Compendium of DSWG Policy and Planning Questions

DSWG Mandate: To develop recommendations on data supports for work and HHR. The focus of these recommendations will be on entry to practice and end of practice physicians.

Notes: This list is not exhaustive. Questions are listed in no particular order. Questions are specific to physicians but could almost always be asked in relation to other health professions as well. Questions are not always formulated in a way that would be suitable for research. In relation to each question, we could ask: Do we have the data to address this question? If not, what would be needed?

Patient-Focused Demographics & Care Needs:

What are the characteristics of population *x* [defined according to geographic area, age, clinical characteristics, or other criteria]?

What are the care needs of population x?

How do patient characteristics translate into care needs?

How do social determinants of health influence patients' need for healthcare services? How does social care (housing, poverty reduction and food security initiatives, disability supports) influence patients' need for healthcare services?

How are trends in chronic or complex disease burden of the population changing over time, and what healthcare/workforce resources will be needed to anticipate and respond to these changes?

Physician-Focused Demographics & Care Provision:

What are the characteristics of the current physician population (e.g. age, gender, specialty, geographic area, focus of practice such as clinical/admin/research)?
What is the average retirement age of physicians in [Specialty X]?
Who provides what care, for whom, where, and when?
Do we have enough physicians?
How many physicians do we need (now and in the future)?
How many physicians are working in [geographic area]? What kind of care is available in this community? How much care do these physicians provide? What kind of care/services do these physicians provide?
Does the physician workforce reflect the population in terms of ethnic/racial diversity?

Virtual Care & Technology

Can virtual care alleviate care deficits in underserved communities?

What are the unique challenges associated with providing care in a virtual environment, and how can these challenges be addressed?

What are the unique challenges associated with providing care in rural, remote, and northern communities? How can these challenges be addressed?

How is emerging technology (AI, telemedicine, digital health records) impacting health workforce needs and configurations?

What digital tools and technologies are currently being used in healthcare settings across Ontario, and what is their impact on care delivery?

How effectively are electronic health records (EHRs) being integrated into different healthcare settings, and what are the challenges and benefits observed?

How are data analytics and AI being utilized to predict and plan for future healthcare needs and resource allocation?

How does the integration of digital health solutions affect patient access to services?

What technological innovations are needed to enhance the efficiency and effectiveness of healthcare teams in Ontario?

What are the training and support needs for healthcare providers in adopting new digital tools and technologies?

How can technology be leveraged to better track and manage patient care journeys across different healthcare providers and settings?

What are the impacts of digital health technologies on healthcare staffing levels and workload? How are digital health technologies influencing physicians' choice of practice location and style (e.g., telemedicine, remote monitoring)?

What is the prevalence and impact of using AI and machine learning tools in clinical decisionmaking among physicians in Ontario?

How are digital tools reshaping the time physicians spend on clinical activity, research, administration, teaching, and leadership roles?

What are the patterns and trends in telehealth and virtual care adoption among early-career, mid-career, and late-career physicians?

How are physicians adapting their practice patterns in response to advancements in healthcare technology (e.g., remote patient monitoring, digital diagnostics)?

What are the challenges and barriers faced by physicians in adopting and integrating digital health technologies into their practice?

How is technology affecting the patient-physician interaction and relationship in different specialties?

What role does technology play in physician attrition and career transitions, particularly in relation to workload and burnout?

How are digital health innovations influencing the emergence of new specialties or subspecialties within medicine?

What factors predict a physician's adoption and effective use of digital health technologies in their practice?

System Characteristics & Policy Impacts

What is necessary to build a sustainable health workforce?

What incentives will best encourage physicians to practice in areas of greatest need? How do care needs translate into health system [physician/allied health/team] resources? How many [primary care physicians/specialists/ subspecialists] does this community need? How do we expect patient characteristics and care needs to change over time? How do specific characteristics and community needs translate into service requirements? (cancer, aging, mental health, palliative care)

Which health professionals are on [Team X]? What services do they deliver? Who does what? Which ERs in Ontario have had to close? When? Why?

What are the wait times for [procedure x] in [community/hospital y]?

How many patients are on the waiting list for [procedure x]?

How does the organization of care provision influence patient outcomes? What configurations result in the best outcomes?

What ancillary resources (equipment, space, other providers (technicians and technologists), funding) do physicians need in order to be able to do their work?

Can we capture each interaction a patient has with the health workforce on a given care journey? (Paramedic, ER triage RN, ER PA, porter, x-ray technician, ER RPN, ER MD, social worker, home care RN, NP or family MD...)

How does the distribution of healthcare resources align with the need for these resources? Does every community in Ontario have access to the services needed to address mental health, the opioid crisis, end-of-life care, pediatric care, cancer care...?

How have recent policy changes impacted the allocation and distribution of healthcare resources across Ontario?

What policies have been effective in addressing shortages in high-need medical specialties and underserved areas?

How do different healthcare funding models affect the efficiency and quality of care delivery in Ontario?

How are changes in healthcare policy influencing the evolution of team-based care and interdisciplinary collaboration?

How do current healthcare policies support or hinder the adoption of innovative care models (e.g., patient-centered care, integrated care pathways)?

How do recent and proposed healthcare policies impact the flexibility and resilience of the healthcare system in response to public health crises or pandemics?

Practice Activity, Style & Capacity

Where are physicians choosing to practice now? What factors influence these choices/decisions?

How much care [hours/days/visits/procedures] does Physician X (identified with a numeric unique identifier only) provide?

How does Physician X (identified with a numeric unique identifier only) spend his/her time? Clinical activity? Research? Admin? Teaching? Leadership?

What are the factors that influence how physicians spend their time?

What are the patterns of practice of early-career physicians? Mid-career physicians? Late-career physicians?

What practice challenges are physicians experiencing at various career stages?

What factors influence how physicians change their practices over time?

What is the annual attrition rate of physicians in [Specialty X/Geography Y]?

How are practice patterns of physicians in [Specialty X/Geography Y] changing over time? What factors predict retirement?

What factors influence physician attrition? E.g. what factors contributed or influenced physicians' moves to a different jurisdiction, province or country, or made them decide to cut back on their practice activities, retire, or to leave practice altogether?
What supports could encourage physicians to delay retirement?
How can physicians be supported in transitioning between practice activities (in particular, back to providing comprehensive primary care or to other practice activities that fill unmet community needs)?
What is the rate of attrition in primary care, and how has it changed over time?
What factors predict rural practice?
What factors predict comprehensive primary care practice?
How is the practice of Medicine changing over time?

How are physician practices changing over time?

What is the rate of attrition from the provision of clinical care? What are physicians doing instead?

How is workload best measured for Specialty X? What constitutes a Full Time Equivalent for Specialty X?

Medical Education & Career Pathways

How many medical students/residents/fellows are in training? Where are they training? Where are they expected to practice?

What factors predict where a physician or medical trainee will choose to practice?

What do medical students need to know to help them make career decisions?

What factors predict medical student specialty choice?

How can we make comprehensive primary care more attractive/appealing to medical students and residents as their career choice?

What factors predict medical student and resident location choice?

How many physicians do we expect to need in the future? What training/skills will these physicians need to have?

How can we support students from remote, rural, and racialized communities to undertake medical training?

How many residency positions do we need to accommodate increased medical school enrolment?

How many clinical teachers do we need to make sure that medical students receive a highquality education?

How many international medical graduates are currently in Ontario but unable to practice? What pathways to practice are available to international medical graduates who want to practice in Ontario? What supports are available to help these physicians?

Crisis Response & Health System Resilience

How can the physician workforce be mobilized quickly to respond to environmental disasters (e.g., wildfires, floods)?

What is the impact of environmental disasters on the distribution and availability of physicians in affected areas?

How can we ensure equitable distribution of physician resources during and after environmental disasters?

What training and preparedness measures are necessary for physicians to effectively respond to environmental disasters?

How do environmental disasters affect the retention and mental health of physicians in affected regions?

How prepared is the physician workforce to handle a sudden increase in healthcare demand during a pandemic?

What measures are needed to support and protect the mental health of physicians during a pandemic?

How can we optimize the deployment of physicians to areas with the highest need during a pandemic?

How can telemedicine and other technologies be leveraged to support the physician workforce during a pandemic?

How can the physician workforce be rapidly deployed to respond to acute calamities such as building collapses or terrorist attacks?

What are the immediate and long-term impacts of such calamities on the physician workforce's availability and distribution?

How can we ensure that physicians receive adequate training to handle the specific health challenges posed by such calamities?

What are the key factors that influence the ability of physicians to remain operational during a prolonged crisis?

Mental Health & Burnout

What are the mental health experiences of physicians?

How does burnout relate to workload?

How does burnout contribute to retirement intention?

What do physicians need to feel fulfilled in their practices?

What are the impacts of healthcare policies on the mental health and well-being of healthcare professionals?

What staffing levels are needed to prevent burnout in [physicians/allied health providers]? What staffing levels result in the best outcomes for patients?

Locums

Where are locums needed? Who is working as a locum? Where? When? How much? How much redundancy is needed in the system to allow physicians to take time away for CME, vacation, family leave?