Ontario Medical Association

Guidance for Hospital Preparedness and Management of COVID-19

Ontario Medical Association, May 15, 2020

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Introduction

The 2019 novel coronavirus (COVID-19) has presented a number of serious challenges to our health care facilities. As a system, we have mobilized to realign certain services and reduce deferred services in order to prioritize our response to COVID-19. For the purpose of this document, “deferred services” refers to services that were specifically deferred or would have been deferred (i.e. identified as “deferrable”).

For the next 6 to 12 months, planning must consider that COVID-19 patients will continue to need hospital-based care, but hopefully at a pace manageable within the current ramped up acute care and critical care capacity. However, any planned response to a pandemic must also include the need for the system to respond to future surges/outbreaks. Any plan should also include a process to re-introduce deferred services in a graduated manner. Timely re-introduction of deferred services is crucial to protect the health of patients with non-COVID-19 conditions and to ensure continuity of the health care system as a whole.

As such, any plan must consider parallel systems of care that strive to keep COVID-19 patients separate from non-COVID-19 patients requiring essential and deferred care, while recognizing that not all patients with COVID-19 will be known on presentation due to risk of asymptomatic and pre-symptomatic transmission.

As we consider future potential for surges/outbreaks and the ramping up of deferred services, attention must be paid to the lessons learned from other jurisdictions during the current surge and from the SARS Commission. Legally, our public health system, our public authorities, and our institutions (such as hospitals) have a duty of care to the public and to health care workers that incorporates the appropriate standard of care in a pandemic caused by a novel and largely unknown pathogen.

The SARS report called for the incorporation of the precautionary principle into all Ontario’s public health and worker safety systems. Indeed, language to this effect was adopted in the wake of the SARS outbreaks in 2003. The SARS report indicated that in any future disease crisis in Ontario, the precautionary principle must guide the development, implementation and monitoring of procedures, guidelines, and processes. Moreover, it further stated that the precautionary principle must guide the development, implementation and monitoring of worker safety procedures, guidelines, processes and systems.

Recommendations are presented below that are both evidence-based, considering the experience of other jurisdictions and of SARS, as well as precautionary in nature, considering the legal need to incorporate this principle into decision-making regarding the coronavirus to ensure adequate protection of both potential patients and health care workers within hospitals.

Given the novel nature of COVID-19, grey literature was the primary source of evidence available, particularly reports and guidance issued by national and international health organizations and centres for health research, with scholarly sources utilized as available and support from media sources. Further, while these recommendations are based on implemented experience and/or expert advice, the individual impact of these proposed measures is as yet unknown and the precautionary principle must be used to guide the implementation of these recommendations.

This guidance is divided into three parts and reflects the need to prepare hospitals for future surges/outbreaks of COVID-19, as well as to enable the graduated re-introduction of deferred services in hospitals. This guidance is intended to support hospitals as they undergo and plan for both streams of work, as well as inform how government and other health system partners can support hospitals in this planning. It builds on the document 'A Measured Approach to Planning for Surgeries and Procedures During the COVID-19 Pandemic' from Ontario Health, released May 7th, 2020, which focusses on feasibility of managing deferred care with criteria for ramping up, as well as roles and responsibilities of Ontario Health, regions, and hospitals in surgical and procedural planning during the COVID-19 pandemic. This document focusses on the structure and operations of hospitals and alternate health facilities (AHFs) to manage deferred care while minimizing the risk of spreading COVID-19 and preserving capacity for a future outbreak/surge.

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Part III: Guiding Principles for Identifying Deferred Services to be Re-introduced in Hospital Setting

Deferred services should be identified for reintroduction in the hospital setting according to principles based on three key factors:

1. Patient factors, including a patient's condition, co-morbidities, physical, mental, and social well-being, and the options and risks related to their required care. Risk is according to the impact of waiting on patients' physical and mental health;
2. System capacity factors, including the resources required to provide specific services; and,

3. COVID-19-specific factors, including the prevalence within the community, testing, and the risk of exposure to and transmission of COVID-19 presented by providing a service.

The principles are detailed in Part III.

Part I: Designating COVID-19 Hospital Sites and Managing COVID-19 within the Primary Hospital Site

This Part I provides hospitals and the system at large with recommendations on designating COVID-19 hospital sites and managing COVID-19 within the primary hospital site, based on early learnings and guidance from other jurisdictions during this current surge, as well as lessons learnt from experience with SARS. These recommendations are applicable for hospitals to prepare for future COVID-19 surges/outbreaks, as well as manage COVID-19 cases to enable the graduated re-introduction of deferred services in hospitals. In applying these recommendations, consideration must also be made for the unique circumstances in rural communities, and modification of the recommendations may be required for rural hospitals.

1. Hospitals should be designated based on key principles

Several provinces have designated hospitals as COVID-19 sites based on their provincial modelling and surge capacity planning. Designated COVID-19 sites can continue to be used to enable the re-introduction of deferred services in other hospital settings.
Here are some key principles for the designation of COVID-19 hospitals in Ontario based on early learnings and past experiences:

- **Designation of COVID-19 hospitals must be a phased approach, recognizing that the number of designated hospitals will increase as the number of cases increases in the province.**
    - British Columbia initially designated 19 COVID-19 hospitals based on modelling comparing, at the time, critical care capacity with the likely scenario of reaching below or at a Hubei epidemic level. As part of its surge capacity planning, if BC reached a Northern Italy epidemic level, all hospital sites would have been needed.
    - Saskatchewan divided the province into 4 regions and planned for a mix of COVID-19, non-COVID-19, and mixed hospitals based on a staged response to increased COVID-19 demand in a given geographical area.

- **Designation of COVID-19 hospitals can be supplemented with establishing alternate health facilities (AHFs) in pre-existing public facilities or constructing on hospital sites to rapidly increase capacity of hospitals.**
    - AHFs can be established for COVID-19 patients, including mild/moderate cases, or emergency and triage, or severe and intensive care cases. AHFs can also be established for acute non-COVID-19 patient care to increase capacity within the

primary hospital site for COVID-19 patients. See Part II: Alternate Health Facilities for further details.
- British Columbia intends to treat critically-ill COVID-19 patients at hospitals, and establish off-site facilities for non-COVID-19 patients.
- Saskatchewan has only planned field hospitals in Regina and Saskatoon so far, based on the principle of using existing capacity first before accessing expanded capacity.

➢ **Assess readiness of designated hospitals to receive COVID-19 positive patients**
- One of the major criticisms of the SARS Alliance (the four designated SARS hospitals during the second SARS outbreak in Ontario) as reported in the SARS Commission Report was that two of the hospitals frequently did not have beds.
- World Health Organization (WHO) Regional Office for Europe and US Centers for Disease Control and Prevention (CDC) have developed hospital readiness/preparedness checklists with key actions that need to be taken by hospitals to ensure a rapid response to a COVID-19 outbreak.

➢ **Designated COVID-19 hospitals and AHFs should be leveraged beyond COVID-19 surges to support the gradual ramp-up of deferred services**
- Designated COVID-19 facilities can be used to facilitate the reintroduction of deferred services while minimizing the risk of future surges, the infection of patients receiving non-COVID-19 related care, and the draining of PPE resources. Leveraging both the segregation of patients afforded by designated facilities as well as their established infection prevention and control procedures can enable a safer and smoother ramp-up of deferred services in non-COVID-19 facilities.
- However, given the potential for patients in non-COVID-19 facilities to become positive after admission, hospitals and AHFs need mechanisms in place to handle such outbreaks, including for example, for patients who are too sick to transfer from emergency departments.

2. Spaces and patients should be segregated and cohorted to reduce the risk of spreading COVID-19 within the hospital

Several countries have established alternate health facilities (AHFs) to segregate COVID-19 patients from other patients. See Part II: Alternate Health Facilities for further details. However, maintaining segregation of patients within a hospital is essential to protect other patients and health care workers, both during a surge/outbreak and to enable re-introduction of deferred services. Segregating spaces and cohorting patients by COVID-19 status will be particularly important to enable the safe ramping up of deferred services in hospitals for non-COVID-19 patients while COVID-19 patients are still receiving care in the same facility. Segregation of non-COVID-19 patients must however be mindful of potentially asymptomatic or pre-symptomatic patients. As a result, patients as well as health care providers and other hospital staff that screen negative for COVID-19 symptoms cannot conclusively be designated

as non-infectious. It is nonetheless essential to segregate confirmed COVID-19 patients from those who may not have COVID-19. Widespread point-of-care testing will allow for clearer distinctions between areas and patients by COVID-19 status.

Here are some key factors to reduce the risk of spreading COVID-19 throughout the hospital:

- **Designating Non-COVID-19, Suspect, and COVID-19 Areas from Admission to Discharge**
    - Principle of "three zones and two channels" - the division of non-COVID-19, suspect, and COVID-19 areas, plus the creation of two separate channels for medical staff and patients to walk through.
        - Implementing a colour system for 3 zones throughout all areas of hospital – red (COVID-19 area), yellow (COVID-19 suspected area), green (non-COVID-19 area).
            - Point-of-care testing should be utilized when available to confirm COVID-19 status of patients in green areas.
        - Erecting Plexiglas barriers to separate corridors within the facility to control staff and patient flow - a barrier on side for non-infected staff and a barrier on side of infected patients.

- **Cohorting COVID-19 Patients**
    - Cohorting patients by units and by floor:
        - Separation of COVID-19 patients and non-COVID patients
        - Further cohorting on COVID-19 patients: separation of patients suspected with COVID-19, including those waiting for test results, from those patients confirmed to have COVID-19 (i.e. COVID-19 units and COVID-19-positive units)
            - Can be further sub-cohorting, such as pregnant women, patients waiting for quarantine period to end, etc.
        - Physical distancing and infection prevention and control procedures are especially important in a 'COVID-19 suspected' area given the risk of interaction between patients with and without COVID-19
    - Mandatory screening of all individuals who present to emergency department outside of emergency department.
        - Those individuals who present with temperature or any respiratory symptoms are taken through a separate 'COVID-19 suspected' area through a separate entrance
        - The Ontario Ministry of Health's COVID-19 Patient Screening Guidance Document can be utilized to inform screening protocol
    - Point-of-care testing should be utilized to cohort patients entering hospital for non-COVID-19 conditions as point-of-care testing equipment and capacity becomes available. Hospitals should prioritize implementation of point-of-care testing as available.

- **Creating Additional Capacity within Hospital**
    - Some innovative approaches to creating additional capacity within a hospital to respond to a surge/outbreak include:
        - Expediting discharge of non-COVID-19 patients
            - This will require the need for strong outpatient and home care supports, including virtual care, for discharged patients
        - Reducing admission rates by developing strict criteria for admission
        - Converting single rooms into double rooms
        - Repurposing operating and recovery rooms into ICUs
        - Repurposing other hospital spaces as emergency units for patients with mild symptoms
    - When ramping up deferred services, these spaces within the hospital can be converted back to their original state (e.g. opening up operating rooms for deferred surgeries) or designated spaces within the hospital can be repurposed and used for the delivery of deferred services.
    - It is anticipated that different regions or centres will identify local solutions that work best for their infrastructure and patients. The sharing of these innovative solutions is encouraged.

3. The health and safety of frontline health care workers within the hospital must be protected

The health and safety of health care workers in a hospital is of utmost importance during a surge of COVID-19. Prioritizing health care workers' health and safety is also an essential condition for reintroducing deferred services, to protect health care workers, hospital staff, and non-COVID-19 patients. Here are some essential ways, ordered per the IPAC hierarchy of controls, to protect them and reduce the risk of transmission of COVID-19:

- **Administrative and Environmental Controls**
    - Effective administrative controls and environmental controls must be implemented, as outlined in Public Health Ontario's IPAC Recommendations for Use of PPE.
    - Administrative controls: active and passive screening, restricted visitor policies, restricted entrance policies, cohorting patients, HCWs, and other staff, etc.
        - Reduce staff exposure to COVID-19 and cross-transmission between COVID-19 and non-COVID-19 units by limiting number of staff involved in COVID-19 patient care by:
            - Designating staff to dedicated units
            - Instituting overtime and extended hours (with appropriate compensation) for staff working in COVID-19 units
    - Environmental controls: barriers between patients and staff at reception and triage, alcohol-based hand rub, antechambers for donning and doffing PPE, etc.

- **Testing of Health Care Workers**
  - Timely testing of health care workers to reduce absences and risk of further transmission
    - As per the Ministry of Health's COVID-19 Provincial Testing Guidance Update, which outlines HCWs and those living in the same household of HCWs as priority populations for testing. The guidance outlines that HCWs and those living with HCWs in line with the provincial case definition, who are experiencing one of the following symptoms or signs should be tested:
      - Fever (Temperature of 37.8°C or greater); OR
      - Any new/worsening symptom (e.g. cough, shortness of breath (dyspnea), sore throat, runny nose or sneezing, nasal congestion, hoarse voice, difficulty swallowing, new olfactory or taste disorder(s), nausea/vomiting, diarrhea, abdominal pain); OR
      - Clinical or radiological evidence of pneumonia.
      - Atypical presentations of COVID-19 should be considered, particularly in children, older persons, and people living with a developmental disability.
    - As it becomes available, point-of-care testing should be utilized to test HCWs to ensure they can continue to work without interruption if they are negative, and to ensure an immediate transition to self-isolation if they are positive.
  - Track staff who are sick and being tested for COVID-19, and maintain a record of staff who are confirmed to have COVID-19
  - Timely, prioritized, and tracked testing of HCWs must also be maintained through the ramp up of deferred services to minimize risk of transmission to an increasing population of non-COVID-19 patients, and an increasing workforce of HCWs and hospital staff.

- **Personal Protective Equipment (PPE)**
  - Health care workers (HCWs) and other staff must have access to appropriate PPE as per the best practice guidance provided by Public Health Ontario's Infection Prevention and Control (IPAC) Recommendations for Use of PPE, and based on an HCW's point-of-care risk assessment and their professional and clinical judgement, as per the Ministry of Health's Directive #5 related to the use of PPE by HCWs within public hospitals and long-term care homes.
  - HCWs and other staff are trained in the rational use of PPE as per Public Health Ontario's IPAC Recommendations for Use of PPE.
  - HCWs are trained in proper donning and doffing of PPE.
  - HCWs in all areas must have full PPE.

    - The type of PPE required will depend on the activity the health care worker is involved in with the patient. For example, direct patient care including nasopharyngeal and oropharyngeal swab collection, aerosol-generating medical procedures, or preliminary screening not involving direct contact. The minimum expectations for type of PPE required per activity are outlined in Public Health Ontario's IPAC Recommendations for Use of PPE.
    - Appropriate PPE should be utilized during all patient encounters, rather than only for those with suspected or confirmed COVID-19 patients given the HCW and/or the patient can be infectious while asymptomatic/pre-symptomatic.
- HCWs' access and training for PPE must be maintained following a COVID-19 surge to allow hospitals to safely ramp up deferred care provision while cases of COVID-19 continue at a lesser rate, to protect a gradual influx of non-COVID-19 patients, and to ensure that HCWs are safe and feel safe providing care to a larger patient population.

➢ **Ministry of Labour Inspections**

- One of the major lessons learnt from the four designated SARS hospitals ("SARS Alliance") was the lack of proactive inspections by the Ministry of Labour of SARS hospitals during the second outbreak, even though health care workers in these designated hospitals continued to get sick. As such, the SARS Commission recommended that in any future infectious disease outbreak, the Ministry of Labour take a proactive approach throughout the outbreak to ensure that health workers are protected in a manner that is consistent with worker safety laws, regulations, guidelines and best practices.
- The Ministry of Labour should be involved in the early inspection of all designated COVID-19 hospitals. Moreover, as per the SARS Commission report, there should be frontline health care worker input collected, considered, and incorporated wherever possible.

4. Medical records should be made accessible to health care workers in the hospital

Traditional policy governing health record access within a hospital structure may require modification for the duration and purposes of COVID-19. Generally, only those within the circle of care may access a medical record of a patient. However, in a pandemic scenario, the need to access personal health information (PHI) may be broader to protect the health and safety of staff and patients within an institution. For example, health care workers may need rapid access to data on COVID-19-positive patients to conduct rapid contact tracing or to ensure proper isolation measures. Legally, this may be permissible if all health care workers are designated as agents of the facility/institution, but hospital policies permitting this may need rethinking and revising for this to be executed. From a technology perspective, access to the Ontario Laboratories Information System (OLIS), either through integration with a Hospital Information

System or provincial clinical viewers, can provide access to COVID-19 lab test results. The Information and Privacy Commissioner should consider the effects of privacy laws within hospital or other institutional settings in terms of interpretation and guidance on the *Personal Health Information Protection Act* (PHIPA) in the context of the ongoing pandemic and the best way(s) in which to protect health care workers and patients.

Further, patients who have access to their medical records and other digital health tools should be empowered to use them to self-manage their non-COVID-19 conditions, particularly for chronic diseases, to prevent these conditions from becoming emergent as deferred services are gradually ramped up. These tools should also be made more widely available and accessible to patients.

Part II: Developing an Alternate Health Facility

Alternate Health Facilities (AHFs) can be established by hospitals and community partners in non-traditional settings to provide additional capacity for care. They have been established in Ontario as well as in other provinces and countries experiencing COVID-19 to create additional capacity during or in anticipation of a surge of COVID-19 patients requiring hospital-based care; as well as to create safe spaces for self-isolation for vulnerable individuals recovering from COVID-19. AHFs may also be utilized to enable hospitals to begin returning to deferred service provision as cases of COVID-19 decrease. The Ministry of Health has released guidance for hospitals on setting up AHFs should the need arise. This Part II provides hospitals and the system at large with additional considerations for developing an AHF to support their capacity for potential future surges of COVID-19, for gradually re-introducing deferred services, or for supporting vulnerable individuals in their communities, based on early learnings from AHFs established around the world as well as lessons learned from experience with SARS. This part does not specifically address other independent health facilities (IHFs) – i.e. community-based non-hospital facilities.

1. AHFs should be established to anticipate a surge, rather than respond to it.

If utilizing AHFs to increase surge capacity, due to the extensive work required to establish an AHF, facilities should if possible be established before hospitals become overwhelmed. AHFs can then immediately reduce the burden on hospitals when required, and hospital administration can have greater capacity to participate in AHF development. Leveraging community partnerships as discussed below can help to facilitate this preparedness. AHFs can be established recognizing that they may not be needed at the capacity for which they are built or at all, so that communities are as prepared as possible in case they are required.

For example, London Health Sciences Centre in Ontario developed an AHF to be ready before hospitals were expected to reach capacity, and it will only be activated if the need calls for it.

2. AHFs can be established – or continue to exist – to enable the re-introduction of deferred services.

Even after a surge has subsided, the creation or continuance of AHFs can allow for the ramping up of deferred services by maintaining segregation of COVID-19 and non-COVID-19 patients. For example, AHFs established for COVID-19 patients can increase capacity within the hospital for non-COVID-19 patients to receive deferred care in existing facilities (such as operating rooms). Alternatively, patients can begin to gradually receive deferred services in AHFs established for non-COVID-19 patients.

3. AHFs established for COVID-19 patients should be set up near hospitals.

As the condition of patients with COVID-19 can change very quickly, having them in a designated COVID-19 AHF close to the hospital, if possible, can allow them to be transferred directly to intensive care if needed.

For example, Joseph Brant Hospital in Burlington, Ontario connecting its temporary Pandemic Response Unit on its hospital parking lot to its main hospital via tunnel for easy access to critical care.

4. AHFs should be established based on the needs and resources available in the local hospital and community.

AHFs set up around the world in response to the pandemic vary in location, structure, and patients served, depending on the needs and the resources available in the local hospital and community.

Most AHFs have been established to isolate COVID-19 patients from other patients, and established facilities typically focus on one COVID-19 patient population (those with mild or moderate symptoms, with acute symptoms, with severe/intensive symptoms, or recovering from COVID-19).

Here are a few examples of the AHFs that have been set up for COVID-19 patients during or in anticipation of a COVID-19 surge:

- Field hospitals set up in tents outside hospital, where people running a fever or showing other flu-like symptoms are tested for signs of COVID-19 and taken to a designated emergency room if they present with severe symptoms (*Italy*)
- 4000-bed capacity AHF established in convention centre to provide critical care including ventilation for COVID-19 patients (*UK*)
- 2000-bed capacity AHF established in exhibition centre to transition those recovering from COVID-19 out of hospital (*Iran*)
- Gymnasium-based AHFs established in Wuhan for patients with mild cases of COVID-19, one of 16 Wuhan AHFs that treated 13,000 patients (*China*)
- London Health Sciences Centre established AHF in local convention centre for patients recovering from COVID-19, to be activated if London hospitals reach capacity (*Ontario*)
- Joseph Brant Hospital built 93-bed temporary modular structure in hospital parking lot for COVID-19 patients with mild to moderate symptoms (*Ontario*)

AHFs can also be established for non-COVID-19 patients to relieve pressure from hospitals and increase capacity within hospitals for treating COVID-19 patients. Examples of these include:

- Vancouver Convention Centre converted into 271-bed AHF for non-COVID-19 patients (*BC*)
- Laval, QC hospital utilized hotel to house 130 mental health and palliative care patients (*QC*)
- New York City convention centre established as 2000-bed AHF for non-COVID-19 patients (*US*)

AHFs have also been established to provide a safe space for vulnerable individuals to recover from COVID-19. For example:

- Toronto's Inner City Health Associates collaborated with Doctors Without Borders/Médecins Sans Frontières and University Health Network to open 400-bed Recovery Site to offer social and medical supports for homeless COVID-19 patients (*Ontario*)

5. AHFs for COVID-19 patients should be designed to minimize the risk of spreading the virus both within and outside the AHF.

To further minimize the risk of spreading COVID-19 within the AHF, the following design elements can be used:

- Principle of "three zones and two channels" - division of non-COVID-19, suspect, and COVID-19 areas, plus the creation of two separate channels for medical staff and patients to walk through. Barriers can be erected to separate corridors within the facility, with a barrier on side for non-infected staff and a barrier on side of infected patients.
- Segregation of non-COVID-19 patients must be mindful of potentially asymptomatic or pre-symptomatic individuals. As a result, health care providers and other AHF staff that screen negative for COVID-19 symptoms cannot conclusively be designated as non-infectious, and infection and prevention control procedures as well as PPE should be utilized accordingly. Widespread point-of-care testing will allow for clearer distinctions between areas and patients by COVID-19 status.
- There may be further cohorting/zoning of patients within an AHF designed for COVID-19 patients depending on the level of risk they pose. For example, a separate zone for patients suspected with COVID-19, including those waiting for test results, from those patients confirmed to have COVID-19 (i.e. COVID-19 units and COVID-19-positive units). There can also be further sub-cohorting, such as zones for pregnant women, patients waiting for quarantine period to end, etc.

To ensure COVID-19 is contained within an AHF, the AHF should be designed as an all-inclusive system within itself and in particular, should not share water and sanitation systems with other nearby buildings.

6. For AHFs that need to be constructed, modular construction should be used.

For AHFs that need to be physically constructed in open spaces (rather than repurposing existing facilities), modular construction should be used. Modules can be assembled quickly and at any time, and can be developed in factories off-site and deployed to locations where needed.

Here are a few examples of AHFs that have been established using modular construction:

- Joseph Brant Hospital in Burlington, Ontario established a 93-bed Pandemic Response Unit in the parking lot of its hospital. The unit was built by Vancouver-based BLT

Construction using modular construction consisting of an aluminum frame covered with an architectural membrane made by Sprung Instant Structures shipped from Calgary.

- Trillium Health Partners also worked with BLT Construction and Sprung Instant Structures to build an 80-bed temporary Pandemic Response Unit at Mississauga Hospital.
- In Wuhan, China, two temporary hospitals were created in less than two weeks using modular construction.
- In King County, Washington, a 200-bed COVID-19 recovery facility was constructed on a soccer field using modular construction.

7. The health and safety of health care workers at AHFs must be protected.

One of the major lessons learnt from the four designated SARS hospitals ("SARS Alliance") was the lack of proactive inspections by the Ministry of Labour of SARS hospitals during the outbreak, even though health care workers in these designated hospitals continued to get sick. As such, the SARS Commission recommended that in any future infectious disease outbreak, the Ministry of Labour take a proactive approach throughout the outbreak to ensure that health workers are protected in a manner that is consistent with worker safety laws, regulations, guidelines and best practices.

To ensure health care worker protection and reduce the risk of transmission, the Ministry of Labour should be involved in the conception and inspection of all AHFs. Moreover, as per the SARS Commission report, there should be frontline health care worker input collected, considered, and incorporated wherever possible.

8. Practical guidance should be developed for the establishment of AHFs in different community settings.

While the provincial guidance provides general guidance and suggestions on developing AHFs in Ontario, practical 'how-to' implementation guidance tailored to specific community settings is needed, such as large- and small-scale hospitals in urban and rural areas.

For example, a group of physicians and community leaders in Uxbridge, Ontario have put together a playbook for developing a field hospital in a small rural community. Specific to the rural context, this playbook is tailored for a community where the local hospital (which is linked to a larger hospital) will typically have fewer resources and be some distance from a major centre, and where establishing an AHF to alleviate pressure on the local and linked hospitals will require an increased need for community engagement and support.

9. Hospitals should develop AHFs in collaboration with community supports.

Due to the community-based nature of most AHFs, the fast and varied planning work atypical of hospital administration, and the significant burden already experienced by hospitals through COVID-19, hospitals should leverage community partnerships and municipal and/or regional

leadership to establish AHFs. This collaboration can complement a hospital's partnership with its Ontario Health Regional Lead and the support of Infrastructure Ontario.

The playbook developed for Uxbridge, Ontario recommends that hospitals recruit the top leaders in the community for a breadth of skills and access to political and community resources, and recognize that the health system and its health professionals cannot bear the burden of developing this alone while also facing the pressures of COVID-19.

For example, London Health Sciences Centre in London, Ontario worked with the City of London and the designated facility's management organization to establish its AHF. Joseph Brant Hospital in Burlington, Ontario collaborated with community-based health care providers, the City of Burlington, and the Halton Region regional government to establish its AHF. Toronto's University Health Network collaborated with Toronto Public Health, Inner City Health Associates, and Doctors Without Borders to establish the COVID-19 Recovery Site for individuals experiencing homelessness.

10. Medical records should be made accessible to health care workers within AHFs

Traditional policy governing health record access within a hospital structure may require modification for the duration and purposes of COVID-19. Generally, only those within the circle of care may access a medical record of a patient. However, in a pandemic scenario, the need to access personal health information (PHI) may be broader to protect the health and safety of staff and patients within an institution. For example, health care workers may need rapid access to data on COVID-19-positive patients to conduct rapid contact tracing or to ensure proper isolation measures. Legally, this may be permissible if all health care workers are designated as agents of the facility/institution, but hospital policies permitting this may need rethinking and revising for this to be executed. From a technology perspective, systems will need to be built within the AHF so health care workers can have on-site access to integrated patient medical records via the provincial electronic health record (EHR), including the Ontario Laboratories Information System (OLIS) which provides access to COVID-19 lab test results. The Information and Privacy Commissioner should consider the effects of privacy laws within hospital or other institutional settings in terms of interpretation and guidance on the *Personal Health Information Protection Act* (PHIPA) in the context of the ongoing pandemic and the best way(s) in which to protect health care workers and patients.

Further, patients who have access to their medical records and other digital health tools should be empowered to use them to self-manage their non-COVID-19 conditions, particularly for chronic diseases, to prevent these conditions from becoming emergent as deferred services are gradually ramped up. These tools should also be made more widely available and accessible to patients.

Part III: Guiding Principles for Identifying Deferred Services to be Re-introduced in Hospital Setting

This Part III presents principles to guide decision-making for identifying which deferred services to re-introduce in the hospital setting, when readiness has been determined according to the principles outlined in Part I of the Ontario Medical Association's *'Principles for the Re-introduction of Deferred Services'*.

Overall, decision-making should take into account three key factors:

- Patient factors, including a patient's condition, co-morbidities, physical, mental, and social well-being, and the options and risks related to their required care. Risk is according to the impact of waiting on patients' physical and mental health;
- System capacity factors, including the resources required to provide specific services; and,
- COVID-19-specific factors, including the prevalence within the community, testing, and the risk of exposure to and transmission of COVID-19 presented by providing a service.

The principles presented below provide hospital setting-specific guidance according to each of these three factors.

Patient Factors

- Re-introduce deferred services in a graduated manner to enable access to time-sensitive care to the greatest extent possible. This would include, but is not limited to:
    - Time-related disease like certain cancers, particularly if the outcome is treatment related;
    - Treatments/procedures for which there is risk of significant morbidity or mortality if there continues to be delays; and
    - Non-emergent activity that will or may convert to emergent.
- Consider a patient's physical, mental, and social well-being in determining what is time-sensitive.
- Consider a patient's level of risk for COVID-19.
- Consider treating healthy patients suitable for day surgery or short stay (overnight) inpatient care and procedures amenable to local or regional anaesthesia techniques in an attempt to minimize impact on hospital resources.

System Capacity Factors

- Re-introduce deferred services in a phased/graduated manner; however, the timing and specific service introduction may vary from organization to organization based on capacity.

- Each hospital should review all deferred services in engagement with the treating physician, relevant department head(s), and multi-disciplinary health care team members.
- Decisions to re-introduce certain deferred services must be made while preserving surge capacity for potential future outbreaks. As stated in the Ontario Health guidance, a hospital must have at least 15% acute care capacity reserved for COVID-19 care.
- Determine availability of ICU capacity for deferred care requiring predictable ICU stay.
- Maintain capacity within emergency departments for urgent services and surge capacity.
- Determine availability of resources necessary for a deferred service, including:
    - Current supply and anticipated need for PPE, per Public Health Ontario's Infection Prevention and Control Recommendations for Use of PPE;
    - Availability of necessary drugs while ensuring a continued drug supply for urgent services;
    - Availability of health human resources, including interprofessional team members;
    - Beds and designated beds within institutions, which must be managed according to the priority and needs of patients;
    - Laboratory capacity, including laboratory medicine physicians and other laboratory-based health human resources, as labs continue to provide COVID-19 testing support. Care must be taken not to overwhelm these finite resources in making decisions related to ramping up services that require laboratory capacity;
    - Availability of hospital spaces for safely providing deferred care:
        - Availability of space that can be re-purposed to provide deferred services, including the establishment of designated spaces within the hospital and/or alternate health facilities (AHFs) for either COVID-19 or non-COVID-19 care. See Part I and II for further details.
        - Implement physical distancing as much as possible when providing deferred care. See Part I and II for further details.
    - While re-introducing deferred services in accordance with patient needs, facilities should also maximize the delivery of services that do not require significant resources in terms of PPE, drugs, health human resources, and hospital resources including ventilators and ICU space, to address the backlog of services while limiting demand on these critical resources.
- Community-based practice and outpatient supports required beyond discharge must be considered before determining if there is system capacity to reintroduce a service.
- For surgical/diagnostic services, the Wait Time Information System (WTIS) priority system would be one method to prioritize patient need.
- Centralized referrals through a single-entry, team-based model can be utilized to shorten wait lists and address the backlog of surgical services in an equitable and efficient manner, as recommended in the Canadian Medical Association Journal.
- Take a regional approach wherever possible for deferred specialized services, to enable some capacity within a region for a given service. This may mean that patients may receive their deferred specialized care at a health care facility other than their usual site of care in order to maximize the available capacity in the system.

COVID-19-specific Factors

- Monitor the influx of COVID-19 patients within the hospital and local trends and prevalence of COVID-19 within the community to determine the level of risk presented by asymptomatic transmission in reintroducing certain deferred services to those who screen negative for COVID-19, and in determining if services can safely be provided without knowing conclusively via testing if a patient has COVID-19.
- Hospitals should develop strategies for segregating COVID-19 and non-COVID-19-related care, and for prioritizing patient and worker health and safety prior to reintroducing deferred services. See Part I and II for further details.
- For ambulatory clinics, strategies need to minimize risk of COVID-19 transmission such as segregating care within clinics, separating days of clinical activity or different clinics addressing non-COVID-19 and suspected COVID-19 patients.