliator will determine the procedures and rules governing the conciliation process in consultation with the parties. All proceedings with the Conciliator are to be strictly confidential.

2.4 On or before the 14th day (or such later date as determined by the Conciliator in

consultation with the parties) following the Conciliator's appointment, if the parties have not reached an agreement, then the Conciliator will issue a written report ("Report") to the parties outlining the parties' respective positions on the issues in dispute and making recommendations to resolve these issues. This Report will be a public document.

2.5 The parties will reconvene within 14 days of receipt of the Report to continue their negotiations and to seek to reach an agreement. The parties will engage in negotiations for a period of no less than 10 days (or such longer period as agreed to by the parties).

General

3.1 The parties agree to participate in this process in good faith and to make all reasonable efforts to reach an agreement.

3.2 Neither party will seek to end the negotiations prior to the conclusion of the two phases of the Joint Process as outlined above.

3.3 The Minister will not advise the Government of Ontario to unilaterally implement proposals prior to the completion of the Joint Process described above.

Appendix "B"

PHYSICIAN SERVICES COMMITTEE

Membership

Each Party will appoint a core membership supplemented from time to time as needed by temporary members with particular expertise or authority.

Co-Chairs

Each of the Parties will appoint a co-chair.

Relationship-Building

The PSC will continue training in relationship building and conflict resolution, as the Parties consider necessary.

Agenda Setting

The agenda of the PSC will be set by the co-chairs of the PSC.

Funding

Each Party will fund its own members and their own administration costs of the PSC.

Meetings

The PSC will normally meet twice a month.

Mandate

The mandate for the PSC is to make recommendations to the Parties as follows:

- To build and sustain a strong positive relationship between the Government of Ontario and the medical profession;
- To receive and consider reports and recommendations as set out in a Physician Services Agreement;
- To advise the Parties in connection with the changing role of physicians within the health care system, including possible improved models of delivery of and compensation for services;
- To develop recommendations, either on its own initiative or as a result of reports and recommendations received from committees reporting to it, to the Minister and the OMA leading to the enhancement of the quality and effectiveness of medical care in Ontario;
- To participate in the dispute resolution processes in accordance with this or other agreements between the Minister and the OMA;
- To consider matters referred to it by either the Minister or OMA.

Committees

The Parties plan to rely on ad hoc working groups and committees to work on various mutual initiatives as determined from time to time.

TAB 39

AGREEMENT

B E T W E E N:

THE ONTARIO MEDICAL ASSOCIATION
(The "OMA")

- and -

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO,
(The "Government of Ontario")
AS REPRESENTED BY THE MINISTER OF HEALTH
AND LONG-TERM CARE
("MOHLTC")

WHEREAS the OMA and the MOHLTC are parties to an agreement which covered the period from April 1st, 1997 to March 31st, 2000 (the "1997 Agreement");

AND WHEREAS The Physician Services Committee, established under the 1997 Agreement, has recommended to the parties several initiatives during the term of the Agreement which were implemented during such term;

AND WHEREAS the Government of Ontario has historically consulted and negotiated with the OMA as the representative of the medical profession in Ontario;

AND WHEREAS the MOHLTC is the Minister of the Government of Ontario charged with health care in the Province of Ontario;

AND WHEREAS the parties wish to continue to work together in order to improve health care in the Province of Ontario;

NOW the OMA and the MOHLTC have come to the following Agreement:

1 GENERAL

1.1 The MOHLTC acknowledges the OMA as the representative of the medical profession for the purpose of these negotiations and this Agreement. For its part, the OMA acknowledges the responsibility of the MOHLTC to manage the Ontario health care system. Both the OMA and the MOHLTC acknowledge the on-going responsibility of the MOHLTC, the OMA and the medical profession it represents to ensure that reasonably accessible medical services are provided to all insured persons in Ontario requiring medical services.

1.2 The parties acknowledge that major and rapid changes are occurring in the way in which

health care is delivered in Ontario. Changes are necessary in order to meet the demands and needs of a changing Ontario population requiring health care services. The parties acknowledge that changes must be attained within appropriate budgets established by the Government of Ontario for the MOHLTC. The parties also acknowledge that the continued representation of the medical profession by the OMA during this time of rapid change will require further clarification and the parties agree to discuss this issue in accordance with the terms set out in this Agreement.

2 PHYSICIAN SERVICES COMMITTEE

2.1 The parties agree to continue the Physician Services Committee ("PSC") which is charged with the responsibility of developing a strong relationship between Ontario's physicians and the MOHLTC. The PSC will continue to provide a broad and structured process for regular liaison and communication between the MOHLTC and the medical profession, through its representation by the OMA. The mandate and terms of reference of the PSC are as set out in Appendix "A" to this Agreement.

3 REVISIONS TO THE SCHEDULE OF BENEFITS - PHYSICIAN SERVICES ("Schedule of Benefits")

3.1 The parties agree to the following revisions to the Schedule of Benefits:

a) 1.95% effective April 1, 2000,
b) 2% effective April 1, 2001,
c) 2% effective April 1, 2002, and
d) 2% effective April 1, 2003.

The parties agree that they will meet in March, 2003 to negotiate whether the 2% revision effective April 1, 2003 shall be increased and for this purpose may take into consideration the prevailing economic conditions.

4 INCORPORATION

4.1 The MOHLTC agrees to recommend to the Government of Ontario that it introduce legislation as soon as possible to allow Ontario physicians to incorporate and to further recommend that the Government of Ontario consult with the OMA.

5 ACADEMIC HEALTH SCIENCES CENTRES

5.1 The MOHLTC and the OMA agree that physicians working at Academic Health Sciences Centers ("AHSC") need to be funded in innovative ways in order for these institutions to fulfil their important patient service and academic activities. The MOHLTC intends to make physician alternative payment plans available to the individual AHSCs on a voluntary basis. Implementation issues with respect to such AHSCs are apart and separate

from this Agreement. However, the parties acknowledge that conversion of the actual value of services provided by physicians from the fee-for-service pool or pools will take place. The manner in which such conversions out of the fee-for-service pool or pools shall be calculated shall be agreed between the parties prior to such conversion. The MOHLTC acknowledges that it will incur additional costs to implement these alternative payment modalities.

6 PRIMARY CARE

6.1 The OMA and the MOHLTC have jointly established seven pilot sites across the Province to investigate the feasibility and effectiveness of the primary care reform models in place at each of these sites. The OMA and the MOHLTC are committed to continuing these efforts. The parties therefore agree to continue with primary eare reform based on the following principles:

1. There will be freedom of choice for both physicians and patients as to whether they wish to participate in primary care reform, and

2. Evaluation of primary care reform shall continue in order to inform the parties of the preferred direction with respect to further implementation.

6.2 The issue of physician and patient accountability shall be determined after an evaluation of the PCR pilot sites.

6.3 The MOHLTC will contribute funding for the acquisition of Primary Care Reform ("PCR") information systems.

6.4 Pending an evaluation to the contrary, no limit shall be set on roster sizes in future Primary Care Network ("PCN") contracts, provided that the physician to whom the patient is rostered personally and directly provides the majority of primary care medical services to the patient.

6.5 Physicians choosing to participate in new PCNs shall be eligible to do so subject to the conditions established in the template agreements governing such sites and subject to the availability of sufficient funds in any given fiscal year of this Agreement. The template agreements to cover physicians participating in primary care reform are separate and apart from this Agreement. However, the parties acknowledge that conversion of the actual value of services provided by physicians to rostered patients from the fee-for-service pool or pools will take place. The parties further agree that the method of calculating such conversions shall be agreed prior to any further implementation. The MOHLTC acknowledges that it will incur additional costs to implement primary care reform.

6.6 The parties agree that the final form of the agreements for physicians participating in primary care reform shall be available for consideration by physicians in advance but will

not be offered for implementation prior to April 1st, 2001.

7 PATIENT CARE ENHANCEMENTS

7.1 The parties agree to several initiatives that are designed to enhance the delivery of certain needed services to the patients of Ontario and to provide appropriate incentives to those physicians prepared to provide such services. Some of these initiatives will be provided through hospitals under the advice and supervision of the hospital Medical Advisory Committee. Other initiatives shall be provided for by changes to the Schedule of Benefits. The initiatives to be provided through changes to the Schedule of Benefits shall be effective July 1st, 2000, and the initiatives to be provided through hospitals shall be effective September1st, 2000.

7.2 The initiatives to be provided through hospitals are:

(1) GP hospital on-call coverage;
(2) Specialist hospital on-call coverage;
(3) Rurality premium; and
(4) GP anaesthesia premium,

and are more fully described in Appendix G to this Agreement.

7.3 The initiatives to be provided through changes to the Schedule of Benefits are:

(1) low volume obstetrics incentive;
(2) admission assessments;
(3) home care application;
(4) home care supervision;
(5) complex care of the elderly; and
(6) after-hour premiums.

and are more fully described in Appendix G to this Agreement.

7.4 Mental Health Sessional Payments

The parties agree to increase the current number of mental health sessional payments as more fully described in Appendix G to this Agreement.

7.5 Hospital On-Call Coverage Committee ("HOCC")

The manner by which each hospital shall be funded for on-call coverage (GP and Specialist) and the extent of such funding will be established through a joint hospital on-call coverage committee of the MOHLTC and the OMA in consultation with the Ontario Hospital Association.

7.6 It shall be the function of the HOCC to ensure that appropriate mechanisms are in place in each hospital to which such funds are flowed to ensure that the funds are used only for the purposes outlined and in the manner specified herein and to develop a template agreement dealing with the funding and service obligations for hospital on-call coverage. The HOCC shall also ensure that appropriate steps are taken at eligible hospitals to provide reasonable coverage in each specialty area for which funding is provided as a condition of such funding. It is recognized that some hospitals require a different mix and supply of priority medical programs and consideration may be given to changes in the categorization of specialties set out in Appendix "G" to this Agreement to accommodate such needs.

8 SYSTEM MANAGEMENT

8.1 The parties agree that there is an on-going need to manage the growth in the cost of the physician services system caused by factors such as an aging and increasing population, the addition of new physicians to the system, new technology and physician and patient behaviour.

8.2 The parties agree to establish a sub-committee of the PSC, the System Management Committee, to advise the PSC in connection with system management.

8.3 The MOHLTC acknowledges that resources separate and apart from any fee increases will be required to address these system management factors. The PSC may make recommendations to the MOHLTC with respect to the need for additional system management resources.

8.4 For the purpose of system management, the MOHLTC agrees that it will not introduce any clawbacks from payments during the term of this Agreement with respect to services rendered before or during the term of this Agreement, it being understood that the MOHLTC reserves its customary rights with respect to taking steps in relation to system growth.

9 TECHNICAL FEES

9.1 The parties recognize that utilization increases in technical fees are influenced by factors which are different, or of a different magnitude, from the factors which influence physician services generally, such as new technologies and the increasing demand for these technologies.

9.2 During the 1997 Agreement, the parties in conjunction with the Ontario Hospital Association established the Committee on Technical Fees ("COTF") to study technical fees and utilization and to report back to the three parties involved. Although an Interim Report has been prepared, no final recommendations have been made. The Interim Report

recommended that effective April 1st, 2001, the technical fees from the fee-for-service pool be combined with the amount spent by hospitals to provide similar in-patient services to form a combined technical fee pool to be jointly managed by the three parties.

9.3 Accordingly, the parties have agreed that no final decisions should be made at this time with respect to technical fees. However, on a temporary basis, the parties are agreed that in the interim they will segregate technical fees from professional fees, and that the COTF will investigate and make recommendations to the PSC concerning system growth and controls, fees and related matters with respect to technical fees. It is further agreed that the COTF will report back to the PSC its recommendations with respect to system growth and controls for the fiscal year 2000/2001 by July 31st, 2000.

9.4 The parties agree to segregate technical fees into a Technical Fees Pool ("T-Fees Pool") as of March 31st, 2000. The T-Fees Pool shall comprise all payments by OHIP for technical fees for diagnostic services provided in hospitals, independent health facilities and physician offices in fiscal year 1999/2000. The parties agree that for fiscal year 2000/2001, the T-Fees Pool will be augmented by an amount equal to 1.95% of the amount of the T-Fees Pool on March 31st, 2000.

9.5 The funding of the T-Fees Pool shall not be adjusted in fiscal year 2000/2001 in any other way until such time as the COTF investigates and makes recommendations to the PSC concerning system growth and controls, fees and related matters with respect to technical fees.

9.6 The recommendations of the COTF will be taken into consideration when deciding how to apply the percentage increases set out in sub-sections 3.1(b), (c) and (d) of this Agreement for technical fees in future fiscal years.

10 MALPRACTICE INSURANCE COVERAGE

10.1 Since the recent announcement by CMPA of coverage on a regional basis, and the very large increases in the cost of coverage that CMPA asserts would result, the parties agree on the urgent need to examine all available alternatives for the provision of malpractice insurance coverage to the physicians of Ontario.

10.2 The MOHLTC and the OMA agree to establish a Physician Malpractice Insurance Expert Committee to urgently evaluate all available options for the supply of malpractice insurance coverage to Ontario physicians, the anticipated cost of providing such coverage and how risk management and case management practices could be provided in conjunction with such coverage. The terms of reference of this committee stipulate that the coverage to be provided must be essentially equivalent to the malpractice insurance coverage currently provided by CMPA.

10.3 The parties agree that this expert committee will report to the parties no later than June

15th, 2000 with their recommendations. The parties agree to review these recommendations and to agree on the manner by which this coverage is to be provided and funded by July 15th, 2000. If the parties are unable to agree, they shall enter into negotiations to deal exclusively with this issue. The terms of reference of this committee are set out in Appendix "C" to this Agreement.

10.4 The Committee shall be cognizant of the potential negative impact of any increased financial burden upon the Government of Ontario and physicians of Ontario.

11 PHYSICIAN HUMAN RESOURCES

11.1 The parties agree to continue the Physician Human Resources Committee to report to and advise the PSC with respect to the following mandate:

(i) to report to the PSC on the recommendations of the Expert Panel on Health Human Resources ("Expert Panel");
(ii) to assist in the implementation of the Expert Panel recommendations pertaining to physician human resources;
(iii) to monitor programs that have been established or are established during the operation of this Agreement to deal with problems of oversupply or undersupply; and
(iv) to review the need for physician recruitment and retention in underserviced areas and to make recommendations to the PSC. The initial sites to be considered include the northern urban referral sites.

11.2 Elimination of New Entrant Discounts

Notwithstanding the provisions of the 1997 Agreement, the differentiated fees in effect in designated oversupplied areas shall cease to apply as of January 1, 2000.

12 NORTHERN AND RURAL RECRUITMENT AND RETENTION

12.1 The OMA and the MOHLTC agree to review the urgent need for physician recruitment and retention in underserviced areas. This task shall be given priority by the PSC and it shall make recommendations to the parties by November 30, 2000. The initial sites to be considered include the northern urban referral sites.

13 SCHEDULE OF BENEFITS

13.1 The parties agree that by December 31, 2000 they shall identify changes in the existing Schedule of Benefits which will result in annual savings of at least $50 million. This will be accomplished by a mix of tightening and modernization. The process for identifying and making the changes will be agreed upon by the parties.

14 GENERAL MATTERS

14.1 Thresholds

The parties agree that for fiscal year 2000/2001, the physician thresholds shall be:

GPs	$330,000	$355,000	$370,000
Specialists	$410,000	$435,000	$460,000
Reduction percentage applied to actual payments	33.3%	66.7%	75%

The parties agree that the in-hospital after-hours services listed in Appendix "D" shall not be included in income for the purpose of calculating thresholds.

The PSC will make recommendations to the parties regarding changes to thresholds in years 2, 3 and 4 of this Agreement.

14.2 Service Retention Initiative

The parties agree to establish a Service Retention Initiative to replace the existing SRI program and shall ask the Physician Human Resources Committee to investigate and make recommendations to the PSC with respect to this initiative and its implementation and monitoring.

14.3 Maternity Benefits

The parties agree to establish a Maternity Leave Benefits Program which will pay 50% of the fee-for-service billings or APP remuneration up to a maximum of $880 per week for 17 consecutive weeks to commence no later than two months following the date of birth of the child or date of the hospital discharge of the child. The details of this program, including its administration, will be developed by PSC for recommendation to the parties.

15 ALTERNATE PAYMENT PLANS/INTEGRATED HEALTH CARE SYSTEMS

15.1 The MOHLTC agrees that the OMA will be notified of all expressions of interest made to or by the Ministry to establish an Alternate Payment Plan "APP"), a health services organization, an integrated delivery system or integrated health care system or any other non-fee-for-service delivery model.

15.2 The MOHLTC further agrees that the OMA will be notified of any intention to commence

negotiations or re-negotiations with respect to any of the foregoing non-fee-for-service arrangements.

15.3 The OMA will be recognized as the representative of those physicians participating in a non-fee-for-service arrangement that request the OMA to represent them for the purpose of the negotiation or re-negotiation of the terms and conditions of their contractual relationship.

15.4 The MOHLTC agrees that the OMA shall be a participant in its own right in all AHSC APP negotiations.

15.5 The MOHLTC agrees that the OMA shall be the representative of all physicians converted to Primary Care Reform for the purposes of negotiating the template agreements that apply to all primary care sites.

15.6 The MOHLTC agrees that all agreements that it enters into, amends or renews, with any third party that provides for, or funds, in whole or in part, the compensation of physicians, shall contain a provision requiring all such physicians, whether a member of the OMA or not, to pay the OMA dues and assessments that the OMA would charge each such physician, if he or she were a member of the OMA and requiring the third party to deduct such amounts from the compensation owed to each physician and remit such amounts to the OMA. The MOHLTC further agrees that it shall require that the OMA be made a party to all such agreements with third parties with respect to the provisions regarding enforcement of OMA dues and assessments.

16 RESOURCE BASED RELATIVE VALUE SCHEDULE COMMISSION

16.1 The parties agree to continue the Resource Based Relative Value Schedule Commission "RBRVSC"). The mandate and terms of reference of the RBRVSC are as set out in Appendix "E" to this Agreement. The role of the RBRVSC is to determine the relative value of services provided by physicians on a revenue neutral basis. The parties agree that the process shall proceed as expeditiously as possible and that a full indivisible RBRV Schedule is to be produced as soon as possible.

16.2 The parties may agree that the implementation of the RBRVS be taken into consideration in deciding how to apply the percentage increases set out in Article 3 of this Agreement.

17 INCENTIVE FUNDING FOR RURAL STUDENT CLERKSHIP ROTATION

17.1 The MOHLTC will provide funding to encourage students to perform clinical rotations in a northern or rural area during their clerkship. This program will supplement any existing funding to a total maximum of $1,500 per month per student for transportation and accommodation. The funding is for a minimum of 4 weeks and a maximum of 12 weeks.

The details of this program shall be established by the parties.

18 GUIDELINE ADVISORY COMMITTEE

18.1 The parties agree to continue the Guideline Advisory Committee "GAC") to advise the PSC with respect to practice, prescribing and referral guidelines for physicians. The mandate and terms of reference for the GAC are as set out in Appendix "F" attached to this Agreement.

19 MEDICAL REVIEW COMMITTEE

19.1 The parties previously agreed to changes made to the regulations regarding the Medical Review Committee "MRC") under the *Health Insurance Act* and established a pre-screening process to review complaints prior to the referral to the MRC.

19.2 The parties agree to examine the manner in which physicians' billings are reviewed by the MOHLTC and by the MRC and to consider whether an alternative approach would be more appropriate.

19.3 Accordingly the parties agree to establish a joint committee with equal representation from the OMA and the MOHLTC to review the MRC process and make recommendations to the parties.

19.4 The committee will be instructed to prepare its report and recommendations for delivery to the parties during the first year of this Agreement.

20 ONTARIO GOVERNMENT FORMS

20.1 The OMA and the MOHLTC agree to establish a committee to review the present list of government forms and any new proposals for forms and consider the need and payment for completion of such forms.

21 TERM AND RENEWAL

21.1 This Agreement will terminate at the end of March 31, 2004. Negotiations to establish the next Physician Services Agreement will begin no later than January 10, 2004. The MOHLTC recognizes the OMA as the representative of the medical profession for the purpose of these negotiations.

The undersigned representatives of the parties hereby agree to unanimously recommend acceptance of this Agreement to their respective principals.

DATED AT TORONTO, ONTARIO THIS 26 DAY OF APRIL, 2000.

FOR THE OMA

FOR THE MOHLTC

APPENDIX "A"

PHYSICIAN SERVICES COMMITTEE

1. The PSC will consist of five members appointed by the OMA and five members appointed by the MOHLTC, all of whom will be expected to remain on the Committee for a minimum of two years and adopt roles of leadership in the performance of the PSC mandate.

2. The PSC will be chaired by a professional facilitator chosen by the parties.

3. The PSC will continue training in conflict resolution and relationship-building as the parties may deem appropriate.

4. The agenda of the PSC will be as determined by the facilitator in consultation with the co-chairpersons appointed by each party.

5. Each party will fund its own members and the MOHLTC will fund the administration costs of the Committee and the cost of the facilitator.

6. The PSC will meet at least twice per month.

7. The mandate for the PSC is as follows:

   (i) to build and sustain a strong positive working relationship between the Government of Ontario and the medical profession;

   (ii) to receive and consider reports and recommendations as set out in this Agreement;

   (iii) to advise the MOHLTC and the OMA in connection with the changing role of physicians within the health care system, including possible improved models of delivery of and compensation for services;

   (iv) to develop recommendations, either on its own initiative or as a result of reports and recommendations received from committees reporting to it, to MOHLTC leading to the enhancement of the quality and effectiveness of medical care in Ontario;

   (v) to work together toward identifying efficiencies and maximizing return on the funding provided for medical services;

   (vi) to review utilization on a monthly basis and recommend to the MOHLTC and the OMA appropriate and effective steps to be taken to deal with utilization changes;

(vii) to develop and recommend patient education programs;

(viii) to review any disagreement arising out of this Agreement referred to it by either party and make recommendations to the parties regarding the resolution of the disagreement. However, the parties need not make such a referral as a pre-condition to commencing any other dispute resolution mechanism;

(ix) to study the report of the Physician Malpractice Insurance Expert Committee and to make recommendations to the parties as to how malpractice insurance for Ontario physicians should be provided effective January 1st, 2001; and

(x) to monitor the impact of hospital restructuring on utilization and the cost of physician services.

8. The PSC is committed to giving appropriate opportunity to affected parties to provide timely input to the PSC before making recommendations to the MOHLTC and the OMA.

APPENDIX "B"

AFTER HOUR PREMIUM CODES

Special Visit to Hospital In-Patient

C994—Evenings, Saturdays, Sundays, Holidays—first patient seen..... $43.70

--for each additional patient requiring a special visit and seen during the

C995--same special visit, add 50% to consultation or visit—minimum premium..... $20.63

C996—Nights—first patient seen..... $65.58

--for each additional patient requiring a special visit and seen during the

C997--same special visit, add 75% to consultation or visit—minimum premium..... $31.20

Special Visit to Office or Other Similar Facility: use the appropriate listing above but substitute the prefix "A" for "C".

Special Visit to Patient's Home or a Multiple Resident Dwelling: Use the appropriate listing above but substitute the prefix "B" for "C". Applies only to B994 and B996.

Special Visit to Emergency Department or Out-Patient Department: Use the appropriate listing above but substitute the prefix "K" for "C".

Special Visit to Long-Term Care Institution: Use the appropriate listing above but substitute the prefix "W" for "C". Applies only to W994 and W996.

C998B—Special Visit to Assist at Non-Elective Surgery—evenings, weekends, holidays...$43.70

C999B—Special Visit to Assist at Non-Elective Surgery—nights.....$65.58

E400B—surgical assist--evenings, weekends, holidays.....By 40%

E401B—surgical assist—nights.....By 62.5%

C998C—Special Visit, anaesthesia, Non-Elective—evenings, weekends, holidays.....$43.70

C999C—Special Visit, anaesthesia, at Non-Elective—nights.....$69.62

E400C—anaesthesia--evenings, weekends, holidays.....By 40%

E401C—anaesthesia—nights.....By 62.5%

E409—non-elective surgical procedure premium—evenings, weekends, holidays.....40%

E410—non-elective surgical procedure premium—nights.....62.5%

NOTES:
1. C99x codes will be limited to a maximum of 3 per physician per day.
2. Evenings are defined as 18:00h to 24:00h.

APPENDIX "C"

PHYSICIAN MALPRACTICE INSURANCE EXPERT COMMITTEE

1. The Physician Malpractice Insurance Committee will consist of ten members appointed by the parties, and an expert chair acceptable to both parties.

2. The MOHTLC will fund the costs of the committee.

3. The mandate for the Physician Malpractice Insurance Expert Committee shall be:

   (i) to investigate on an urgent basis the options by which physician malpractice insurance coverage essentially equivalent to the physician malpractice insurance coverage currently provided by CMPA could be made available to Ontario physicians;

   (ii) to examine the cost of providing such insurance coverage;

   (iii) to determine how risk management and case management practices could be provided in conjunction with such coverage;

   (iv) to report its findings and recommendations to the parties by no later than June 15th, 2000; and

   (v) to perform other related functions as may be requested by the PSC.

APPENDIX "D"

IN-HOSPITAL AFTER-HOURS SERVICES EXEMPTED FROM THRESHOLDS

Special Visit to Hospital In-Patient: C994, C995, C996, C997 and associated services

Special Visit to Emergency Department or Out-Patient Department: K994, K995, K996, K997 and associated services

C998B and C999B: Special Visits to Assist at Non-Elective Surgery and associated services

E400B and E401B: surgical assist premiums and associated services

C998C and C999C: Special Visits, anaesthesia, at Non-Elective Surgery and associated services

C109 and C110: Special Visits, Non-Elective Diagnostic and Therapeutic Procedures and associated services,

E400C and E401C: anaesthesia premium and associated services

E402 and E403: Special Visits, epidurals and associated services,

E409 and E410: non-elective surgical procedure premium and associated services

Emergency Department—Physician on Duty: H151 to H154, H121 to H124, H112, H113 and associated services

APPENDIX "E"

RESOURCE BASED RELATIVE VALUE SCHEDULE COMMISSION MANDATE AND TERMS OF REFERENCE

Mandate:

1. To produce a complete and indivisible Resource Based Relative Value Schedule for recommendation to both the OMA and the MOHLTC.

2. To receive submissions from the MOHLTC, the OMA and other appropriate parties as determined by the Commission, prior to producing such schedule.

Terms of Reference:

1. The Commission will consist of two appointees from each of the OMA and the MOHLTC and a neutral chair to be agreed upon by both parties.

2. The MOHLTC will pay for the Chair of the Commission and such expenses of the Commission as agreed upon between the OMA and the MOHLTC.

3. All payments to and expenses incurred by the appointees of the MOHLTC and the OMA will be the responsibility of the MOHLTC and the OMA respectively. Similarly, all expenses incurred by the MOHLTC, the OMA or any other appropriate party in relation to making submissions to the Commission will be borne by the party making the submissions.

4 The Commission will produce the complete and indivisible schedule as soon as possible.

5 The Commission will continue to provide an adequate opportunity to all appropriate parties to make submissions at all remaining stages of its mandate.

6 The Commission will continue to establish its own procedure and rules.

7 The MOHLTC and the OMA agree to assist the Commission by providing to it available information on RBRVS. All information supplied by either party will be made available by the Commission to the other party on the explicit understanding that such information will be used only for the purposes of making submissions to the Commission.

8 The Commission will report its findings and recommendations, together with a complete and indivisible RBRV Schedule, to the OMA and the MOHLTC simultaneously. If the Schedule so produced is implemented by the MOHLTC, it will be implemented in its entirety.

APPENDIX "F"

GUIDELINE ADVISORY COMMITTEE

1. The Guideline Advisory Committee ("GAC") will consist of three members appointed by the OMA, three persons appointed by the MOHLTC and a chair to be selected by the parties.

2. The GAC will be aided in its work by the appointment of a person from the Institute for Clinical Evaluative Sciences.

3. Each party will fund its own members and the MOHLTC will fund the administration costs of the Committee.

4. The mandate for the GAC is:

   (i) to develop and recommend to the PSC appropriate strategies for the implementation and monitoring of practice and referral guidelines;

   (ii) to make recommendations for assisting in the implementation of prescribing guidelines; and

   (iii) to consult widely with the profession in the development of its recommendations.

5. All information concerning physician practices and procedures obtained by the GAC shall be maintained confidentially by it and used only for the purpose of developing appropriate guidelines.

APPENDIX "G"

PATIENT CARE ENHANCEMENTS

A. HOSPITAL INITIATIVES

(1) General Practice Hospital On-Call Coverage

For the purpose of General Practice hospital on-call coverage, eligible hospitals are all hospitals where the services contained in this Section (1) are provided except federally funded hospitals and those within an AHSC that has an alternate funding plan covering these services.

General and family practitioners shall be reimbursed for being available to provide after-hours hospital services such as surgical assisting, emergency department back-up coverage and in-patient care.

The following will be used to determine the amount payable for full coverage per eligible hospital per 12 month period.

(a) All Hospitals Except Level A, B, 1, 2 or 3 Hospitals (as set out in the Alternative Funding Agreement for Emergency Services)

# of Participating Physicians	Payment per Hospital
5 or more	$75,000
4	$68,000
3	$60,000
2	$60,000
1	$45,000

(b) Level A, B, 1, 2 or 3 Hospitals (as set out in the Alternative Funding Agreement for Emergency Services)

# of Participating Physicians	Payment per Hospital
5 or more	$40,000
4	$36,000
3	$33,000
2	$30,000
1	$25,000

(2) Specialist Hospital On-call Coverage

For the purpose of specialist hospital on-call coverage, eligible hospitals are all hospitals where the services contained in this Section (2) are provided except federally funded hospitals and those within an AHSC that has an alternate funding plan covering these services.

This initiative is being undertaken to address on-call specialist coverage in Ontario. Coverage less than full coverage shall be prorated on approval by HOCC.

(a) Level II Specialists

The parties agree that funding will be provided for specialists being available to provide on call hospital services in the specialties of Anaesthesia, General Surgery, Orthopaedic surgery, Psychiatry, Internal Medicine, Obstetrics and Gynaecology, and Paediatrics.

The following will be used to determine the amount payable to eligible hospitals for full coverage per specialty per 12-month period.

# of Participating Physicians	Payment per Hospital
5 or more	$75,000
4	$68,000
3	$60,000
2	$60,000
1	$45,000

(b) Level III Specialists

Funding will also be provided to specialists being available to provide on-call hospital services in the specialties of Cardiothoracic Surgery, Neurosurgery, Cardiology, Emergency Medicine, Gastroenterology, Haematology/Oncology, Neurology, Ophthalmology, Otolaryngology, Plastic Surgery, Respiratory Medicine, Diagnostic Radiology, and Urology.

The following will be used to determine the amount payable to cligible hospitals per specialty per 12-month period.

# Participating Physicians	Payment per Hospital
5 or more	$15,000
4	$14,000
3	$13,500
2	$12,000
1	$8,000

(c) Level IV Specialists

Funding will also be provided to eligible hospitals for specialists being available to provide on-call hospital services in the specialties of Immunology, Dermatology, Physical Medicine and Rehabilitation, Rheumatology, Nuclear Medicine and Radiation Oncology.

Where one of the above specialists, in an eligible hospital, performs a special visit in the evening, night, on weekends or holidays, the hospital shall receive, a call-in fee of $100 in addition to any other fee-for-service amounts which may be billed. The physician will be limited to 2 call-in fees per calendar day.

(3) Rurality Premiums

Each hospitals set out in Appendix "H" to this Agreement shall receive a $15,000 per annum financial incentive for GP on-call funding. This incentive is in addition to the on-call funding as set out in this Appendix.

(4) GP Anaesthesia Premium

This premium is intended to assist in retaining GP anaesthetists within rural communities.

Each eligible hospital as determined by the HOCC that does not have a Royal College certified anaesthetist associated with it and where general practitioners provide a minimum of $10,000 of anaesthetist services per year will receive an additional $15,000 per annum. This incentive is in addition to the on-call funding as set out in this Appendix.

B AMENDMENTS TO THE SCHEDULE OF BENEFITS

(1) Low Volume Obstetrics Incentive

It is important to maintain family physician involvement in obstetrical services.

Where a physician has only one delivery in a calendar day, there shall be a 50% premium applied to such delivery, to a maximum of 25 deliveries in any fiscal year per physician. This premium will apply only to the following codes as set out in the Schedule of Benefits: P006, P009, P018, P020 and P038.

(2) Admission Assessments

General Practitioners who are on-call and admit a non-elective patient through an emergency room or as a transfer from another institution will receive an admission assessment fee of $75.00. This fee compensates the physician for performing a complete history and physical examination. It cannot be billed within 30 days of any other admission assessment for that patient and is available only to the most responsible physician dealing with that patient in the hospital.

(3) **Home Care Application: $16.50**

This fee will be payable to the most responsible physician for personal completion and submission of a home care service request form to the Community Care Access Centre ("CCAC") on behalf of a patient for whom the physician provides on-going primary care. The service may be claimed in addition to an appropriate assessment.

(4) **Home Care Supervision: $10.40**

This fee will be payable to the most responsible physician for providing advice, direction or information in response to an inquiry from staff of a CCAC or CCAC contractor on behalf of a patient for whom the physician provides on-going primary care. The physician must record the date, question, response and identity of the CCAC staff in the patient's medical record.

(5) **Complex Care of the Elderly: $10.30**

A 20% premium will be added to the general assessment code (A003) for services provided to patients who are 75 years of age or older. This general assessment premium can be charged only once per patient per year.

(6) **Mental Health Sessional Payments**

Effective April 1, 2000 the number of psychiatry sessions for patients will increase by 13,500 per year.

(7) **After Hour Premiums**

To compensate physicians who perform after hours work, there will be an increase in the following after hour premium codes and special visit premium codes:

(a) Evening and night in-patient services;
(b) Special visits to the office;
(c) Special visits to the emergency room or out-patients department;
(d) Special visits to long term care institutions;
(e) Special visits to patient's home;
(f) Anaesthetics or surgical assists; and
(g) After hour obstetrical and non-elective surgical procedures,

which are more specifically descibed in Appendix B. Notwithstanding sub-section 3.1a), these premium codes shall be the amounts listed in Appendix B. Thereafter, the System Management Committee will consider the feasibility of making further revisions to the premium codes listed in Appendix B and make recommendations in that regard to the PSC.

APPENDIX "H"

HOSPITALS ELIGIBLE FOR THE RURALITY PREMIUM

Bruce Peninsula Health Service – Lions Head
Bruce Peninsula Health Service – Wiarton
Campbellford Memorial Hospital
Centre Grey General Hospital, Markdale
Chapleau General Hospital
Deep River and District Hospital
District Health Centre, Sioux Lookout
Dryden District General Hospital
Durham Memorial Hospital
Espanola General Hospital

Four Counties General Hospital, Newbury
Glengarry Memorial Hospital, Alexandria
Haliburton Highlands Health Services - Haliburton
Haliburton Highlands Health Services – Minden
Kirkland and District Hospital
Mattawa General Hospital
Meaford General Hospital
MICS Group of Hospitals – Cochrane
MICS Group of Hospitals – Iroquois Falls
MICS Group of Hospitals – Matheson

Notre Dame Hospital, Hearst
Palmerston and District Hospital
Quinte Healthcare Corporation – Bancroft
Riverside Health Care Facilities – Fort Frances
Saugeen Memorial Hospital, Southampton
Sensenbrenner Hospital, Kapuskasing
Smooth Rock Falls Hospital
South Grey Bruce Health Centre - Chesley
South Grey Bruce Health Centre - KIncardine
South Grey Bruce Health Centre – Walkerton

South Huron Hospital – Exeter
St. Francis Memorial Hospital, Barry's Bay
St. Joseph's General Hospital, Blind River
St. Joseph's General Hospital, Elliot Lake
Temiskaming Hospitals, New Liskeard
West Nipissing General Hospital, Sturgeon Falls
West Parry Sound Health Centre
Wingham and District Hospital

LETTER OF UNDERSTANDING

April 26, 2000

Dear Dr. Wexler:

Re: Data from the Minister of Health and Long-Term Care

This will confirm our understanding with respect to the provision of data required by the OMA or the PSC and its reporting committees.

1. Negotiations

The OMA will continue to provide the MOHLTC with a list of all data it seeks for negotiation or other agreed to purposes. In return, the MOHLTC will provide the OMA with all requested data that it believes it can legally so provide. In the event there is disagreement over whether specific data so requested can be made available, the issue will be referred to the Privacy Commissioner for determination. All information obtained by the OMA shall be maintained confidentially by it and used solely for the purpose of negotiations or other approved purposes.

2. PSC and Constituent Committees

The PSC will continue to provide the MOHLTC with a list of all data it seeks for the purposes required by it or its constituent committees. In return, the MOHLTC will provide the PSC with all requested data that it believes it can legally so provide. In the event there is disagreement over whether specific data so requested can be made available, the issue will be referred to the Privacy Commissioner for determination. All information obtained by the OMA shall be maintained confidentially by it, the PSC and its constituent committees and used solely for the purposes of the PSC and its constituent committees.

3. OMA Monitoring Information

The MOHLTC agrees that the OMA requires certain data in order to meet its obligations to its members and pursuant to the Agreement. The OMA will provide the MOHLTC with a list of all data it seeks for monitoring purposes. In return, the MOHLTC will provide the OMA with all types of data reasonably available and that it believes it can legally provide. In the event there is disagreement over whether specific data so requested can be made available, the issue will be referred to the Privacy Commissioner for determination.

Yours truly,

Elizabeth Witmer
Minister of Health and Long-Term Care

LETTER OF UNDERSTANDING

April 26, 2000

Dear Dr. Wexler:

Re: Meetings with the Minister of Health and Long-Term Care

This will confirm our understanding with respect to regular meetings between the Ontario Medical Association and the Minister of Health and Long-Term Care.

As part of our intent to strengthen the relationship among the medical profession, the Ontario Medical Association and the Minister of Health and Long-Term Care, the Minister of Health and Long-Term Care will meet with the President of the OMA and the CEO of the OMA at least once every two months for the purpose of discussing matters of mutual concern and interest.

It is acknowledged that these meetings are not intended to be in place of the meetings of the Physician Services Committee.

Yours very truly,

Elizabeth Witmer
Minister of Health and Long-Term Care

ONTARIO MEDICAL ASSOCIATION
CORPORATE INFORMATION

TAB 40

News *Release*

Ontario Medical Association
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Inwats 1-800-268-7215

74% of Ontario Doctors Support New Contract with Government

OMA President thanks doctors for making patients their priority throughout 15-month negotiations process.

Toronto, March 30, 2005 – Today, the Ontario Medical Association's (OMA) elected governing Council voted to ratify a new contract for Ontario's 24,000 doctors. The new agreement between the OMA and the government of Ontario makes new investments to improve patient care and builds a framework for future cooperation between government and doctors in addressing critical issues facing Ontario's health care system more effectively and efficiently.

"Thanks to the patience and hard work of doctors and the support of our patients, Ontario's doctors have reached and now ratified a new 4 year contract with government," said Dr. John Rapin, President of the OMA. "This agreement takes important first steps to improving the most pressing concerns of our patients; growing wait times and the critical doctor shortage."

The ratification comes after nearly 15 months of negotiations and follows a rejection by almost 60% of Ontario doctors of a first offer from government. Following a unanimous endorsement of the OMA's Board of Directors, 74% of doctors supported the agreement in a telephone referendum between March 22 and March 28. Today the OMA's governing Council voted to ratify the tentative agreement.

The new agreement retains all of the fee increases and program investments achieved in the first offer and includes an additional investment of $120 million. The new contract also meets several priorities and concerns outlined by doctors including:

- Across the board retroactive increase to April 1, 2004:
  - General and Family Practitioners 2.5%
  - Specialists 2.0%
- Immediately eliminates billing thresholds, which will help shorten wait times for tests and treatment.
- Enhanced incorporation benefits - bringing doctors in line with most other provinces.
- Wait List Strategy - Government has agreed to work closely with the OMA to ensure physicians' concerns are addressed.

The agreement also develops a new partnership by establishing several new committees between doctors and the Ministry of Health and Long-Term Care aimed at identifying and addressing health care issues as early as possible. Rapin stressed to government the importance of moving forward in collaboration with stakeholders in health care reform in Ontario.

"A solid partnership with the government is the only way to successfully move forward to strengthen Ontario's health care system," said Rapin. "Our patients deserve to know that their care remains our number one priority."

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For more information please contact OMA Media Relations at (416) 340-2862 or toll free at 1-800-268-7215.

TAB 41

Archived Release

McGuinty government and Ontario's doctors achieve groundbreaking deal

March 30, 2005 12:00 A.M.

Ministry of Health and Long-Term Care

Doctors Give New Four-Year Agreement Ringing Endorsement TORONTO, March 30 - The agreement between the McGuinty government and the Ontario Medical Association (OMA) that was strongly endorsed by Ontario doctors today will bring more physicians to Ontario and help doctors reduce wait times and keep patients healthy, Health and Long-Term Care Minister George Smitherman announced today. "We have achieved a groundbreaking agreement with Ontario doctors that will improve health services for patients beginning immediately and for years to come," Smitherman said. "Doctors across Ontario will be able to keep their doors open longer for their patients. More Ontario patients will have a doctor of their own close to home." The four-year agreement, which was ratified by 74 per cent of OMA members on March 30, 2005, will: - Relieve the doctor shortage by bringing more doctors to underserviced communities - Support doctors who spend more time treating seniors, including helping them manage chronic conditions like diabetes - Further reduce wait times - Encourage physicians to provide preventive care like helping people quit smoking, screening for cancer and flu shots - Support doctors who work as a team with nurses and other providers to deliver comprehensive care to patients. "This agreement makes Ontario a very attractive place to practise medicine," said Smitherman. "Now we're ready to move full steam ahead together with Ontario doctors on our health priorities - shorter wait times, more doctors in communities and healthier Ontarians." This news release, along with other media materials, such as matte stories and audio clips, on other subjects, are available on our website at: http://www.health.gov.on.ca under the News Media section. Backgrounder ---------- RATIFIED OMA AGREEMENT WILL IMPROVE HEALTH SERVICES IN ONTARIO The ratified agreement between the McGuinty government and the Ontario Medical Association (OMA) will improve health services and give Ontarians better access to the health care they need. The agreement provides significant incentives and Initiatives to make Ontario an attractive place to practise medicine. Improving Access to

Family Physicians - Providing an across-the-board increase of 2.5 per cent for general practitioners/family physicians, retroactive to April 1, 2004 - Offering new incentives to support physicians to work in a group practice with other health care professionals to deliver comprehensive care - Supporting the provision of comprehensive care to patients after hours and on weekends - Introducing a financial incentive for new medical graduates to encourage them to join a group health practice Improving Access to Specialists - Providing an across-the-board increase of two per cent for specialists, retroactive to April 1, 2004 - Eliminating immediately billing thresholds for specialists to help reduce wait times - Increasing fees for specialists providing in-hospital care, long-term and community care - Introducing incentives to improve access to anesthesia services in Ontario's hospitals Expanding Access To Care in Rural Communities - Offering premiums to encourage physicians to practise in rural and remote communities - Introducing new funding to support hospital-based specialists in the North Enhancing Care for Seniors - Supporting doctors to spend more time treating seniors including helping them manage chronic conditions like diabetes and heart disease - Introducing new on-call fees in long-term care homes, home care and palliative care - Offering incentives for physicians to provide enhanced palliative care services for seniors Reducing Wait Times and Supporting Hospital Care - Eliminating the billing threshold for specialists to help reduce wait times - Expanding hospital on-call coverage and in-hospital care fees for specialists - Introducing new fees for family doctors caring for their own patients in emergency departments - Providing bonuses to physicians for seeing their post-hospital patients will support continuity of patient care - Introducing new funds for education and training of emergency department physicians Supporting Health Promotion and Disease Prevention - Offering bonuses for family physicians with enrolled patients to provide preventive care services - including colorectal screening, mammograms, smoking cessation, pap tests, immunizations and flu shots - Introducing special fees for doctors who manage specific chronic diseases including diabetes and congestive heart failure Improving Quality of Life for Physicians - Providing monthly support to undergraduate medical students in Ontario schools for their final year - Offering continuing medical education and locum relief - Expanding pregnancy and parental leave benefits - Introducing a new program to help physicians receive health-related benefits such as critical illness insuranceFor further

information: Members of the media: Eva Lannon, Minister's Office, (416) 327-4320; Dan Strasbourg, Ministry of Health and Long-Term Care, (416) 314-6197; Members of the general public: (416) 327-4327, or (800) 268-1154

TAB 42

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79% of Ontario's Doctors Vote in support of New Agreement with Province

Patients will be the beneficiaries of improved care and refocus on collaborative care models.

Toronto, Oct 18, 2008 – The elected governing Council of the Ontario Medical Association (OMA) voted today to ratify a new contract with the provincial government. The vote took place this morning after a referendum with Ontario's doctors across Ontario who voted 79% in support of the agreement.

"I'm pleased that doctors have strongly endorsed this new contract." said Dr. Ken Arnold, President of the OMA. "Over the last 4 years doctors have been working harder to reduce wait times and improve access to care. This new agreement will build on that progress and help to further improve care for patients."

The new contract runs from April 1, 2008 until March 31, 2012. After the OMA's Board of Directors unanimously endorsed the agreement in early September, information sessions were held across the province to prepare physicians for a week long online and telephone referendum. The vote resulted in 79% of those who voted voicing support for the agreement, leading to its ratification by the OMA's governing council this morning in Toronto.

Key components of the agreement include:

- Fee increases of 12.25% over four years
- $340 million in new program funding and incentives
- A refocus on collaborative care by providing funds to hire 500 licensed nurses to work with physicians in their offices.
- Initiatives to work to find a family doctor for 500,000 additional patients
- Deferral of payments on the principal of eligible debts for medical students

Dr. Arnold spoke to recent improvements to access to health care in Ontario. In particular he referenced the 630,000 patients who have found a family doctor since 2003, who didn't previously have one. He also acknowledged that there remains work to be done. In particular, he spoke to his commitment to work with government to expedite efforts to bring e-health to all physician offices to improve efficiencies and best practices.

"Ontario's physicians have recognized that this new contract presents an excellent opportunity to strengthen health care in Ontario," said Dr. Arnold. "Our goal is to provide quality care for all of our patients."

- 30 –

For more information please contact OMA Media Relations at (416) 340-2862 or toll-free at 1-800-268-7215 ext. 2862.

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Inwats 1-800-268-7215

Backgrounder

Key details of the agreement include:

- The agreement runs from April 1, 2008 to March 31, 2012. It is valued at approximately $1 billion and includes an increase of 12.25% on fees and alternate payment plans and programs over four years.

- The increases in each year are as follows:

2008/09	3%
2009/10	2%
2010/11	3%
2011/12	4.25%

- The agreement also includes $240 million in new program funding and $100 million in incentive funds.

- Up to 500 licensed nurses will be hired to work with physicians in three key priority areas: Aging at Home strategy, End of Life care, and Mental Health and Addictions.

- A new Diabetes Registry will be established to help patients and physicians better manage their conditions.

- A target to find a family doctor for 500,000 patients, especially those of higher risk, who are currently without one.

- The Northern Physician Retention Initiative will continue for the duration of the Agreement.

- A new program will allow medical students to defer payments on the principal of the eligible debts during training and the Ministry will pay the full interest on the eligible debt through the end of the residency training program.


OMA

TAB 43

Archived Release

New Agreement With Doctors Improves Access To Care

October 18, 2008 12:00 A.M.

Ministry of Health and Long-Term Care

<<

McGuinty Government And Doctors Will Work To Get A Family Doctor For
500,000 Ontarians

>>

TORONTO, Oct. 18 /CNW/ -

<<

NEWS

The McGuinty government has reached a new agreement with the Ontario Medical Association that includes a shared commitment to help 500,000 Ontarians without a family physician find one.

The commitment is the driving force behind a new program called Health Care Connect that will connect patients with family health care providers who are taking on new patients. Health care professionals in each of the 14 Local Health Integration Networks will connect people with appropriate health care providers in their community. The program will be launched in February, 2009.

Other key components of the agreement ratified by Ontario Medical Association members on October 18 include:

- Reducing congestion in hospital emergency rooms
- Providing funding for 500 nurses to join group practices
- Helping patients who have chronic diseases - such as diabetes - better manage their condition and reduce their need for emergency health services
- Ensuring Ontario remains the jurisdiction of choice for future physicians with a new program that will defer interest on medical resident debt
- Improving access to community mental health services provided by physicians

QUOTES

"This new agreement reflects the common vision shared by our government and the province's doctors on how to improve

health care for all Ontarians," said Health and Long-Term Care Minister David Caplan. "We expect significant progress to be made in the next few years in family health care becoming available to more Ontarians and hospital emergency departments becoming less crowded."

QUICK FACTS

- The agreement with the OMA will cover the period April 1, 2008 to
March 31, 2012

LEARN MORE

Find out more about the government's priorities to improve Ontarians' access to health care (http://www.health.gov.on.ca/english/public/updates/archives/hu_0 _priorities_20080424.html).

Read about Family Health Teams (http://www.health.gov.on.ca/transformation/fht/fht_mn.html) in the province.

For public inquiries call ServiceOntario, INFOline at 1-866-532-3161
(Toll-free in Ontario only)

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ontario.ca/health-news
Disponible en français
>>

For further information: Steve Erwin, Minister's Office, (416) 326-3986; Andrew Morrison, Ministry of Health and Long-Term Care, (416) 314-6197

TAB 44

Ontario
Ministry of Health and Long-Term Care

Physician Services Committee

OMA

April 8, 2003

The Honorable Tony Clement
The Minister of Health and Long-Term Care
Xxth Floor, Hepburn Block,
80 Grosvenor Street
Toronto, Ontario

Dr. Elliot Halparin
President
Ontario Medical Association
525 University Avenue
Suite 300
Toronto, Ontario

Dear Sirs,

Re: Hospital Privileges and the Family Health Group Initiatives

As part of the Family Health Group Primary Care Renewal initiative, the PSC is recommending to the OMA and the MOHLTC that the OMA and the MOHLTC monitor the impact of the introduction of Family Health Groups on the provision of hospital services and take corrective action, where necessary to ensure adequate patient care.

Yours truly,

Dr. Christopher McKibbon
Co-Chair, Physician Services Committee

Dr. David McCutcheon
Co-Chair, Physician Services Committee

Physician Services Committee Secretariat
4th Floor, 525 University Avenue
Toronto, ON M5G 2K7

Tel: (416) 340-2255
Fax: (416) 340-2933
Email: Secretariat@Physician-Services-Committee.ca

MEMORANDUM OF AGREEMENT

BETWEEN:

THE ONTARIO MEDICAL ASSOCIATION
(THE "OMA")

-and-

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO
(THE "GOVERNMENT OF ONTARIO")
AS REPRESENTED BY THE MINISTER OF HEALTH
AND LONG TERM CARE
(THE "MOHLTC")

The Physician Services Committee recommends the following matters be accepted by the parties.

1. The Schedule of Benefits will be amended as set out in the attached Appendix A. These changes to the Schedule take into consideration recommendations received from the Central Tariff Committee, the importance of continuing to provide for patient care enhancements as set out in Section 7 of the Framework Agreement between the parties and the need to begin to address issues of relativity. The parties will develop by May 15, 2003, an accountability system for measuring the success of these patient care enhancements.

2. The parties are committed to the continuation and acceleration of the reform and renewal of primary care in Ontario. In support of this initiative, the parties have established Family Health Groups to advance and promote comprehensive care, as described in Appendix B. In addition, enhancements and improvements have been made to the Family Health Networks and these changes are set out in Appendix C. These initiatives and changes begin July 1, 2003.

3. The Physician Services Committee continues to address issues regarding the Medical Review Committee. In addition to establishing the ongoing OHIP Payment Review Program and the Education and Prevention Committee to provide physicians with more information about the process, it has agreed to proceed with the initiatives contained in Appendix D.

4. The parties agree that an additional Twenty Three million dollars ($23,000,000.00) in ongoing annual funding will be made available to the The Academic Health Sciences initiative contained in Section 5 of the Framework Agreement. This new funding is mainly for the purpose of addressing special AHSC patient care needs in the areas of anaesthesia, transplant medicine and surgery, neurosurgery, surgical oncology and academic family medicine.

5. Patient care enhancements as provided through Hospital On-Call Coverage in Sections 7.5 and 7.6 of the Framework Agreement shall be improved by adding Fifteen million dollars ($15,000,000.00) in funding to the program effective April 1, 2003. This funding shall be used to continue to provide these enhancements through improved hospital on-call coverage in the new areas described in Appendix E. In addition, the Hospital On-Call Coverage Committee will develop and initiate an effective program evaluation and ongoing accountability process.

6. The MOHLTC and the OMA recognize the importance and urgency of having diagnostic services planned and co-ordinated on a province-wide basis with all stakeholders working together in a Diagnostic Services Committee (DSC). In order to establish the DSC, a special DSC development committee will be created to make recommendations to the Physician Services Committee. The mandate and terms of reference for the development committee are set out in Appendix F.

7. The current seven per cent discount on the payment of facility fees to Independent Health Facilities licensed under the Independent Health Facilities Act will be removed effective August 1, 2003.

8. The current technical fee reduction now in effect for services provided in private physicians' offices will be eliminated effective April 1, 2003.

9. The OMA and The MOHLTC recognize that a practice has developed across the province, whereby hospitals provide direct payments to physicians for the performance of on-call and other clinical services in hospital organizations. A multi-stakeholder task force will be established to develop and recommend a plan for dealing with this matter. The mandate and terms of reference of the task force are set out in Appendix G.

10. The parties recognize the importance of stabilizing laboratory medicine across the province. Accordingly, they will begin discussions with other stakeholders, including the Ontario Association of Medical Laboratories, the Ontario Hospital Association, the Ontario Council of Teaching Hospitals and the Council of the Faculties of Medicine of Ontario, for the purpose of developing an appropriate funding plan for laboratory physicians.

DATED AT TORONTO THIS 8th DAY OF APRIL, 2003.

THE PHYSICIAN SERVICES COMMITTEE

Dr. Christopher D. McKibbon

Dr. David J. McCutcheon

Dr. Garnet J. M. Maley

Dr. Rueben Devlin

Dr. M. Stewart Kennedy

Mr. Hugh Macleod

Dr. Wayne R. Tanner

Dr. Lynn Wilson

Mr. Mark E. Geiger

Mr. Harvey A. Beresford

APPENDIX A: 2003/04 Fee Code Changes

FEE/NO CODE	DESCRIPTION	2002 SOB Fee	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
A007	Intermediate Assessment	$27.30			$28.50
A035	General Surgery - Office/Clinic - Consultation	$59.55			$75.00
A045	Neurosurgery - Office/Clinic - Consultation	$89.70			$100.00
A071	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A075	Geriatrics - Office/Clinic - Consultation	$112.35			$140.00
A131	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A135	Internal Medicine - Office/Clinic - Consultation - excludes cardiology consultations	$112.35			$125.00
A181	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A185	Neurology - Office/Clinic - Consultation	$112.35			$125.00
A195	Psychiatry - Office/Clinic - Consultation	$122.00			$125.00
A197	PSYCHIATRY - Office/Clinic - Consultation on behalf of disturbed child - consultative interview with parents	$107.20	$122.00		$125.00
A198	PSYCHIATRY - Office/Clinic - Consultation on behalf of disturbed child - consultative interview with child	$107.20	$122.00		$125.00
A205	Obstetrics & Gynaecology - Office/Clinic - Consultation	$57.30			$75.00
A265	Paediatrics - Office/Clinic - Consultation	$112.35			$135.00
A311	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A315	Physical Medicine & Rehabilitation - Office/Clinic - Consultation	$112.35			$125.00
A341	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A411	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A471	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A481	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A485	Rheumatology - Office/Clinic - Consultation	$112.35			$125.00
A601	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A611	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A615	Haemotology - Office/Clinic - Consultation	$112.35			$125.00
A621	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A625	Clinical Immunology - Office/Clinic - Consultation	$112.35			$125.00
A645	General Thoracic Surgery - Office/Clinic - Consultation	$59.85			$75.00
A661	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
A994	Special Visit to Office or Similar Facility - Evenings Evening (17:00h -24:00h) Mon-Fri or Daytime and Evenings on Sat, Sun and Hol	$50.05		$53.50	
A996	Special Visit to Office or Similar Facility - Nights (00:00h - 07:00h)	$75.10		$80.25	

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTION	2002 SOB Fee	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
B994	Special Visit to Patient Home or Mulitple Resident Dwelling Evenings (17:00h-24:00h) Mon-Fri or daytime and evenings on Sat, Sun, and Hol	$58.50		$62.55	
B996	Special Visit to Patient Home or Multiple Resident Dwelling Nights (00:00h - 07:00h)	$87.85		$93.90	
C002	SUB. VISITS- GP	$17.30	$23.00		
C007	SUB. VISITS- GP	$17.30	$23.00		
C008	SUB. VISITS- GP	$17.30	$23.00		
C009	SUB. VISITS- GP	$17.30	$23.00		
C035	General Surgery - Non-Emergency Hospital In-Patient - Consultation	$59.55			$75.00
C045	Neurosurgery - Non-Emergency Hospital In-Patient - Consultation	$89.70			$100.00
C065	ORTHOPAEDIC SURGERY - Non-Emergency Hospital In-Patient Services - Consultation	$56.15			$61.15
C071	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C075	Geriatrics - Non-Emergency Hospital In-Patient - Consultation	$112.35			$125.00
C095	Cardiovascular & Thoracic Surg. - Non-Emergency Hospital In-Patient - Consultation	$59.55			$75.00
C121	SUB. VISITS- SPEC	$18.25	$23.00		
C121	SUB. VISITS- GP	$17.30	$23.00		
C131	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C135	Internal Medicine - Non-Emergency Hospital In-Patient - Consultation	$112.35			$125.00
C181	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C185	Neurology - Non-Emergency Hospital In-Patient - Consultation	$112.35			$125.00
C205	Obstetrics & Gynaecology - Non-Emergency Hospital In-Patient - Consultation	$57.30			$75.00
C225	Genetics - Non-Emergency Hospital In-Patient - Consultation	$112.35			$125.00
C265	Paediatrics - Non-Emergency Hospital In-Patient - Consultation	$112.35			$135.00
C311	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C315	Physicial Medicine & Rehab. - Non-Emergency Hospital In-Patient - Consultation	$112.35			$125.00
C341	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C355	Urology - Non-Emergency Hospital In-Patient - Consultation	$55.95			$60.95
C411	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C415	GASTROENTEROLOGY - Non-Emergency Hospital In-Patient Services - Consultation	$112.35			$125.00
C471	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C481	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C485	Rheumatology - Non-Emergency Hospital In-Patient - Consultation	$112.35			$125.00
C601	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTION	2002 SOB Fee	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
C605	Cardiology - Non-Emergency Hospital In-Patient - Consultation	$112.35			$125.00
C611	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C615	Haemotology - Non-Emergency Hospital In-Patient - Consultation	$112.35			$125.00
C621	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C625	Clinical Immunology - Non-Emergency Hospital In-Patient - Consultation	$112.35			$125.00
C645	General Thoracic Surgery - Non-Emergency Hospital In-Patient - Consultation	$59.85			$75.00
C661	Complex Medical Specific Re-Assessment - revision to maximum	$52.10		$52.10	
C882	SUB. VISITS- SPEC	$18.25	$23.00		
C882	SUB. VISITS- GP	$17.30	$23.00		
C895	Psychiatry - Non-Emergency Hospital In-Patient - Consultation	$134.25			$140.00
C982	SUB. VISITS- SPEC	$18.25	$23.00		
C994	Special Visit to Hospital Inpatient- Evenings (17:00h - 24:00h) Mon-Fri or Daytime and Evening Sat, Sun and Hol	$50.05		$53.50	
C995	Special Visit to Hospital Inpatient- Additional patients requiring special visit and seen during the same special visit add 45%	$24.40		$26.75	
C996	Special Visit to Hospital Inpatient- Evenings (17:00h - 24:00h) Mon-Fri or Daytime and Evening Sat, Sun and Hol	$75.10		$80.25	
C997	Special Visit to Hospital Inpatient- Additional patients requiring special visit and seen during the same special visit add 68.75% to Consults and Visist	$36.70		$40.15	
C998B	Assistant's After Hour Premiums - Spec Visit at Non - Elective Surgery with Sacrifice of Office Hours	$50.05		$53.50	
C998C	Anesthesia After Hours Premiums- Evenings (17:00h-24:0h) Mon-Fri or Daytime and Evenings Sat, Sun and Hol	$50.05		$53.50	
C999B	Assistant's After Hour Premiums - Spec Visit at Non - Elective Surgery with Sacrifice of Office Hours Nights (00:00-07:00)	$75.10		$80.25	
C999C	Anesthesia After Hours Premiums- Nights (00:00h-07:00h)	$75.10		$80.25	
CXX2	SUB. VISITS- SPEC	$18.25	$23.00		
CXX7	SUB. VISITS- SPEC	$18.25	$23.00		
CXX8	SUB. VISITS- SPEC	$18.25	$23.00		
CXX9	SUB. VISITS- SPEC	$18.25	$23.00		
E022C	Anesthesia ASA III Premium - Patient with severe illness	$23.54		$47.08	
E057	ORTHOPAEDIC SURGERY - RECONSTRUCTION - MUSCLES/SOFT TISSUE - REVISION REPAIRS	N/A		Add 30%	
E058	ORTHOPAEDIC SURGERY - REDUCTION - DISLOCATIONS	N/A		Add 30%	

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTION	2002 SOB Fee	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
E059	ORTHOPAEDIC SURGERY - RECONSTRUCTION - LIGAMENTS	N/A		Add 30%	
E090	Removal of contralateral ovary with moderate or severe endometriosis	N/A		$255.70	
E400B	Assistant's After Hour Premiums - Evenings (17:00h-24:00h)	add 47.5%		add 50%	
E400C	Anesthesia After Hour Premiums - Evenings (17:00h-24:00h)	add 47.5%		add 50%	
E401B	Assistant's After Hour Premiums - Nights (00:00h-07:00h)	add 68.75%		add 75%	
E401C	Anesthesia After Hour Premiums - Nights (00:00h-07:00h)	add 68.75%		add 75%	
E409A	After Hours Premium - Evenings (17:00h-24:00h)	add 45%		add 50%	
E410A	After Hours Premium -Nights (00:00h-07:00h)	add 68.75%		add 75%	
E430	DIAGNOSTIC & THERAPEUTIC PROCEDURES - GYNECOLOGY - When Papanicolaou Smears performed outside hospital	N/A		$10.95	
E502	OBSTETRICS - OBSTETRICAL CARE - Labour – Delivery - Vaginal birth after cesarean section (VBAC) - add to P011, P018, P041, P042	$28.50		$28.50	
E505	Partial Mastectomy or wedge resection - with limited axillary node sampling	$134.25			$174.53
E525	Partial Mastectomy Plus radical node dissection - add	$31.35			$40.76
E542	SURGICAL PREAMBLE & INTEGUMENTARY - SKIN & SUBCUTANEOUS TISSUE; OPERATIONS ON THE BREAST - Added to surgical procedures when performed outside the hospital - Add to numerous integumentary procedures	$10.95		$10.95	
E546	Partial Mastectomy or sedge resection - with radical axillary node dissection	$238.25			$309.73
E627	Endoscopic placement of stent in rectum	N/A		$134.35	
E628	SURGICAL PROCEDURES - CARDIOVASCULAR - Each additional lead extraction add	N/A		$190.70	
E629	Endoscopic placement of stent in duodendum	N/A		$134.35	
E630	Endoscopic placement of stent in colon	N/A		$134.35	
E640	Add-on to M105 - Chest Wall reconstruction	N/A		$176.05	
E797	DIGESTIVE - OESOPHAGUS - Endoscopies (IOP) - Subsequent procedure by same physician (within three months following previous endoscopic procedure) - management of uncomplicated upper gastrointestinal bleeding, by any technique (e.g. laser, injection, diath	$45.40		$45.40	
E800	SURGICAL PROCEDURES - OPERATIONS ON THE DIGESTIVE SYSTEM - Endoscopies Ultrasound -radial or linear probe through endoscope to endoscopy	N/A		$99.50	
E801	SURGICAL PROCEDURES - OPERATIONS ON THE DIGESTIVE SYSTEM - ENDOSCOPIC ULTRASOUND - radical or linear probe through endoscope including bilary and/or pancreatic examination to endoscopy fee	N/A		$149.30	
E802	SURGICAL PROCEDURES - OPERATIONS ON THE DIGESTIVE SYSTEM - Endoscopic Ultrasound - Biopsy per lesion to a max of 3 per lesion	N/A		$49.75	

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTOR	2002 SOB Fee	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
E803	SURGICAL PROCEDURES - OPERATIONS ON THE DIGESTIVE SYSTEM - Endoscopic Ultrasound - Dilation of stricture	N/A		$30.05	
E804	SURGICAL PROCEDURES - OPERATIONS ON THE DIGESTIVE SYSTEM - Endoscopic Ultrasound - Injection of one or more of any of the following - metastases, node, masses, or celiac plexus	N/A		$142.20	
E805	SURGICAL PROCEDURES - OPERATIONS ON THE DIGESTIVE SYSTEM - Endoscopic Ultrasound - Drainage of pseudocyst (including stent insertion if performed)	N/A		$199.05	
E862	Retropubic urethropexy - when performed laparoscopically	N/A		Add - 25%	
E863	Retropubic urethropexy - when performed laparoscopically	N/A		Add - 10%	
E901	NERVOUS - CRANIAL SPINAL - Use of operating microscope in association with cranial & spinal procedures - add to N102, N103, N105, N111, N151, N152, N153, N154, N193, N194, N195, N196, N197, N211, N213, N266, N267, N313, N314, N317, N318, N319, N320, N321	$211.15		$211.15	
E902	NERVOUS - CRANIAL - Brain - Meningioma and other tumourous lesions, including pituitary tumours craniotomy plus excision - lesion greater than 4 cm in diameter - add to N102, N153	$366.45		$366.45	
E925	Surgical Procedures - Peripheral Nerves - add 30% to basic fee when repair is delayed more than four weeks	add 30%		add 30%	
E952	ORGANS OF SPECIAL SENSES - EYE - EXTRAOCULAR MUSCLES - Repair - Repeat strabismus procedure (following a previous repair done by a different surgeon) - add to E158, E159, E162	$121.25		$121.25	
E978	Spinal tumors - per segment after first 3 segments	N/A		$156.75	
F040	MUSCULOSKELETAL - ELBOW & FOREARM - Reduction - Fractures - Transcondylar/condylar - closed reduction	$202.85	$292.50		
G198	DIAGNOSTIC & THERAPEUTIC PROCEDURES - ALLERGY - Patch test (to a maximum of 50 per year) - for industrial or occupational dermatoses - increase in maximum # of services billable	$1.87		$1.87	
G206	ALLERGY - Patch test - per test - increase in maximum # of services billable	$1.87		$1.87	
G365	GYNAECOLOGY - Periodic Papinicolaou smear, excluding smears provided in conjunction with a consultation	$4.40	$6.60		
G394	DIAGNOSTIC & THERAPEUTIC PROCEDURES - GYNAECOLOGY - Additional Papanicolaou Smear - for follow-up of abnormal or inadequate smears	$4.40	$6.60		
G398	Medical management of prolapsed - pessary	N/A		$41.10	
G420	OTOLARYNGOLOGY - Ear syringing and/or extensive curetting or debridement - uni or bilateral	$5.55	$11.05		
G455	DIAGNOSTIC &THERAPEUTIC PROCEDURES - ELECTROMYOGRAPHY AND NERVE CONDUCTION STUDIES - revision to description	$27.40		$27.40	

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTION	2002 SOB	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
G456	PHYSICAL MEDICINE - Electromyography and Nerve Conduction Studies - Schedule A - Complete procedure, professional component - when physician performs EMG and/or performs or supervises nerve conduction studies and interprets the results (P1) - revision to	$97.40		$97.40	
G459	DIAGNOSTIC & THERAPEUTIC PROCEDURES - PHYSICAL MEDICINE - Electromyography & Nerve Conduction Studies - Schedule A - Complete electomyography and nerve conduction studies (two or more nerves) - MD interprets only (P2) - revision to desoription	$21.30		$21.30	
G478C	ELECTROCONVULSIVE THERAPY *(increase units 3 - 5)*	$11.77		$11.77	
G479C	DIAGNOSTIC & THERAPEUTIC PROCEDURES - PHYSICAL MEDICINE - Electroconvulsive therapy (ECT) cerebral single or multiple - In Patient *(increase units 3 - 5)*	$11.77		$11.77	
G610	Critical Care - Neonatal Intensive Care - Level B - 1st day	$195.10			$207.00
G611	Critical Care - Neonatal Intensive Care - Level B - 2nd day onwards	$55.05			$75.35
G650	CARDIOVASCULAR - Continuous ECG Monitoring; e.g., Holter - Level 1 - Recording/analyzing and recalling for subsequent analysis all beats and transmitting this information to a scanner which is capable of analyzing or printing every beat and also performi	$46.95		$46.95	
G651	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - Continuous ECG Monitoring; e.g., Holter - Level 1 - technical component - scanning -change to description	$24.25		$24.25	
G652	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - Continuous ECG Monitoring; e.g., Holter - Level 1 - technical component - recording - change to description	$33.20		$33.20	
G653	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - Continuous ECG Monitoring; e.g., Holter - Level 2 - professional component - recording - change to description	$33.45		$33.45	
G654	DIAGNOSTIC & THERAPEUTIC PROCEDURES -CARDIOV HOLTER MONITORING LEVEL 2 TECH COMP REC'D - change to description	$23.15		$23.15	
G655	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIO HOLTER MONITORING LEVEL 2 TECH COMP SCAN - change to description	$15.85		$15.85	
G656	CONTINUOUS ECG MONITORING - change to description	$50.15		$50.15	
G657	CONTINUOUS ECG MONITORING - change to description	$66.85		$66.85	
G658	CONTINUOUS ECG MONITORING - change to description	$70.45		$70.45	
G659	CONTINUOUS ECG MONITORING - change to description	$93.95		$93.95	
G682	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - CONTINUOUS ECG MONITORING LEVEL 1; Technical Component 48 to 71 hours recording	N/A		$48.50	
G683	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - CONTINUOUS ECG MONITORING LEVEL 1; Technical Component 48 to 71 hours scanning	N/A		$66.40	

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTION	2002 / 03 FEE	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
G684	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - CONTINUOUS ECG MONITORING LEVEL 1; Technical Component 72 or hours recording	N/A		$72.75	
G685	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - CONTINUOUS ECG MONITORING LEVEL 1; Technical Component 72 or more hours scanning	N/A		$99.60	
G686	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - CONTINUOUS ECG MONITORING LEVEL 2; Technical Component 48 to 71 hours recording	N/A		$46.30	
G687	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - CONTINUOUS ECG MONITORING LEVEL 2; Technical Component 48 to 71 hours scanning	N/A		$31.70	
G688	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - CONTINUOUS ECG MONITORING LEVEL 2; Technical Component 72 or more hours recording	N/A		$69.45	
G689	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - CONTINUOUS ECG MONITORING LEVEL 2; Technical Component 72 or more hours scanning	N/A		$47.55	
G690	DIAGNOSTIC & THERAPEUTIC PROCEDURES - CARDIOVASCULAR - CONTINUOUS ECG MONITORING LEVEL 2; Loop Recorder - Professional component (per 14 day test) recording	N/A		$119.85	
H102	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Emergency Department - Physician on Duty - Monday to Friday - Daytime and Evenings (08:00h – 24:00h) - Comprehensive assessment and care	$31.75	$34.65		
H104	FAMILY PRACTICE AND PRACTICE IN GENERAL - Emergency Department - Physician on Duty - Monday to Friday - Daytime and Evenings (08:00h – 18:00h) - Re-assessment - description change	$14.05		$14.05	
H121	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Emergency Department - Physician on Duty - Nights (00:00h – 08:00h) - Minor assessment	$21.10	$24.45		
H122	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Emergency Department - Physician on Duty - Nights (00:00h – 08:00h) - Comprehensive assessment and care	$46.05	$60.60		
H123	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Emergency Department - Physician on Duty - Nights (00:00h – 08:00h) - Multiple systems assessment	$42.55	$49.35		
H124	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Emergency Department - Physician on Duty - Nights (00:00h – 08:00h) - Re-assessment	$21.10		$24.45	
H134	PHYSICIAN ON DUTY IN ER - EVENINGS (18:00-24:00) - desoription change	$15.45		$15.45	
H151	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Emergency Department - Physician on Duty - Saturdays, Sundays, Holidays - Daytime/Evenings (08:00h – 24:00h) - Minor assessment	$18.55	$20.95		
H152	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Emergency Department - Physician on Duty - Saturdays, Sundays and Holidays - Daytime and Evenings (08:00h – 24:00h) - Comprehensive assessment and care	$40.35	$51.95		

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTION	2002 SOB Fee	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
H153	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Emergency Department - Physician on Duty - Saturdays, Sundays, Holidays - Daytime/Evenings (08:00h – 24:00h) - Multiple systems assessment	$36.85	$42.30		
H154	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Emergency Department - Physician on Duty - Saturdays, Sundays, Holidays - Daytime/Evenings (08:00h – 24:00h) - Re-assessment	$18.55		$20.95	
J182B	DIAGNOSTIC ULTRASOUND - Miscellaneous - Extremities - per limb (excluding vascular study)	$24.05	$25.90		
J182C	DIAGNOSTIC ULTRASOUND - Miscellaneous - Extremities - per limb (excluding vascular study)	$15.05	$15.40		
J482B	DIAGNOSTIC ULTRASOUND - MISCELLANEOUS - Extremities - per limb (excluding vascular study)	$24.05	$25.90		
J482C	DIAGNOSTIC ULTRASOUND - MISCELLANEOUS - Extremities - per limb (excluding vascular study)	$11.25	$11.30		
J663C	NUCLEAR MEDICINE - IN VIVO - MISCELLANEOUS- Scintimammography - Breast Examination - Professional Component (P2)	N/A		$21.95	
J692B	LEVEL 3 OVERNIGHT SLEEP STUDY	$192.05		$0.00	
J692C	LEVEL 3 OVERNIGHT SLEEP STUDY	$50.00		$0.00	
J863C	NUCLEAR MEDICINE - IN VIVO - MISCELLANEOUS- Scintimammography - Professional Component (P1)	N/A		$43.90	
J889C	DIAGNOSTIC & THERAPEUTIC PROCEDURES - OVERNIGHT SLEEP STUDIES - Level 1 - Therapeutic study for CPAP Titration *(description change)*	$180.50		$125.80	
J890C	DIAGNOSTIC & THERAPEUTIC PROCEDURES - OVERNIGHT SLEEP STUDIES - Level 1 - Diagnostic Study *(description change)*	$180.50		$125.80	
J891C	DIAGNOSTIC & THERAPEUTIC PROCEDURES - OVERNIGHT SLEEP STUDIES - Level 2 - Overnight sleep study with continuous monitoring of oxygen saturation, ECG and ventilation by plethysmography and with technician attendance during study period. *(description change)*	$133.70		$91.55	
J892B	DIAGNOSTIC & THERAPEUTIC PROCEDURES - OVERNIGHT SLEEP STUDIES - Level 3 - Overnight sleep study with monitoring to stage sleep (EEG, EOG, sub-mental EMG) and continuous monitoring of ECG with technician in attendance during study period.			$0.00	
J892C	DIAGNOSTIC & THERAPEUTIC PROCEDURES - OVERNIGHT SLEEP STUDIES - Level 3 - Overnight sleep study with monitoring to stage sleep (EEG, EOG, sub-mental EMG) and continuous monitoring of ECG with technician in attendance during study period.			$0.00	
K032	CONSULTATION & VISITIS - SPECIFIC NEUROCOGNITIVE ASSESSMENT - Diagnosis of Dementia	N/A		$50.45	

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTION	2002/3 OB Fee	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
K190	PSYCHIATRY - Office/Clinic - Individual in-patient psychotherapy (including aversive conditioning, narcoanalysis, psychoanalysis) - per ½ hour or major part thereof	$54.15	$56.40		
K191	CONSULTATIONS & VISITS - PSYCHIATRY - Psychotherapy, Family Psychotherapy, Hypnotherapy and Psychiatric Care - Family psychiatric care, in-patient, per ½ hour or major part thereof	$61.40	$63.95		
K193	PSYCHIATRY - Office/Clinic - Family therapy - in-patients (two or more family members) per ½ hour or major part thereof	$61.40	$63.95		
K195	PSYCHIATRY - Office/Clinic - Family therapy - out-patients (two or more family members) per ½ hour or major part thereof	$61.40	$63.95		
K196	CONSULTATIONS & VISITS - PSYCHIATRY - Psychotherapy, Family Psychotherapy, Hypnotherapy and Psychiatric Care - Family psychiatric care, out-patient, per ½ hour or major part thereof	$61.40	$63.95		
K197	PSYCHIATRY - Office/Clinic - Individual out-patient psychotherapy (inoluding aversive conditioning, narcoanalysis, psychoanalysis) - per ½ hour or major part thereof	$54.15	$56.40		$58.40
K198	PSYCHIATRY - Office/Clinic - Psychiatric care, out-patient - per ½ hour or major part thereof	$54.15	$56.40		$58.40
K199	CONSULTATIONS & VISITS - PSYCHIATRY - Psychotherapy, Family Psychotherapy, Hypnotherapy and Psychiatric Care - Psychiatric care, in-patient, per ½ hour or major part thereof	$60.10	$62.60		
K200	CONSULTATIONS & VISITS - PSYCHIATRY - Psychotherapy, Family Psychotherapy, Hypnotherapy and Psychiatric Care - Group psychotherapy, in-patients - per member, per ½ hour or major part thereof - up to six hours per day - 4 people	$13.45	$13.95		
K201	PSYCHIATRY - Office/Clinic - Group psychotherapy - in-patients - per member - per unit (½ hr or major part thereof - first 12 units per day) - 5 people	$11.10	$11.60		
K202	PSYCHIATRY - Office/Clinic - Group psychotherapy - in-patients - per member - per unit (½ hr or major part thereof - first 12 units per day) - 6 to 12 people	$9.55	$9.85		
K203	PSYCHIATRY - Office/Clinic - Group psychotherapy - out-patients - per member - per unit (½ hr or major part thereof - first 12 units per day) - 4 people	$13.45	$13.95		
K204	PSYCHIATRY - Office/Clinic - Group psychotherapy - out-patients - per member - per unit (½ hr or major part thereof - first 12 units per day) - 5 people	$11.10	$11.60		
K205	PSYCHIATRY - Office/Clinic - Group psychotherapy - out-patients - per member - per unit (½ hr or major part thereof - first 12 units per day) - 6 to 12 people	$9.55	$9.85		
K206	CONSULTATIONS & VISITS - PSYCHIATRY - Psychotherapy, Family Psychotherapy, Hypnotherapy and Psychiatric Care - Group psychotherapy, out-patients - per member, per ½ hour - (seventh hour onward, to a maximum of 3 hours)	$8.70	$9.15		

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTION	2002 SOB Fee	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
K207	CONSULTATIONS & VISITS - PSYCHIATRY - Psychotherapy, Family Psychotherapy, Hypnotherapy and Psychiatric Care - Group psychotherapy, in-patients - per member, per ½ hour - (seventh hour onward, to a maximum of 3 hours)	$8.70	$9.15		
K994	SPECIAL VISIT TO EMERG/OPD NIGHT 5-12MN/SAT/SUN/HOLS 1ST PAT	$50.05		$53.50	
K995	SPECIAL VISIT TO EMERG/OPD NIGHT 5-12MN/SAT/SUN/HOLS EA.AD.PAT	$24.40		$26.75	
K996	SPECIAL VISIT EMERG./O.P.D.12MIDNIGHT-7A.M.1STPT.	$75.10		$80.25	
K997	SPECIAL VISIT EMERG./O.P.D.12MIDNIGHT-7A.M.EA.ADD.PAT	$36.70		$40.15	
M155	Lung Transplant (one lung)	$1,549.20			$2,013.96
M157	Donor heart - Lung removal	$683.60			$888.68
N102	Meningioma and other tumourous lesions	$1,205.45			$1,567.09
N103	Brain - supratentorial	$1,044.30			$1,357.59
N105	Intracranial aneurysm repair - carotid circulation	$1,285.45			$1,671.09
N109	Intracranial abscess - hemispherectomy	$1,416.55			$1,841.52
N110	Cerebral lobectomy	$1,647.20			$2,141.36
N111	Transsphenoidal microscopic approach to pituituary fossa	$1,205.45			$1,567.09
N117	Intracranial abscess - craniotomy	$1,044.55			$1,357.92
N151	Brain - infratentorial	$1,205.45			$1,567.09
N152	Craniotomy plus lobectomy	$1,094.70			$1,423.11
N153	Meningioma and other tumourous lesions	$1,567.20			$2,037.36
N185	SPINE - Decompression - Posterior - Posterior laminectomy one or two levels, cervical, thoracic, lumbar	$596.60		$682.50	
N186	SPINE - Decompression - Anterior, Anterolateral or Posterolateral - Anterolateral or posterolateral decompression, lumbar or thoracic spine, single disc level	$1,060.85		$1,144.95	
N193	NERVOUS - CRANIAL - Intracranial Abscess - Posterior fossa craniectomy and plugging of obex (to include decompression of Arnold Chiari malformation if present)	$994.25		$0.00	
N313	Removal of spinal tumour - excision	$994.25			$1,292.53
N314	Removal of spinal tumour - one surgeon	$1,155.25			$1,501.83
N317	Extradural partial or toal removal by laminectomy	$864.00			$1,123.20
N318	Intradural partial or total removal of spinal tumour	$1,094.70			$1,423.11
N319	Tumours- Intramedullary - biopsy and/or decompression	$930.05			$1,209.07
N320	Tumours- Intramedullary - removal	$1,255.65			$1,632.35

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTION	2002 SOB Fee	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
N337	SPINE - Decompression - Posterior - Repeat posterior exploration or reopening of posterior exploration, more than six months after original procedure, includes foraminotomy, discectomy or neurolysis	$638.65	$805.10		
P008	OBSTETRICAL CARE - Post natal care in office	$24.65	$27.30		
Q994	SKI-SLOPE/ROADSIDE .NIGHTS(5-12MN.)SAT.SUN.HOL.FIRST PAT.	$35.60		$53.50	
Q996	SKI-SLOPE/ROADSIDE SIDE-NIGHT (12MID.TO7AM)1ST PAT.	$53.55		$80.25	
R008	SURGICAL PREAMBLE & INTEGUMENTARY - SKIN & SUBCUTANEOUS TISSUE - Myo/Fascia-cutaneous & Myogenous Flaps - Lower transverse rectus abdominus flap	$624.45	$965.25		
R105	Partial mastectomy plus radical node dissection	$496.35			$645.26
R109	Mastectomy, radical or modified	$496.30			$645.26
R111	Partial Mastectomy or wedge resection	$203.15			$264.10
R216	Radical resection tumour - excision - bone	$759.70			$987.61
R330	Major resection tumour - excision - bone	$474.85			$617.31
R360	FOOT & ANKLE - Reconstruction - Forefoot - Major forefoot reconstruction	$362.10		$450.45	
R457	SPINE - Decompression - Posterior - Lumbar hemilaminectomy for disc disease including removal of soft disc or osteophyte	$412.55		$499.10	
R486	MUSCULOSKELETAL - ELBOW & FOREARM - Arthroplasty - Complete arthroplasty replacement	$480.35	$605.60		
R874	Cardiopulmmonary transplantation	$1,911.20			$2,484.56
R911	Excision - neck - radical	$636.00			$826.80
R915	Excision - neck - modified radical	$683.60			$888.68
S005	Resection of lesion of oral cavity	$676.80			$879.84
S007	Extended resection of lesion of oral cavity	$799.00			$1,038.70
S068	Pharyngo-laryngectomy	$871.40			$1,132.82
S082	DIGESTIVE - OESOPHAGUS - Incisicn - Intrathoracic oesophagus tube - via laparotomy	$402.50		$402.50	
S083	DIGESTIVE - OESOPHAGUS - Incision - Oesophagostomy - Intrathoracio oesophagus tube - via oesophagoscope	$298.25		$298.25	
S090	Total thoracic oesophageal resection	$880.55			$1,144.72
S236	SURGICAL PROCEDURES - OPERATIONS ON THE DIGESTIVE SYSTEM - ENDOSCOPIC ULTRASOUND - Using linear or radial echo-endoscope (Scope also used for therapeutic procedure) excluding biliary or pancreatic examination	N/A		$199.05	
S237	SURGICAL PROCEDURES - OPERATIONS ON THE DIGESTIVE SYSTEM - ENDOSCOPIC ULTRASOUND - Using linear or radial echo-endoscope (Scope also used for therapeutic procedure) including biliary and/or pancreatic examination	N/A		$248.80	

APPENDIX A: 2003/04 Fee Code Changes

FEE CODE	DESCRIPTION	2002 SOB Fee	EFFECTIVE April 1, 2003	EFFECTIVE July 1, 2003	EFFECTIVE August 1, 2003
S267	Hepatectomy - 3 or 4 liver segments	$1,245.95			$1,619.74
S270	Hepatectomy - 1 or 2 liver segments	$893.35			$1,161.36
S271	Hepatectomy 5 or more liver segments	$1,345.85			$1,749.61
S274	Liver transplant - donor	$727.40			$945.62
S294	Liver transplant - recipient	$2,072.95			$2,694.84
S295	Repeat liver transplant	$2,847.80			$3,702.14
S300	PANCREAS - Excision - Pancreatectomy - "Whipple type" procedure	$1,346.50			$1,750.45
S434	Kidney re-transplant	$1,401.30			$1,821.69
S435	Kidney transplant	$1,171.30			$1,522.69
S436	Donor nephrectomy	$492.60			$640.38
S437	Renal autotransplantation	$876.00			$1,138.80
S710	Hysterectomy with omentectomy for maligignancy	$513.30			$667.29
S727	Ovarian debulking for ovarian carcinoma	$667.30			$867.49
S750	Radical resection pelvic and para-aortic nodes for cancer	$601.40			$781.82
S762	Hysterectomy - radical trachelectomy excluding node dissection	$604.15			$785.40
S763	Hysterectomy - radical includes node dissection	$673.90			$876.07
U994	OPD SPECIAL VISIT PREMIUM CODES	$50.05		$53.50	
U995	OPD SPECIAL VISIT PREMIUM CODES	$24.40		$26.75	
U996	OPD SPECIAL VISIT PREMIUM CODES	$75.10		$80.25	
U997	OPD SPECIAL VISIT PREMIUM CODES	$36.70		$40.15	
W002	SUB. VISITS- Chronic Care - GP	$17.30	$23.00		
W003	SUB. VISITS- Nursing Homes - GP	$17.30	$22.00		
W121	ANY SPECIALTY - Non-Emergency Long-Term Care In-Patient Services - Nursing home or home for the aged - Additional visits due to intercurrent illness	$17.30	$22.00		
W872	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Non-Emergency Long-Term Care In-Patient Services - Nursing home or home for the aged - Palliative care	$17.30	$22.00		
W882	CONSULTATIONS & VISITS - FAMILY & GENERAL PRACTICE - Non-Emergency Long-Term Care In-Patient Services - Chronic care or convalescent hospital - Palliative care	$17.30	$23.00		
W972	CONSULTATIONS & VISITS - SPECIALIST - Non-Emergency Long-Term Care In-Patient Services - Nursing home or home for the aged - Palliative Care	$18.25	$22.00		
W982	CONSULTATIONS & VISITS - SPECIALIST - Non-Emergency Long-Term Care In-Patient Services - Chronic care or convalescent hospital - Palliative Care	$18.25	$23.00		
W994	SPECIAL VISIT TO L-T-C-INS.-NIGHT-SAT-SUN-HOL-1ST PAT. SEEN	$50.05		$53.50	

APPENDIX A: 2003/04 Fee Code Changes

W996	SPEC.VIS.LTCI NIGHTS(12MN.7AM)FIRST PAT.SEEN	$75.10		$80.25	
WXX2	SUB. VISITS- Chronic Care - SPEC.	$17.30	$23.00		
WXX3	SUB. VISITS- Nursing Homes - SPEC.	$17.30	$22.00		
XXXXB	Assistant time unit preamble revision - Double assistant units after one hour			Effective July 1	
XXXXC	Anesthetic time unit preamble revision - Double anesthetist units after one hour			Effective July 1	
Z428	Pacemaker lead extraction, including the use of extraction sheaths with or without laser or similar technology	N/A		$586.75	
Z429	Implantation of coronary sinus lead for biventricular pacing	N/A		$293.40	
Z535	RECTUM - Endoscopy - Sigmoidoscopy (with rigid scope) with or without anoscopy (IOP)	$36.10	$36.10		
Z555	INTESTINES (EXCEPT RECTUM) - Endoscopy (IOP) - Endoscopy - of sigmoid to descending colon	$56.55	$56.55		
Z559	DIGESTIVE - BILIARY TRACT - Endoscopy (IOP) - ERCP including sphincterotomy and may include removal of one or more bile duct stones - repeat within 90 days of previous Z558	$134.85		$0.00	
Z579	DIGESTIVE - BILIARY TRACT - Endoscopy (IOP) - Endoscopic retrograde cholangiopancreatography (ERCP) with cannulation of common bile duct and/or pancreatic duct - repeat within 90 days of previous Z561	$179.60		$0.00	
Z907	MIDDLE EAR - Introduction (IOP) - Debridement of mastoid cavities and/or repair of small perforation under microscopy;SPECIAL.VISIT but not for removal of cerumen for access only to the tympanic membrane (IOP)	$26.30		$26.30	

CTC - Existing Items:

All fee codes affected by change to anaesthetist fees - double time untis after 1 hour (XXXXC)

All fee codes affected by change to surgical assist fees - double time untis after 1 hour (XXXXB)

All fee codes affected by change to surgical assist fees increase to base units

These fee codes represent the CTC/MOHLTC changes agreed upon through the negotiations.

APPENDIX B

FAMILY HEALTH GROUP LETTER OF AGREEMENT

- among-

HER MAJESTY THE QUEEN, in right of Ontario, as represented by the Minister of Health and Long -Term Care (the "Ministry")

-and-

THE PHYSICIANS listed in Appendix "A"

-and-

THE ONTARIO MEDICAL ASSOCIATION, a corporation established under the Corporations Act (Ontario) (the "OMA")

Dear Minister:

We, the Physicians, wish to form a Family Health Group and agree to provide Comprehensive Care to all our patients that are either members of our initial roster provided by the Ministry or actually registered by us and added to our roster. We understand that Comprehensive Care is as defined in Appendix "B" attached to this letter.

We also understand that the OMA and the Ministry have agreed upon a method of identifying approximately 6,600 general practitioners in Ontario as physicians that regularly provide Comprehensive Care to their patients. We understand that we may have been so identified. Any physician that has been so identified will be referred to in this Letter of Agreement as an "Identified Physician".

Our practices are within reasonable proximity to one another and our offices are accessible to the patients on all of our rosters.

Comprehensive Care services will be provided during our regular office hours at our office locations. We agree to advise the Ministry in writing and our patients by posting appropriate notices in all our offices of our hours and locations.

Roster and Registration

The Ministry will provide each Identified Physician with an initial roster of patients to whom the Physician has regularly provided Comprehensive Care, as determined by the Ministry. Physicians who are or become members of our Family Health Group that are not Identified Physicians will not have an initial roster of patients. Each Identified Physician or other Physician may actually register any new or existing patients using the Registration Form attached as Appendix "C". All registered patients shall be added to the Physician's roster and removed from any other physician's roster on which they may appear.

Additional Services

We agree to make the following additional services available to the patients on our rosters:

1. After Hours Services as described in Appendix 'D'.

2. Telephone Health Advisory Services as described in Appendix 'E'

Payment

In return for fulfilling the terms of this Agreement, we will be entitled to the premiums and bonuses set out in Appendix "F" in addition to the normal fee-for-service payments, for services rendered to patients on our rosters.

Human Resources

We understand that additional Physicians may join our Family Health Group and we agree to advise the Ministry as soon as possible of any additions or departures of Group Physicians. Each new Physician will be required to sign a copy of this Agreement which must be sent to and received by the Ministry before the new Physician becomes entitled to the payment provisions of the Agreement. The payment provisions will begin on signing by the parties unless otherwise provided elsewhere in this Agreement.

We appreciate that our Group must always consist of at least three Physicians in order to be entitled to the payment provisions of this Letter. However, if our Physician complement falls to two, we will have 180 calendar days from the date that such an event occurs to add a new Physician and during that time, this Agreement will continue to operate. Failing the recruitment of a new Physician, this Agreement will cease to operate unless the Physicians and the Ministry agree otherwise.

Term of the Agreement

This Agreement will remain in effect until March 31, 2007, but may be terminated before that date by either the Physicians or the Ministry giving the other written and dated notice of the desire to terminate the Agreement. In that case, the Agreement will end ninety calendar days after the date of the notice to terminate.

Dispute Resolution

Without prejudice to the termination rights set out in this Agreement, in the event of a dispute arising out of the interpretation or application of this Agreement which the parties are unable to resolve, it will be referred to the Physician Services Committee (the "PSC") for consideration. After consultation with the parties, the PSC will provide them with its recommendations for resolution of the dispute. If the dispute remains unresolved, the Agreement will be terminated after the expiry of ninety days from the date the PSC provided the parties with it's recommendations unless the physicians and the Ministry agree otherwise.

We understand that the template for this Agreement was negotiated by the OMA and the Ministry and may be amended by them at any time (an Amendment). Any Amendment will apply to this Agreement thirty days after the date on which written notice of the Amendment is sent to the Physicians. The Physicians may, within this time period, either elect to accept the Amendment or give notice of termination of the Agreement in accordance with the provisions of this Agreement. If no notice of termination is given, the Physicians will be deemed to have accepted the Amendment.

We acknowledge that the Ministry and the OMA have agreed to support and advance the Family Health Group initiative.

We, the undersigned Physicians agree to the terms and conditions of this Agreement.

Dated at _____, this ____ day of _____, 200__.

THE PHYSICIANS **THE OMA** **THE MINISTER**

APPENDIX "A"

The following Physicians agree to the terms and conditions of this Agreement:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

APPENDIX "B"

DESCRIPTION OF COMPREHENSIVE CARE

Comprehensive Care assumes that the care is part of an on-going process into the future and provides care in the patient's family and social context. It includes the creation, management and maintenance of an appropriate medical record managed by the physician.

Comprehensive Care includes the following services:

Health Assessments

1. When necessary, the taking of a full history, including presenting complaint, if any, past illnesses, social history, family history, review of systems and performing a complete physical examination.
2. Periodically taking a specific history and performing a physical examination as required to screen patients for disease.
3. Regularly taking a specific history and performing a physical examination as required to respond to patient complaints and/or to manage chronic problems.

Diagnosis and Treatment

Assess and plan for patients' care based on the outcomes of a history and physical examination aided by appropriate investigations and consultations according to the results of complete, periodic, or regular health assessments. Care for and monitor episodic and chronic illness or injury. In the case of acute illness or injury, offer early access to assessment, appropriate diagnostic testing, primary medical treatment, and advice on self-care and prevention. Provides or co-ordinates chronic disease management for conditions such as diabetes and hypertension.

Primary Reproductive Care

Provide primary reproductive care, including counselling patients on birth control and family planning, and educating about, screening for, and treating sexually transmitted diseases.

Primary Mental Health Care

Offer treatment of emotional and psychiatric problems, to the extent that the physician is comfortably able to provide the treatment. Where appropriate, refer patients to and collaborate with psychiatrists and appropriate mental health care providers.

Primary Palliative Care

Provide palliative care or offer to support the team responsible for providing palliative care to my terminally ill patients. Palliative care includes offering office-based services, referrals to Community Care Access Centres or to such other support services as are required, and making patient visits where appropriate.

Support for Hospital, Home and Long-Term Care Facilities

Where applicable and where possible, assist with discharge planning, rehabilitation services, out-patient follow-up and home care services.

Service Co-ordination and Referral

Co-ordinate referrals to other health care providers and agencies, including specialists, rehabilitation and physiotherapy services, home care and hospice programs and diagnostic services, as appropriate. Appropriately monitor the status of patients who have been referred for additional care and collaborate on medical treatment of patients.

Patient Education and Preventative Care

Use evidence-based guidelines to screen patients at risk for disease, to attempt early detection and institute early intervention and counselling to reduce risk or development of harm from disease including appropriate immunizations.

Pre-Natal, Obstetrical, Post-Natal, and In-Hospital New Born Care

Provide or arrange to provide maternity services, including antenatal care to term, labour and delivery, and maternal and newborn care.

Arrangements for 24/7 Response

Provide service to Patients through a combination of regular office hours, extended office hours, and the Telephone Health Advisory Service (THAS) which allows twenty four hours a day, seven days as week response to patient health concerns.

Professional Rights and Obligations

Nothing in this Agreement precludes a Physician from terminating his or her relationship with any patient in accordance with applicable guidelines issued by the College of Physicians and Surgeons of Ontario. Further, nothing in this Agreement shall create obligations for a Physician that go beyond his or her professional competence or that, using the Physician's best efforts, are beyond the reasonable control of the Physician.

APPENDIX "C"

PATIENT REGISTRATION FORM

Patient registration must be completed using the attached form and by following the Ministry process. The Physicians will be provided with registration support services from the Ministry or its delegate upon request.

Registration bonuses will be paid to each Identified Physician as follows:

-$1,000 upon registering 33% of the total number of patients on the initial roster;

-$1,000 upon registering an additional 33% of the total number of patients on the initial roster;

-$1,000 upon registering the balance of the patients on the initial roster.

A registration bonus of $1,500 will be paid to a non-identified physician who registers one thousand or more patients.

The patient registration form is the same form that is used in the FHN Templates. The parties are currently developing a more user-friendly version which will be available at the time of offer.

APPENDIX "D"

AFTER HOURS SERVICES

1. The Physicians shall ensure that a sufficient number of Physicians are available to provide services to the patients on their rosters during reasonable and regular office hours from Monday to Friday.

2. Evening and weekend hours shall be as follows:

   (A) If the Family Health Group consists of only three Physicians, at least one Physician office staffed by a Group Physician shall be open on three of the following occasions: Monday to Thursday night (from 5:00 p.m. to 8:00 p.m.) or for three hours on a weekend.

   (B) If the Family Health Group consists of only four Physicians, at least one Physician office staffed by a Group Physician shall be open on four of these occasions: Monday to Thursday night (from 5:00 p.m. to 8:00 p.m.) or for three hours on a weekend.

   (C) If the Family Health Group consists of only five Physicians, at least one Physician office staffed by a Group Physician shall be open on five of these occasions: Monday to Thursday night (from 5:00 p.m. to 8:00 p.m.) or for three hours on a weekend.

   (D) We understand that we are not required to supply after hours services on recognized holidays. For the purpose of this Agreement, Recognized Holidays means New Year's Day, Good Friday, Victoria Day, Canada Day, August Civic Holiday, Labour Day, Thanksgiving, Christmas Day and Boxing Day.

   (E) If the Family Health Group consists of more than five Physicians, the evening and weekend hours obligation will be the same as in section (C), however, the staffing of additional Physicians during such hours may be necessary if the Family Health Group determines that the volume and needs of their patients make such additional staffing necessary.

   (F) The Family Health Group may elect to commence After Hours Services on weeknights at a time other than 5 p.m. but before 7 p.m. but shall provide at least 3 full hours of After Hours Service on such night or nights.

3. The evening and weekend hours may be provided by Physicians at appropriate locations of their choice. They must advise the Ministry in writing and their patients by posting appropriate notices in all Physician offices of the office hours and locations for these hours.

4. If more than fifty percent (50%) of the Family Health Group provide public hospital emergency room coverage or public hospital anaesthesia services on a regular, ongoing basis, then the obligation to provide Evening and Weekend Hours may be waived by the Ministry at the written request of the Family Health Group.

5. Physicians providing services in an Emergency Room of a Public Hospital shall use best efforts to ensure that non-emergency services provided to patients are not counted by the Public Hospital as a visit to the Emergency Room.

APPENDIX "E"

TELEPHONE HEALTH ADVISORY SERVICES

1. The Ministry shall, at its expense and when it is available, arrange for the provision of THAS for the benefit of patients on Physicians' rosters.

2. THAS shall include advice and referral information, including triage to self-care and access to a Group Physician, where appropriate.

3. THAS shall be available to patients on Physicians' rosters from 5 p.m. to 9 a.m., Monday to Thursday, 5 p.m. Friday to 9 a.m. Monday and during Recognized Holidays. THAS service shall include appropriate feedback to the patient's Physician.

4. Physicians shall not charge anyone directly or indirectly, nor shall they accept payment on any person's behalf, for this service.

5. The Ministry shall make a monthly payment of $1,000 to each Family Health Group of less than 10 Physicians, and $2,000 per month to a Group of 10 or more Physicians for:

   A. ensuring that a Physician is available on call during the THAS hours of delivery;

   B. ensuring that the THAS provider is informed of which Physician is on call and how to reach that Physician;

   C. in conjunction with the Ministry, promoting the THAS among the patients on Physicians' rosters and for encouraging the proper and appropriate use of THAS by the patients;

   D. giving the THAS provider information about available local services to which its staff can direct callers, and

   E. participating in on-going reviews and an overall evaluation of THAS.

APPENDIX "F"

PAYMENT

Even though all payments will be made to the individual Physician, each Physician within a Family Health Group will apply for a Group Registration Number from the Ministry in order to receive the payments set out in this Appendix. For clarity, all billings associated with these payments need to be accompanied by this Group Registration Number.

1. New Premium for Providing Care to Seniors

The Ministry shall pay to a FHG physician a premium of 10% on valid claims for general assessments (A003) performed on patients between the ages of 65 and 74 inclusive. This premium must be claimed using fee schedule code E065. The E065 premium may be claimed a maximum of once per patient per fiscal year (April 1st - March 31st) for all patients actually registered with the FHG Physician.

Note: To be eligible for this premium the patient must be actually registered using the form set out in Appendix C, even if they already appear on the initial roster provided by the Ministry.

2. Comprehensive Care Premium

A FHG Physician is eligible for a 10% premium for valid comprehensive care claims submitted for services to patients on the roster of any of the FHG physicians. The codes to which this premium may be applied are listed below. Note that the Comprehensive Care Premium will be paid to the FHG Physician by the claims payment system for eligible claims submitted with the Group Registration Number.

Fee Code	Fee Description
A003	General Assessments
A888	Emergency Department Equivalent – Partial Assessment
A901	House Call Assessment
E075	Geriatric General Assessment Premium
G365	Pap Smear
G538	Active Immunization
G590	Active Immunization Influenza Agent with Visit

G591	Active immunization Influenza Agent with Sole Reason
K005	Primary Mental Health Care
K013	Counseling – per 1/2 hour
K017	Annual Health Exam – child after 2nd Birthday
A001	Minor Assessment
A007	Intermediate Assessment

3. After hours add on premium

The Ministry shall pay the FHG Physician a 10% premium for valid claims for all After Hours Services as set out in Appendix 'D' that are provided to registered patients of the FHG. Services must be provided, and the premium will be paid for all patients assessments (A Code Services). A shadow billing code of EXXX must accompany each submitted claim in order for the premium to be paid.

4. Palliative Care Premium

A FHG Physician shall receive an additional $2,000 after submitting valid claims for fee schedule code K023 for four (4) or more rostered palliative care patients in any fiscal year. Such patients may appear on the initial roster supplied by the Ministry, or may be actually registered in the fiscal year.

5. Premiums for Primary Health Care of Patients with Serious Mental Illness

A FHG physician shall receive an additional $1,000 per fiscal year when during that fiscal year up to five patients with diagnoses of bipolar disorder or schizophrenia are registered with the FHG physician. Fee Schedule codes for services provided by these patients must be accompanied by diagnostic codes, 295 or 306 and the patient must be formally registered in order for the premium to be paid.

A FHG physician shall receive an additional $1,000 ($2,000 in total) for the Mental Health Care premium for at least an additional 5 patients (at least 10 patients in total) subject to the rules provided above.

Note: To be eligible for this premium the patient must be actually registered using the form set out in Appendix C, even if they already appear on the initial roster provided by the Ministry. This premium will become effective October 1st, 2003.

6. New Patient Fee

The Ministry shall pay the FHG Physician $100 for each New Patient that is registered up to a maximum of 50 patients per fiscal year. For each such enrolment a shadow billing code, QXXX, must be billed in order for payment to be made. In addition, a 10% premium shall be added to this payment for those New Patients between 65 and 74 years of age and a 20% premium shall be added for those patients 75 and over.

In order to earn this fee the FHG physician must, in addition to formally enrolling the patient, co-sign with the patient a "New Patient Declaration form" as set out in Appendix G. This fee will become effective October 1st, 2003

The Patient Declaration form requires the FHG Physician to agree to provide ongoing Comprehensive Care to the registered patient. Please note that the Ministry will undertake periodic reviews of claims for new patients and may request access to the New Patient Declarations, or contact the Physician, or contact the patient to verify the accuracy of the claims.

APPENDIX "G"

NEW PATIENT DECLARATION FORM

Date _____

I, _____(Patient Name) declare that I currently do not have a family physician due to one or more of the following circumstances:

(Please mark applicable box)

- ☐ My family physician has moved to another community.
- ☐ I have moved to another community.
- ☐ My family physician is no longer available due to illness/death.
- ☐ My family physieian is no longer available due to change of practice type.

_____ _____

Patient Signature Patient Health Number

I, _____ (Physician Name) declare that the above patient is not a patient of mine or to the best of my knowledge is not a patient of any of the other participating physicians in the Family Health Group of which I am affiliated.

I agree to accept this patient into my practiee and to provide ongoing health care to this patient from the date of the document forward. I will keep this documentation available on file in my primary office location and will provide to the Ministry of Health and Long-Term Care as and when required for verification purposes.

_____ _____

Physician Signature Physician Billing Number

APPENDIX C

FHN Template Amendments

The items denoted with an asterisk (*) will not become effective until a later date. The Physicians will be notified as soon as possible of that date. Please note that all billings or enrollment for LTC patients submitted prior to that date will not be accepted by the Ministry systems.

The following amendments will be made to the Family Health Network Templates

1. **Premium for Providing Care to Seniors**

   The Ministry shall pay to the FHN a premium of 10% on valid claims for general assessments (A003) performed on patients between the ages of 65 and 74 inclusive. This premium must be claimed using fee schedule code E065. The E065 premium may be claimed a maximum of once per patient per fiscal year (April 1st - March 31st) for all patients enrolled to a FHN physician.

2. **Premiums for Primary Health Care of Patients with Serious Mental Illness ***

   A FHN physician shall receive an additional $1,000 per fiscal year when during that fiscal year up to five patients with diagnoses of bipolar disorder or schizophrenia are enrolled with the FHN physician. Fee Schedule codes for services provided by these patients must be accompanied by diagnostic codes, 295 or 306 and the patient must be formally registered in order for the premium to be paid.

   A FHN physician shall receive an additional $1,000 ($2,000 in total) for the Mental Health Care premium for at least an additional 5 patients (at least 10 patients in total) subject to the rules provided above.

   Note that the Mental Health Premium will be paid to the FHN Physician by the claims payment system based on claims data.

3. **After Hours Premium**

   The Ministry shall pay the FHN Physician a 10% premium for all After Hours Services provided to enrolled patients in accordance with Section 5.2. A shadow billing code of EXXX must accompany each submitted claim in order for the premium to be paid.

4. New Patient Fee *

The Ministry shall pay the FHN Physician $100 for each New Patient that is enrolled up to a maximum of 50 patients per fiscal year. For each such enrolment a shadow billing code, QXXX, must be billed in order for payment to be made. In addition, a 10% premium shall be added to this payment for those New Patients between 65 and 74 years of age and a 20% premium shall be added for those patients 75 and over. In order to earn this fee the FHN physician must, in addition to enrolling the patient, co-sign with the patient a "New Patient Declaration" as set out in Appendix K.

The Patient Declaration form requires the FHN Physician to agree to provide ongoing Comprehensive Care to the enrolled patient. Please note that the Ministry will undertake periodic reviews of claims for new patients and may request access to the Declarations, contact the Physician or the patient to verify the accuracy of the elaims.

5. Base Rate Payment Adjnstment *

The new base rate payment multiplier will be at least $102.00.

6. Newborn Care Episodic Fee *

The FHN physician shall receive an additional payment of $12.50 for approved claims for up to 8 well baby visits (A007) to Enrolled Patients in the first year of life. The add-on code, EXXX must accompany each submitted claim in order for the premium to be paid. The Ministry and/or OFHN will advise FHN Physicians by correspondence at what date the Newborn Care Episodic Fee becomes effective.

Note:
The parties agree to continue iterative review and discussion with respect to expanding access to additional/new patient based care premiums with a goal to eonclude these discussions no later than January 2004.

The Following Amendments will be made to Article 3 of the FHN Template Agreement.

7. Long-Term Care Patient Enrolment *

In order to permit the enrolment of residents of long-term care facilities Article 3 of the Agreement will be amended as follows:

Article 3.1.1 and 3.2.1 delete:

"(e) not a resident of a Long Term Care Facility;"

Add in new Article 3.1.3 as follows:

3.1.3 Enrolling of Long Term Care Patients

Notwithstanding Articles 3.1.1 and 3.2.2 FHN Physicians have the option of enrolling all of their patients who reside in a Long Term Care Facility.

If the FHN physician chooses to enroll his Long-Term Care patients, he/she must offer enrolment to all such patients in the same long-term care facility. The Base Rate Payments for these patients are outlined in Appendix I, Schedule 1. (see above).

The Base Rate Payment for enrolled patients in Long-Term Care facilities is not age and sex adjusted and is **$366.72** per annum.

The Ministry and/or OFHN will advise FHN Physicians by correspondence at what date enrolment of Long-Term Care Patients becomes effective.

Physicians choosing to enrol LTC patients must agree to not submit claims for the included codes for this base rate payment provided for in the amended Appendix I, Schedule 2 to the FHN Template. (This appendix will contain all of the codes currently provided in Appendix I, Schedule 2, plus additional W and K codes to be identified).

8. The following amendment will be made to Appendix I, Article 1.7.2 (b)

GP Specialists and the Access Bonus

The Ministry and the OMA have worked collaboratively on the development of operational procedures and policies with respect to the implementation of that portion of Article 1.7.2 (b) that deals with excluding general practitioner specialists billings from the Maximum Special Payment (MSP) calculation.

This implementation will start with a code based exemption for oculovisual assessments. Further information on the details of these exclusions and implementation will be provided to FHNs by the Ministry/OFHN.

9. The following amendment will be made to Article 17.2.1 and Appendix K and references to it will he deleted.

Dispute Resolution

Any disputes among the parties arising from matters under this agreement may be referred to the PSC for consideration.

10. The following amendments will be made to Article 2.2 of the FHN Template and to the Appendices

Income Stabilization *

The parties have agreed to implement as soon as possible (on a date to be announeed), an income stabilization plan that is designed to provide greater financial security for physicians who decide to enter a FHN.

The changes are as follows:

Change 2.2, Deliverable as follows:

Prior to, or concurrent with, the Effective Date, the FHN Physicians shall:

(d) communicate to OFHN whether or not they are opting for Ineome Stabilization as described in Appendix L.

Insert New Appendix as Follows

APPENDIX "L"

Income Stabilization for New FHN Physicians

Physicians entering into a Family Health Network (FHN) will be offered a guaranteed first year annual income based on their previous 12 consecutive months of OHIP billing. A methodology for calculating the income guarantee amount for physicians without a previous 12 consecutive months of OHIP billing e.g. maternity leave, illness, new to practice and sabbaticals, will be established.

Income stabilization will be offered from the "Issuance Date" which is the date upon which FHN physicians may begin to enroll their patients.

Those physicians selecting this option are required to sign an understanding with the Ministry/OFHN to ensure that they continue to be available to patients for care and that they provide a similar mix of services and hours to those provided during the Income Stabilization Calculation Year.

This undertaking will require participating physicians to undertake to roster a significant portion of their projected roster during the 12 month period of the income guarantee (70%).

APPENDIX D

MRC Initiatives

Background:

The OMA and the MOHLTC share a common interest that claims made for insured services are appropriately submitted and paid in accordance with the Schedule of Benefits. In the 2000 Agreement the MOHLTC and the OMA agreed to examine the way in which physician billings are reviewed by the MOH and by the MRC and to consider whether an alternative approach would be more appropriate. An initial report to the parties recommended several improvements including the establishment of an Education and Prevention Committee, changes to the MRC process, and the establishment of an alternative process to the MRC now referred to as the OHIP Payment Review Program. At this time the parties recommend further improvements in this ongoing process of review.

The parties recommit themselves to an ongoing process to review in detail the audit and recovery mechanisms currently in use by the MOHLTC and the MRC to determine whether changes or alternate mechanisms are necessary. The parties will report regularly to their principals anticipating the initial report by October 1, 2003.

In all of these recommendations the parties recognize the requirement for a transparent, and effective monitoring and accountability mechanism.

Initiatives:

1. MOHLTC will request and encourage the CPSO/MRC to implement Appendix 2 of the Final Report of the OMA/MOHLTC Joint Committee on the MRC TO PSC November 2001.

2. (1) The parties agree to appoint an expert third party to:
   a. review the sampling technique used by the MOHLTC in the OPRP to choose charts for review;
   b. assess the appropriateness of the use of "extrapolation" to calculate recoveries on claims submitted.

   (2) The MOHLTC agrees to encourage the MRC to participate in a review of the sampling technique conducted by the expert third party.

3. The MOHLTC, in consultation with the OMA, will within 60 days make recommendations to the Minister for amendments to the "Costs Regulation" including the prescription of specific criteria under which costs shall be paid and the amounts to be paid. The recommendations must reflect that the costs will not exceed either the current or actual cost of the review.

4. The MOHLTC will recommend that the application fee for a review under Section 18.1(8) be $350, and the application fee for a review under Section 18.1(5) will be a minimum of $350 and a maximum of no more than 5% of the recovery or $2,500 (whichever is less).

5. In order to clarify to physicians the circumstances or patterns of claims which may cause a detailed review of billing submissions, the MOHLTC after consultation with the OMA, agrees to issue an educational Bulletin advising physicians of the principles used in the analysis of claims and to update this advice from time to time as may be necessary.

6. The MOHLTC and OMA recognize the value of the MRC membership reflecting the various disciplines of the profession. The MOHLTC will recommend that the Minister urge that the CPSO reflect this principle in their nominations for MRC appointments.

7. With respect to reeoveries pending appeal, the General Manager will apply his discretion fairly and consistently (with regard to the cireumstances) on the requirement for immediate recovery, recovery over time and/or requirements for an irrevocable letter of credit from the physician. Where the physician is unable to secure a letter of credit, an equivalent security may be provided by the OMA at its discretion. This will not apply to physicians facing recovery for a subsequent similar billing decision. The General Manager will consult with the OMA when developing the principles for exercise of his discretion.

8. The parties will make recommendations to the Minister or the General Manager of OHIP and to the MRC regarding possible changes to record-keeping standards required under the Health Insurance Act or applied by the MRC, the MOHLTC, OPRP, and HSARB with an initial report being delivered within six months. It is anticipated that the parties will be assisted in their work by appropriate clinical Sections of the OMA and other interested groups. All recommended record-keeping standards accepted for implementation will be communicated to the profession.

APPENDIX E

Hospital On-Call Coverage Enhancements

The Physician Services Committee, through its Hospital On-Call Coverage Committee (HOCC) will consider funding concurrent, additional on-call rotas in the following specialties: Obstetrics, Family Medicine, Internal Medicine and Neonatal Intensive Care. HOCC will develop guidelines and processes based on workload and other factors it considers relevant for determining the need for a second stipend for on-call.

Level II Specialists

The following specialties will receive Level II funding: Cardiac Surgery, Thoracic Surgery, Plastic Surgery, Critical Care Medicine and Urology.

Level III Specialists

The following specialties will receive Level III funding: Endocrinology, Nephrology and Geriatric Medicine

APPENDIX F

DIAGNOSTIC SERVICES COMMITTEE DEVELOPMENT TEAM

1. The Diagnostic Services Committee Development Team (DSCDT) will be established to develop and recommend to the parties a framework agreement among the principal stakeholders for the structure and operation of an on-going Diagnostic Services Committee (DSC). In doing this, it will take into consideration the responsibilities that will be required of the DSC.

2. The DSC will function as an advisory body to the Minister of Health and Long Term Care for the purpose of planning and co-ordinating an efficient and effective diagnostic services system in the province with accountability among users and providers of diagnostic services. It will have the following responsibilities:

   (a) to provide advice and recommendations on funding and infrastructure for the province-wide diagnostic system;

   (b) to provide advice and recommendations on the use of any new funding;

   (c) to provide advice on appropriate quality and service standards for diagnostic services and the strategies to achieve this;

   (d) to develop and set up the way in which the technical component of diagnostic services (currently described as technical fees) will be evaluated, compensated and administered;

   (e) to develop and recommend a province-wide utilization management proeess for the system, including technical fees;

   (f) to consider and recommend strategies to address the health care needs for diagnostics in the province.

3. The Diagnostic Services Committee Development Team (DSCDT) will consist of three members appointed by each of the OMA, the MOHLTC and the OHA with a chair to be appointed by the MOHLTC after consultation with the parties.

4. Each party will pay for its own members and the MOHLTC will pay for the chair and fund the administration costs of the DSCDT.

5. The DSCDT will begin meeting in May, 2003, and must submit to the parties an interim report no later than October 31, 2003, and it's final recommendations no later than January 31, 2004.

APPENDIX G

HOSPITAL CLINICAL SERVICES PAYMENTS TASK FORCE

1. The Hospital Clinical Services Payments Task Force (the Task Force) will consist of three members appointed by each of the OMA, and the MOHLTC; and three representatives from the OHA; with a chair to be appointed by the MOHLTC after consultation with the OMA. The Co-Chairs of the Physicians Services Committee, or their delegates, will be ex-officio members of the Task Force.

2. Each party will pay for it's own members and the MOHLTC will pay for the chair and fund the administration costs of the Task Force.

3. The mandate for the Task Force is:

   (a) to investigate and obtain information on the extent and amount of direct hospital payments made to physicians for on-call purposes;

   (b) to investigate and obtain information on the extent and amount of direct hospital payments to physicians for the performanee of clinical services;

   (c) to develop options and make recommendations to the Minister and the PSC concerning the appropriate payment mechanisms for on-call and clinieal services in hospitals and the introduction and implementation of those mechanisms, taking into consideration other initiatives including alternate payment arrangements.

4. After consultation with the Task Force, the MOHLTC reserves the right to appoint an auditor or auditors to assist the Task Force in its work.

5. The Task Force will begin meeting in May, 2003 and is required to submit it's report to the Minister and the PSC no later than December 31, 2003. It will meet as frequently as necessary in order to complete the mandate on time.

AGREEMENT

BETWEEN:

THE ONTARIO MEDICAL ASSOCIATION
(The "OMA")

- and -

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO,
(The "Government of Ontario")
AS REPRESENTED BY THE MINISTER OF HEALTH
AND LONG-TERM CARE
("MOHLTC")

WHEREAS the OMA and the MOHLTC are parties to an agreement which covered the period from April 1st, 1997 to March 31st, 2000 (the "1997 Agreement");

AND WHEREAS The Physician Services Committee, established under the 1997 Agreement, has recommended to the parties several initiatives during the term of the Agreement which were implemented during such term;

AND WHEREAS the Government of Ontario has historically consulted and negotiated with the OMA as the representative of the medical profession in Ontario;

AND WHEREAS the MOHLTC is the Minister of the Government of Ontario charged with health care in the Province of Ontario;

AND WHEREAS the parties wish to continue to work together in order to improve health care in the Province of Ontario;

NOW the OMA and the MOHLTC have come to the following Agreement:

1 GENERAL

1.1 The MOHLTC acknowledges the OMA as the representative of the medical profession for the purpose of these negotiations and this Agreement. For its part, the OMA acknowledges the responsibility of the MOHLTC to manage the Ontario health care system. Both the OMA and the MOHLTC acknowledge the on-going responsibility of the MOHLTC, the OMA and the medical profession it represents to ensure that reasonably accessible medical services are provided to all insured persons in Ontario requiring medical services.

1.2 The parties acknowledge that major and rapid changes are occurring in the way in which

health care is delivered in Ontario. Changes are necessary in order to meet the demands and needs of a changing Ontario population requiring health care services. The parties acknowledge that changes must be attained within appropriate budgets established by the Government of Ontario for the MOHLTC. The parties also acknowledge that the continued representation of the medical profession by the OMA during this time of rapid change will require further clarification and the parties agree to discuss this issue in accordance with the terms set out in this Agreement.

2 PHYSICIAN SERVICES COMMITTEE

2.1 The parties agree to continue the Physician Services Committee ("PSC") which is charged with the responsibility of developing a strong relationship between Ontario's physicians and the MOHLTC. The PSC will continue to provide a broad and structured process for regular liaison and communication between the MOHLTC and the medical profession, through its representation by the OMA. The mandate and terms of reference of the PSC are as set out in Appendix "A" to this Agreement.

3 REVISIONS TO THE SCHEDULE OF BENEFITS - PHYSICIAN SERVICES ("Schedule of Benefits")

3.1 The parties agree to the following revisions to the Schedule of Benefits:

a) 1.95% effective April 1, 2000,
b) 2% effective April 1, 2001,
c) 2% effective April 1, 2002, and
d) 2% effective April 1, 2003.

The parties agree that they will meet in March, 2003 to negotiate whether the 2% revision effective April 1, 2003 shall be increased and for this purpose may take into consideration the prevailing economic conditions.

4 INCORPORATION

4. The MOHLTC agrees to recommend to the Government of Ontario that it introduce legislation as soon as possible to allow Ontario physicians to incorporate and to further recommend that the Government of Ontario consult with the OMA.

5 ACADEMIC HEALTH SCIENCES CENTRES

5.1 The MOHLTC and the OMA agree that physicians working at Academic Health Sciences Centers ("AHSC") need to be funded in innovative ways in order for these institutions to fulfil their important patient service and academic activities. The MOHLTC intends to make physician alternative payment plans available to the individual AHSCs on a voluntary basis. Implementation issues with respect to such AHSCs are apart and separate

from this Agreement. However, the parties acknowledge that conversion of the actual value of services provided by physicians from the fee-for-service pool or pools will take place. The manner in which such conversions out of the fee-for-service pool or pools shall be calculated shall be agreed between the parties prior to such conversion. The MOHLTC acknowledges that it will incur additional costs to implement these alternative payment modalities.

6 PRIMARY CARE

6. The OMA and the MOHLTC have jointly established seven pilot sites across the Province to investigate the feasibility and effectiveness of the primary care reform models in place at each of these sites. The OMA and the MOHLTC are committed to continuing these efforts. The parties therefore agree to continue with primary care reform based on the following principles:

1 There will be freedom of choice for both physicians and patients as to whether they wish to participate in primary care reform, and

2. Evaluation of primary care reform shall continue in order to inform the parties of the preferred direction with respect to further implementation.

The issue of pbysician and patient accountability shall be determined after an evaluation of the PCR pilot sites.

6.3 The MOHLTC will contribute funding for the acquisition of Primary Care Reform ("PCR") information systems.

Pending an evaluation to the contrary, no limit shall be set on roster sizes in future Primary Care Network ("PCN") contracts, provided that the physician to whom the patient is rostered personally and directly provides the majority of primary care medical services to the patient.

6.5 Physicians choosing to participate in new PCNs shall be eligible to do so subject to the conditions established in the template agreements governing such sites and subject to the avsilability of sufficient funds in any given fiscal year of this Agreement. The template agreements to cover physicians participating in primary care reform are separate and apart from this Agreement. However, the parties acknowledge that conversion of the actual value of services provided by physicians to rostered patients from the fee-for-service pool or pools will take place. The parties further agree that the method of calculating such conversions shall be agreed prior to any further implementation. The MOHLTC acknowledges that it will incur additional costs to implement primary care reform.

6.6 The parties agree that the final form of the agreements for physicians participating in primary care reform shall be available for consideration by physicians in advance but will

not be offered for implementation prior to April 1st, 2001

7 PATIENT CARE ENHANCEMENTS

7.1 The parties agree to several initiatives that are designed to enhance the delivery of certain needed services to the patients of Ontario and to provide appropriate incentives to those physicians prepared to provide such services. Some of these initiatives will be provided through hospitals under the advice and supervision of the hospital Medical Advisory Committee. Other initiatives shall be provided for by changes to the Schedule of Benefits. The initiatives to be provided through changes to the Schedule of Benefits shall be effective July 1st, 2000, and the initiatives to be provided through hospitals shall be effective September1st, 2000.

7.2 The initiatives to be provided through hospitals are:

(1) GP hospital on-call coverage;
(2) Specialist hospital on-call coverage;
(3) Rurality premium; and
(4) GP anaesthesia premium,

and are more fully described in Appendix G to this Agreement.

7.3 The initiatives to be provided through changes to the Schedule of Benefits are:

(1) low volume obstetrics incentive;
(2) admission assessments;
(3) home care application;
(4) home care supervision;
(5) complex care of the elderly; and
(6) after-hour premiums.

and are more fully described in Appendix G to this Agreement.

7.4 Mental Health Sessional Payments

The parties agree to increase the current number of mental health sessional payments as more fully described in Appendix G to this Agreement.

7.5 Hospital On-Call Coverage Committee ("HOCC")

The manner by which each hospital shall be funded for on-call coverage (GP and Specialist) and the extent of such funding will be established through a joint hospital on-call coverage committee of the MOHLTC and the OMA in consultation with the Ontario Hospital Association.

It shall be the function of the HOCC to ensure that appropriate mechanisms are in place in each hospital to which such funds are flowed to ensure that the funds are used only for the purposes outlined and in the manner specified herein and to develop a template agreement dealing with the funding and service obligations for hospital on-call coverage. The HOCC shall also ensure that appropriate steps are taken at eligible hospitals to provide reasonable coverage in each specialty area for which funding is provided as a condition of such funding. It is recognized that some hospitals require a different mix and supply of priority medical programs and consideration may be given to changes in the categorization of specialties set out in Appendix "G" to this Agreement to accommodate such needs.

8 SYSTEM MANAGEMENT

8.1 The parties agree that there is an on-going need to manage the growth in the cost of the physician services system caused by factors such as an aging and increasing population, the addition of new physicians to the system, new technology and physician and patient behaviour.

8.2 The parties agree to establish a sub-committee of the PSC, the System Management Committee, to advise the PSC in connection with system management.

8.3 The MOHLTC acknowledges that resources separate and apart from any fee increases will be required to address these system management factors. The PSC may make recommendations to the MOHLTC with respect to the need for additional system management resources.

For the purpose of system management, the MOHLTC agrees that it will not introduce any clawbacks from payments during the term of this Agreement with respect to services rendered before or during the term of this Agreement, it being understood that the MOHLTC reserves its customary rights with respect to taking steps in relation to system growth.

9 TECHNICAL FEES

9.1 The parties recognize that utilization increases in technical fees are influenced by factors which are different, or of a different magnitude, from the factors which influence physician services generally, such as new technologies and the increasing demand for these technologies.

9.2 During the 1997 Agreement, the parties in conjunction with the Ontario Hospital Association established the Committee on Technical Fees ("COTF") to study technical fees and utilization and to report back to the three parties involved. Although an Interim Report has been prepared, no final recommendations have been made. The Interim Report

recommended that effective April 1st, 2001, the technical fees from the fee-for-service pool be combined with the amount spent by hospitals to provide similar in-patient services to form a combined technical fee pool to be jointly managed by the three parties.

9.3 Accordingly, the parties have agreed that no final decisions should be made at this time with respect to technical fees. However, on a temporary basis, the parties are agreed that in the interim they will segregate technical fees from professional fees, and that the COTF will investigate and make recommendations to the PSC concerning system growth and controls, fees and related matters with respect to technical fees. It is further agreed that the COTF will report back to the PSC its recommendations with respect to system growth and controls for the fiscal year 2000/2001 by July 31st, 2000.

9.4 The parties agree to segregate technical fees into a Technical Fees Pool ("T-Fees Pool") as of March 31st, 2000. The T-Fees Pool shall comprise all payments by OHIP for technical fees for diagnostic services provided in hospitals, independent health facilities and physician offices in fiscal year 1999/2000. The parties agree that for fiscal year 2000/2001, the T-Fees Pool will be augmented by an amount equal to 1.95% of the amount of the T-Fees Pool on March 31st, 2000.

9.5 The funding of the T-Fees Pool shall not be adjusted in fiscal year 2000/2001 in any other way until such time as the COTF investigates and makes recommendations to the PSC concerning system growth and controls, fees and related matters with respect to technical fees.

The recommendations of the COTF will be taken into consideration when deciding how to apply the percentage increases set out in sub-sections 3.1(b), (c) and (d) of this Agreement for technical fees in future fiscal years.

10 MALPRACTICE INSURANCE COVERAGE

Since the recent announcement by CMPA of coverage on a regional basis, and the very large increases in the cost of coverage that CMPA asserts would result, the parties agree on the urgent need to examine all available alternatives for the provision of malpractice insurance coverage to the physicians of Ontario.

The MOHLTC and the OMA agree to establish a Physician Malpractice Insurance Expert Committee to urgently evaluate all available options for the supply of malpractice insurance coverage to Ontario physicians, the anticipated cost of providing such coverage and how risk management and case management practices could be provided in conjunction with such coverage. The terms of reference of this committee stipulate that the coverage to be provided must be essentially equivalent to the malpractice insurance coverage currently provided by CMPA.

The parties agree that this expert committee will report to the parties no later than June

15th, 2000 with their recommendations. The parties agree to review these recommendations and to agree on the manner by which this coverage is to be provided and funded by July 15th, 2000. If the parties are unable to agree, they shall enter into negotiations to deal exclusively with this issue. The terms of reference of this committee are set out in Appendix "C" to this Agreement.

The Committee shall be cognizant of the potential negative impact of any increased financial burden upon the Government of Ontario and physicians of Ontario.

11 PHYSICIAN HUMAN RESOURCES

11 The parties agree to continue the Physician Human Resources Committee to report to and advise the PSC with respect to the following mandate:

(i) to report to the PSC on the recommendations of the Expert Panel on Health Human Resources ("Expert Panel");

(ii) to assist in the implementation of the Expert Panel recommendations pertaining to physician human resources;

to monitor programs that have been established or are established during the operation of this Agreement to deal with problems of oversupply or undersupply; and

(iv) to review the need for physician recruitment and retention in underserviced areas and to make recommendations to the PSC. The initial sites to be considered include the northern urban referral sites.

Elimination of New Entrant Discounts

Notwithstanding the provisions of the 1997 Agreement, the differentiated fees in effect in designated oversupplied areas shall cease to apply as of January 1, 2000.

12 NORTHERN AND RURAL RECRUITMENT AND RETENTION

12.1 The OMA and the MOHLTC agree to review the urgent need for physician recruitment and retention in underserviced areas. This task shall be given priority by the PSC and it shall make recommendations to the parties by November 30, 2000. The initial sites to be considered include the northern urban referral sites.

13 SCHEDULE OF BENEFITS

3. The parties agree that by December 31, 2000 they shall identify changes in the existing Schedule of Benefits which will result in annual savings of at least $50 million. This will be accomplished by a mix of tightening and modernization. The process for identifying and making the changes will be agreed upon by the parties.

14 GENERAL MATTERS

Thresholds

The parties agree that for fiscal year 2000/2001, the physician thresholds shall be:

GPs	$330,000	$355,000	$370,000
Specialists	$410,000	$435,000	$460,000
Reduction percentage applied to actual payments	33.3%	66.7%	75%

The parties agree that the in-hospital after-hours services listed in Appendix "D" shall not be included in income for the purpose of calculating thresholds.

The PSC will make recommendations to the parties regarding changes to thresholds in years 2, 3 and 4 of this Agreement.

Service Retention Initiative

The parties agree to establish a Service Retention Initiative to replace the existing SRI program and shall ask the Physician Human Resources Committee to investigate and make recommendations to the PSC with respect to this initiative and its implementation and monitoring.

Maternity Benefits

The parties agree to establish a Maternity Leave Benefits Program which will pay 50% of the fee-for-service billings or APP remuneration up to a maximum of $880 per week for 17 consecutive weeks to commence no later than two months following the date of birth of the child or date of the hospital discharge of the child. The details of this program, including its administration, will be developed by PSC for recommendation to the parties.

15 ALTERNATE PAYMENT PLANS/INTEGRATED HEALTH CARE SYSTEMS

The MOHLTC agrees that the OMA will be notified of all expressions of interest made to or by the Ministry to establish an Alternate Payment Plan "APP"), a health services organization, an integrated delivery system or integrated health care system or any other non-fee-for-service delivery model.

The MOHLTC further agrees that the OMA will be notified of any intention to commence

negotiations or re-negotiations with respect to any of the foregoing non-fee-for-service arrangements.

The OMA will be recognized as the representative of those physicians participating in a non-fee-for-service arrangement that request the OMA to represent them for the purpose of the negotiation or re-negotiation of the terms and conditions of their contractual relationship.

15.4 The MOHLTC agrees that the OMA shall be a participant in its own right in all AHSC APP negotiations.

The MOHLTC agrees that the OMA shall be the representative of all physicians converted to Primary Care Reform for the purposes of negotiating the template agreements that apply to all primary care sites.

The MOHLTC agrees that all agreements that it enters into, amends or renews, with any third party that provides for, or funds, in whole or in part, the compensation of physicians, shall contain a provision requiring all such physicians, whether a member of the OMA or not, to pay the OMA dues and assessments that the OMA would charge each such physician, if he or she were a member of the OMA and requiring the third party to deduct such amounts from the compensation owed to each physician and remit such amounts to the OMA. The MOHLTC further agrees that it shall require that the OMA be made a party to all such agreements with third parties with respect to the provisions regarding enforcement of OMA dues and assessments.

16 RESOURCE BASED RELATIVE VALUE SCHEDULE COMMISSION

16.1 The parties agree to continue the Resource Based Relative Value Schedule Commission "RBRVSC"). The mandate and terms of reference of the RBRVSC are as set out in Appendix "E" to this Agreement. The role of the RBRVSC is to determine the relative value of services provided by physicians on a revenue neutral basis. The parties agree that the process shall proceed as expeditiously as possible and that a full indivisible RBRV Schedule is to be produced as soon as possible.

16.2 The parties may agree that the implementation of the RBRVS be taken into consideration in deciding how to apply the percentage increases set out in Article 3 of this Agreement.

17 INCENTIVE FUNDING FOR RURAL STUDENT CLERKSHIP ROTATION

7. The MOHLTC will provide funding to encourage students to perform clinical rotations in a northern or rural area during their clerkship. This program will supplement any existing funding to a total maximum of $1,500 per month per student for transportation and accommodation. The funding is for a minimum of 4 weeks and a maximum of 12 weeks.

The details of this program shall be established by the parties.

18 GUIDELINE ADVISORY COMMITTEE

The parties agree to continue the Guideline Advisory Committee "GAC") to advise the PSC with respect to practice, prescribing and referral guidelines for physicians. The mandate and terms of reference for the GAC are as set out in Appendix "F" attached to this Agreement.

19 MEDICAL REVIEW COMMITTEE

The parties previously agreed to changes made to the regulations regarding the Medical Review Committee "MRC") under the *Health Insurance Act* and established a pre-screening process to review complaints prior to the referral to the MRC.

The parties agree to examine the manner in which physicians' billings are reviewed by the MOHLTC and by the MRC and to consider whether an alternative approach would be more appropriate.

Accordingly the parties agree to establish a joint committee with equal representation from the OMA and the MOHLTC to review the MRC process and make recommendations to the parties.

19.4 The committee will be instructed to prepare its report and recommendations for delivery to the parties during the first year of this Agreement.

20 ONTARIO GOVERNMENT FORMS

The OMA and the MOHLTC agree to establish a committee to review the present list of government forms and any new proposals for forms and consider the need and payment for completion of such forms.

21 TERM AND RENEWAL

21.1 This Agreement will terminate at the end of March 31, 2004. Negotiations to establish the next Physician Services Agreement will begin no later than January 10, 2004. The MOHLTC recognizes the OMA as the representative of the medical profession for the purpose of these negotiations.

The undersigned representatives of the parties hereby agree to unanimously recommend acceptance of this Agreement to their respective principals.

DATED AT TORONTO, ONTARIO THIS 26 DAY OF APRIL, 2000.

FOR THE OMA

FOR THE MOHLTC

APPENDIX "A"

PHYSICIAN SERVICES COMMITTEE

1 The PSC will consist of five members appointed by the OMA and five members appointed by the MOHLTC, all of whom will be expected to remain on the Committee for a minimum of two years and adopt roles of leadership in the performance of the PSC mandate.

2. The PSC will be chaired by a professional facilitator chosen by the parties.

3. The PSC will continue training in conflict resolution and relationship-building as the parties may deem appropriate.

4. The agenda of the PSC will be as determined by the facilitator in consultation with the co-chairpersons appointed by each party.

5. Each party will fund its own members and the MOHLTC will fund the administration costs of the Committee and the cost of the facilitator.

6. The PSC will meet at least twice per month.

7. The mandate for the PSC is as follows:

(i) to build and sustain a strong positive working relationship between the Government of Ontario and the medical profession;

(ii) to receive and consider reports and recommendations as set out in this Agreement;

to advise the MOHLTC and the OMA in connection with the changing role of physicians within the health care system, including possible improved models of delivery of and compensation for services;

to develop recommendations, either on its own initiative or as a result of reports and recommendations received from committees reporting to it, to MOHLTC leading to the enhancement of the quality and effectiveness of medical care in Ontario;

(v) to work together toward identifying efficiencies and maximizing return on the funding provided for medical services;

to review utilization on a monthly basis and recommend to the MOHLTC and the OMA appropriate and effective steps to be taken to deal with utilization changes;

to develop and recommend patient education programs;

to review any disagreement arising out of this Agreement referred to it by either party and make recommendations to the parties regarding the resolution of the disagreement. However, the parties need not make such a referral as a pre-condition to commencing any other dispute resolution mechanism;

to study the report of the Physician Malpractice Insurance Expert Committee and to make recommendations to the parties as to how malpractice insurance for Ontario physicians should be provided effective January 1st, 2001; and

(x) to monitor the impact of hospital restructuring on utilization and the cost of physician services.

8. The PSC is committed to giving appropriate opportunity to affected parties to provide timely input to the PSC before making recommendations to the MOHLTC and the OMA.

APPENDIX "B"

AFTER HOUR PREMIUM CODES

Special Visit to Hospital In-Patient

C994—Evenings, Saturdays, Sundays, Holidays—first patient seen..... $43.70
--for each additional patient requiring a special visit and seen during the
C995--same special visit, add 50% to consultation or visit—minimum premium... $20.63
C996—Nights—first patient seen..... $65.58
--for each additional patient requiring a special visit and seen during the
C997--same special visit, add 75% to consultation or visit—minimum premium... $31.20

Special Visit to Office or Other Similar Facility: use the appropriate listing above but substitute the prefix "A" for "C".

Special Visit to Patient's Home or a Multiple Resident Dwelling: Use the appropriate listing above but substitute the prefix "B" for "C". Applies only to B994 and B996.

Special Visit to Emergency Department or Out-Patient Department: Use the appropriate listing above but substitute the prefix "K" for "C".

Special Visit to Long-Term Care Institution: Use the appropriate listing above but substitute the prefix "W" for "C". Applies only to W994 and W996.

C998B—Special Visit to Assist at Non-Elective Surgery—evenings, weekends, holidays...$43.70
C999B—Special Visit to Assist at Non-Elective Surgery—nights.....$65.58

E400B—surgical assist--evenings, weekends, holidays. ....By 40%
E401B—surgical assist—nights..... ..By 62.5%

C998C—Special Visit, anaesthesia, Non-Elective—evenings, weekends, holidays.....$43.70
C999C—Special Visit, anaesthesia, at Non-Elective—nights.....$69.62

E400C—anaesthesia--evenings, weekends, holidays.. ...By 40%
E401C—anaesthesia—nights..... .By 62.5%

E409—non-elective surgical procedure premium—evenings, weekends, holidays. ...40%
E410—non-elective surgical procedure premium—nights..... .62.5%

NOTES:
1. C99x codes will be limited to a maximum of 3 per physician per day.
2. Evenings are defined as 18:00h to 24:00h.

APPENDIX "C"

PHYSICIAN MALPRACTICE INSURANCE EXPERT COMMITTEE

1. The Physician Malpractice Insurance Committee will consist of ten members appointed by the parties, and an expert chair acceptable to both parties.

2. The MOHTLC will fund the costs of the committee.

3 The mandate for the Physician Malpractice Insurance Expert Committee shall be:

(i) to investigate on an urgent basis the options by which physician malpractice insurance coverage essentially equivalent to the physician malpractice insurance coverage currently provided by CMPA could be made available to Ontario physicians;

to examine the cost of providing such insurance coverage;

to determine how risk management and case management practices could be provided in conjunction with such coverage;

to report its findings and recommendations to the parties by no later than June 15th, 2000; and

(v) to perform other related functions as may be requested by the PSC.

APPENDIX "D"

IN-HOSPITAL AFTER-HOURS SERVICES EXEMPTED FROM THRESHOLDS

Special Visit to Hospital In-Patient: C994, C995, C996, C997 and associated services

Special Visit to Emergency Department or Out-Patient Department: K994, K995, K996, K997 and associated services

C998B and C999B: Special Visits to Assist at Non-Elective Surgery and associated services

E400B and E401B: surgical assist premiums and associated services

C998C and C999C: Special Visits, anaesthesia, at Non-Elective Surgery and associated services

C109 and C110: Special Visits, Non-Elective Diagnostic and Therapeutic Procedures and associated services,

E400C and E401C: anaesthesia premium and associated services

E402 and E403: Special Visits, epidurals and associated services,

E409 and E410: non-elective surgical procedure premium and associated services

Emergency Department—Physician on Duty: H151 to H154, H121 to H124, H112, H113 and associated services

APPENDIX "E"

RESOURCE BASED RELATIVE VALUE SCHEDULE COMMISSION MANDATE AND TERMS OF REFERENCE

Mandate:

1 To produce a complete and indivisible Resource Based Relative Value Schedule for recommendation to both the OMA and the MOHLTC.

2. To receive submissions from the MOHLTC, the OMA and other appropriate parties as determined by the Commission, prior to producing such schedule.

Terms of Reference:

The Commission will consist of two appointees from each of the OMA and the MOHLTC and a neutral chair to be agreed upon by both parties.

2 The MOHLTC will pay for the Chair of the Commission and such expenses of the Commission as agreed upon between the OMA and the MOHLTC.

3. All payments to and expenses incurred by the appointees of the MOHLTC and the OMA will be the responsibility of the MOHLTC and the OMA respectively. Similarly, all expenses incurred by the MOHLTC, the OMA or any other appropriate party in relation to making submissions to the Commission will be borne by the party making the submissions.

4 The Commission will produce the complete and indivisible schedule as soon as possible.

5 The Commission will continue to provide an adequate opportunity to all appropriate parties to make submissions at all remaining stages of its mandate.

6 The Commission will continue to establish its own procedure and rules.

7 The MOHLTC and the OMA agree to assist the Commission by providing to it available information on RBRVS. All information supplied by either party will be made available by the Commission to the other party on the explicit understanding that such information will be used only for the purposes of making submissions to the Commission.

8 The Commission will report its findings and recommendations, together with a complete and indivisible RBRV Schedule, to the OMA and the MOHLTC simultaneously. If the Schedule so produced is implemented by the MOHLTC, it will be implemented in its entirety.

APPENDIX "F"

GUIDELINE ADVISORY COMMITTEE

1 The Guideline Advisory Committee ("GAC") will consist of three members appointed by the OMA, three persons appointed by the MOHLTC and a chair to be selected by the parties.

2. The GAC will be aided in its work by the appointment of a person from the Institute for Clinical Evaluative Sciences.

3 Each party will fund its own members and the MOHLTC will fund the administration costs of the Committee.

4. The mandate for the GAC is:

(i) to develop and recommend to the PSC appropriate strategies for the implementation and monitoring of practice and referral guidelines;

(ii) to make recommendations for assisting in the implementation of prescribing guidelines; and

(iii) to consult widely with the profession in the development of its recommendations.

5. All information concerning physician practices and procedures obtained by the GAC shall be maintained confidentially by it and used only for the purpose of developing appropriate guidelines.

APPENDIX "G"

PATIENT CARE ENHANCEMENTS

A. HOSPITAL INITIATIVES

(1) General Practice Hospital On-Call Coverage

For the purpose of General Practice hospital on-call coverage, eligible hospitals are all hospitals where the services contained in this Section (1) are provided except federally funded hospitals and those within an AHSC that has an alternate funding plan covering these services.

General and family practitioners shall be reimbursed for being available to provide after-hours hospital services such as surgical assisting, emergency department back-up coverage and in-patient care.

The following will be used to determine the amount payable for full coverage per eligible hospital per 12 month period.

(a) All Hospitals Except Level A, B, 1, 2 or 3 Hospitals (as set out in the Alternative Funding Agreement for Emergency Services)

# of Participating Physicians	Payment per Hospital
5 or more	$75,000
4	$68,000
3	$60,000
2	$60,000
1	$45,000

(b) Level A, B, 1, 2 or 3 Hospitals (as set out in the Alternative Funding Agreement for Emergency Services)

# of Participating Physicians	Payment per Hospital
5 or more	$40,000
4	$36,000
3	$33,000
2	$30,000
1	$25,000

(2) Specialist Hospital On-call Coverage

For the purpose of specialist hospital on-call coverage, eligible hospitals are all hospitals where the services contained in this Section (2) are provided except federally funded hospitals and those within an AHSC that has an alternate funding plan covering these services.

This initiative is being undertaken to address on-call specialist coverage in Ontario. Coverage less than full coverage shall be prorated on approval by HOCC.

(a) Level II Specialists

The parties agree that funding will be provided for specialists being available to provide on call hospital services in the specialties of Anaesthesia, General Surgery, Orthopaedic surgery, Psychiatry, Internal Medicine, Obstetrics and Gynaecology, and Paediatrics.

The following will be used to determine the amount payable to eligible hospitals for full coverage per specialty per 12-month period.

# of Participating Physicians	Payment per Hospital
5 or more	$75,000
4	$68,000
3	$60,000
2	$60,000
1	$45,000

(b) Level III Specialists

Funding will also be provided to specialists being available to provide on-call hospital services in the specialties of Cardiothoracic Surgery, Neurosurgery, Cardiology, Emergency Medicine, Gastroenterology, Haematology/Oncology, Neurology, Ophthalmology, Otolaryngology, Plastic Surgery, Respiratory Medicine, Diagnostic Radiology, and Urology.

The following will be used to determine the amount payable to eligible hospitals per specialty per 12-month period.

# Participating Physicians	Payment per Hospital
5 or more	$15,000
4	$14,000
3	$13,500
2	$12,000
1	$8,000

(c) Level IV Specialists

Funding will also be provided to eligible hospitals for specialists being available to provide on-call hospital services in the specialties of Immunology, Dermatology, Physical Medicine and Rehabilitation, Rheumatology, Nuclear Medicine and Radiation Oncology.

Where one of the above specialists, in an eligible hospital, performs a special visit in the evening, night, on weekends or holidays, the hospital shall receive, a call-in fee of $100 in addition to any other fee-for-service amounts which may be billed. The physician will be limited to 2 call-in fees per calendar day.

(3) Rurality Premiums

Each hospitals set out in Appendix "H" to this Agreement shall receive a $15,000 per annum financial incentive for GP on-call funding. This incentive is in addition to the on-call funding as set out in this Appendix.

GP Anaesthesia Premium

This premium is intended to assist in retaining GP anaesthetists within rural communities.

Each eligible hospital as determined by the HOCC that does not have a Royal College certified anaesthetist associated with it and where general practitioners provide a minimum of $10,000 of anaesthetist services per year will receive an additional $15,000 per annum. This incentive is in addition to the on-call funding as set out in this Appendix.

B AMENDMENTS TO THE SCHEDULE OF BENEFITS

(1) Low Volume Obstetrics Incentive

It is important to maintain family physician involvement in obstetrical services

Where a physician has only one delivery in a calendar day, there shall be a 50% premium applied to such delivery, to a maximum of 25 deliveries in any fiscal year per physician. This premium will apply only to the following codes as set out in the Schedule of Benefits: P006, P009, P018, P020 and P038.

Admission Assessments

General Practitioners who are on-call and admit a non-elective patient through an emergency room or as a transfer from another institution will receive an admission assessment fee of $75.00. This fee compensates the physician for performing a complete history and physical examination. It cannot be billed within 30 days of any other admission assessment for that patient and is available only to the most responsible physician dealing with that patient in the hospital.

Home Care Application: $16.50

This fee will be payable to the most responsible physician for personal completion and submission of a home care service request form to the Community Care Access Centre ("CCAC") on behalf of a patient for whom the physician provides on-going primary care. The service may be claimed in addition to an appropriate assessment.

(4) **Home Care Supervision: $10.40**

This fee will be payable to the most responsible physician for providing advice, direction or information in response to an inquiry from staff of a CCAC or CCAC contractor on behalf of a patient for whom the physician provides on-going primary care. The physician must record the date, question, response and identity of the CCAC staff in the patient's medical record.

(5) **Complex Care of the Elderly: $10.30**

A 20% premium will be added to the general assessment code (A003) for services provided to patients who are 75 years of age or older. This general assessment premium can be charged only once per patient per year.

Mental Health Sessional Payments

Effective April 1, 2000 the number of psychiatry sessions for patients will increase by 13,500 per year.

After Hour Premiums

To compensate physicians who perform after hours work, there will be an increase in the following after hour premium codes and special visit premium codes:

(a) Evening and night in-patient services;
(b) Special visits to the office;
(c) Special visits to the emergency room or out-patients department;
(d) Special visits to long term care institutions;
(e) Special visits to patient's home;
(f) Anaesthetics or surgical assists; and
(g) After hour obstetrical and non-elective surgical procedures,

which are more specifically descibed in Appendix B. Notwithstanding sub-section 3.1a), these premium codes shall be the amounts listed in Appendix B. Thereafter, the System Management Committee will consider the feasibility of making further revisions to the premium codes listed in Appendix B and make recommendations in that regard to the PSC.

APPENDIX "H"

HOSPITALS ELIGIBLE FOR THE RURALITY PREMIUM

Bruce Peninsula Health Service – Lions Head
Bruce Peninsula Health Service – Wiarton
Campbellford Memorial Hospital
Centre Grey General Hospital, Markdale
Chapleau General Hospital
Deep River and District Hospital
District Health Centre, Sioux Lookout
Dryden District General Hospital
Durham Memorial Hospital
Espanola General Hospital

Four Counties General Hospital, Newbury
Glengarry Memorial Hospital, Alexandria
Haliburton Highlanda Health Services - Haliburton
Haliburton Highlands Health Services – Minden
Kirkland and District Hospital
Mattawa General Hospital
Meaford General Hospital
MICS Group of Hospitals – Cochrane
MICS Group of Hospitals – Iroquois Falls
MICS Group of Hospitals – Matheson

Notre Dame Hospital, Hearst
Palmerston and District Hospital
Quinte Healthcare Corporation – Bancroft
Riverside Health Care Facilities – Fort Frances
Saugeen Memorial Hospital, Southampton
Sensenbrenner Hospital, Kapuskasing
Smooth Rock Falls Hospital
South Grey Bruce Health Centre - Chesley
South Grey Bruce Health Centre - KIncardine
South Grey Bruce Health Centre – Walkerton

South Huron Hospital – Exeter
St. Francis Memorial Hospital, Barry's Bay
St. Joseph's General Hospital, Blind River
St. Joseph's General Hospital, Elliot Lake
Temiskaming Hospitals, New Liskeard
West Nipissing General Hospital, Sturgeon Falls
West Parry Sound Health Centre
Wingham and District Hospital

LETTER OF UNDERSTANDING

April 26, 2000

Dear Dr. Wexler:

Re: Data from the Minister of Health and Long-Term Care

This will confirm our understanding with respect to the provision of data required by the OMA or the PSC and its reporting committees.

1 Negotiations

The OMA will continue to provide the MOHLTC with a list of all data it seeks for negotiation or other agreed to purposes. In return, the MOHLTC will provide the OMA with all requested data that it believes it can legally so provide. In the event there is disagreement over whether specific data so requested can be made available, the issue will be referred to the Privacy Commissioner for determination. All information obtained by the OMA shall be maintained confidentially by it and used solely for the purpose of negotiations or other approved purposes.

2. PSC and Constituent Committees

The PSC will continue to provide the MOHLTC with a list of all data it seeks for the purposes required by it or its constituent committees. In return, the MOHLTC will provide the PSC with all requested data that it believes it can legally so provide. In the event there is disagreement over whether specific data so requested can be made available, the issue will be referred to the Privacy Commissioner for determination. All information obtained by the OMA shall be maintained confidentially by it, the PSC and its constituent committees and used solely for the purposes of the PSC and its constituent committees.

3. OMA Monitoring Information

The MOHLTC agrees that the OMA requires certain data in order to meet its obligations to its members and pursuant to the Agreement. The OMA will provide the MOHLTC with a list of all data it seeks for monitoring purposes. In return, the MOHLTC will provide the OMA with all types of data reasonably available and that it believes it can legally provide. In the event there is disagreement over whether specific data so requested can be made available, the issue will be referred to the Privacy Commissioner for determination.

Yours truly,

Elizabeth Witmer
Minister of Health and Long-Term Care

LETTER OF UNDERSTANDING

April 26, 2000

Dear Dr. Wexler:

Re: Meetings with the Minister of Health and Long-Term Care

This will confirm our understanding with respect to regular meetings between the Ontario Medical Association and the Minister of Health and Long-Term Care.

As part of our intent to strengthen the relationship among the medical profession, the Ontario Medical Association and the Minister of Health and Long-Term Care, the Minister of Health and Long-Term Care will meet with the President of the OMA and the CEO of the OMA at least once every two months for the purpose of discussing matters of mutual concern and interest.

It is acknowledged that these meetings are not intended to be in place of the meetings of the Physician Services Committee.

Yours very truly,

Elizabeth Witmer
Minister of Health and Long-Term Care