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A community-based approach to influenza assessment and treatment during a pandemic

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Abstract

In the event of an influenza pandemic, hospitals and community-based health services will be overwhelmed. To ensure that life-saving health services are able to continue, the *Ontario Health Plan for an Influenza Pandemic* (OHPIP) provides direction for assessing and treating patients with influenza, remotely and through the implementation of alternate assessment, treatment and referral centres (Flu Centres). The OHPIP also provides tools and resources for local pandemic planners to assist them with the implementation of this strategy.

The recent outbreaks of H5N1 avian influenza have heightened concerns among public health experts around the world about the next influenza pandemic and the ability of health care services to respond effectively to such an overwhelming crisis. These experts include the World Health Organization, which cites the emergence of the H5N1 virus as a clear warning that we need to enhance preparedness for an influenza pandemic.¹ In light of these warnings, federal, provincial, territorial and local governments across Canada have been engaged in pandemic preparedness activities – activities that have also been driven by the country's recent experience with Severe Acute Respiratory Syndrome (SARS) outbreaks in 2003. Canada was one of the first jurisdictions to release a modern, comprehensive strategy to deal with an influenza pandemic. The *Canadian Pandemic Influenza Plan* was published in February 2004, and updated in December 2006; Ontario followed closely with the release of the first iteration of the *Ontario Health Plan for an Influenza Pandemic* (OHPIP) in May 2004, which was subsequently updated in 2005 and 2006.

A key priority of pandemic preparedness at both the federal and provincial levels is planning for the surge capacity that will be required across the health care system to assess and treat individuals who are ill with influenza. In Ontario, it is estimated that approximately 2.3 million people will be ill enough with influenza to require an outpatient visit during an influenza pandemic² (these numbers are replicable for all provinces and territories). Guidelines on strategies to curtail or eliminate non-critical services across the health care system and for a competency-based approach to health human resources planning have been developed in Ontario to mitigate this surge in demand; however, these strategies alone will be insufficient. The anticipated surge would still overwhelm current resources and the ability of the health care system to maintain life-saving services would be severely compromised.³ As a result, the 2006 version of the OHPIP includes a strategy for a community-based approach to influenza assessment and treatment as a means to further mitigate the impacts of the predicted surge and to help ensure that critical health services continue during an influenza pandemic.

Figure 1. Community assessment and treatment during a pandemic.

Ontario's approach to influenza assessment and treatment

The Ontario community health care sector is diverse in terms of its focus, sophistication, professionalization, organization, dependencies and resources. Consequently, the Ontario Ministry of Health and Long-Term Care (MOHLTC) applied a network approach to foster collaboration across the community health care system to encourage an integrated approach to the delivery of community health services during a pandemic. The decision to use the network approach was based on evidence that suggests that allowing for a network of relations in emergency management can significantly improve the emergency management effort. A study of 164 emergency preparedness and response organizations by the University of Colorado (1993) found that: (i) the more contacts and the more cohesion, the greater the emergency preparedness; and (ii) the higher the hierarchical autonomy, the lower the preparedness.⁴

The network tasked with developing the strategy for Ontario was struck by the MOHLTC and comprised a collection of provincial associations from the community health sector, including community health centres, public health, family physicians, long-term care, home and community care and not-for-profit emergency management organizations. Through a series of collaborative workshops, the network developed the overall strategy to divert all but the most severely ill from hospitals and to sustain individuals in their current environment. As well, the network identified which services and resources each of their members could potentially contribute to the overall strategy. As a result of this

process, the network proposed that individuals who may be stricken with influenza-like illness during a pandemic be assessed and treated remotely and also through the implementation of alternate assessment, treatment and referral centres (Flu Centres). The overall objective of this approach is to provide a timely way for assessing and treating people with symptoms of influenza while allowing the critical aspects of the traditional health care system to continue (Figure 1 illustrates how patients will access the health care system during a pandemic). This approach, described in detail below, was adopted by the Ontario Health Plan for an Influenza Pandemic Steering Committee and was included as a guideline in the 2006 version of the *Ontario Health Plan for an Influenza Pandemic*.

Self-assessment

Individuals will perform a self-assessment using a common screening tool that is in development under the auspices of the MOHLTC. The tool, although developed prior to a pandemic, will be modified based on the characteristics and symptomatology of the presenting pandemic virus. It will be available on the Ministry's web site (www.health.gov.on.ca) and widely publicized through various media.

Remote assessment

Should some individuals be uncomfortable, unwilling or unable to assess themselves, or should they want to seek further assistance, they will be encouraged to utilize province-wide, free telephone services such as Telehealth (1-

Figure 2. Patient flow for Flu Centres.

Ontario Ministry of Health, Long-Term Care - Emergency Management Unit - Pandemic Influenza Planning - Community Strategic Advisory Committee, May 15, 2006.

866-797-0000), or government Internet-based services that will be enhanced to provide the public with remote access to support individual decision-making. Once the individual completes the tool, he/she will be assisted with the selection of the appropriate setting for further assessment and treatment based on the information provided. It is anticipated that the majority of individuals will have moderate symptoms³ and as a result will be directed to Flu Centres that will be set up in their community for assessment and treatment by a health care provider.

Face-to-face assessments

It is acknowledged, however, that despite efforts to enable the public to assess themselves or be assessed remotely for

influenza, a significant number of individuals will prefer to have a face-to-face assessment in a setting with which they are familiar (i.e., family physician office). In anticipation of this demand, a screening tool will be developed by the MOHLTC for health care settings based on the algorithm that will be developed for the self- and remote-screening tool so that health care providers can divert individuals to the appropriate setting for further assessment and treatment.

The majority of individuals who are referred for treatment upon completion of an assessment will access care through the Flu Centres, with the exception of the most severely ill who will be immediately referred to a hospital. For those with more moderate conditions, the Flu Centres will provide supportive care to relieve symptoms, and anti-viral treat-

ment. It is the access to anti-viral treatment, as needed, that will encourage the public to use the Flu Centres. Following assessment and treatment at the Flu Centre, the patient will have access to educational materials for self-care and, if necessary, he/she will be referred to the appropriate community-based supports to ensure that his/her condition is consistently monitored and/or that he/she is provided with home care services through local community-based agencies.

In an effort to streamline the documentation process for assessment, treatment and referrals, a generic Primary Assessment Record⁶ has been developed for the initial assessment at the treatment centre, and this record will remain with patients as they move across the continuum of care (see Figure 2 for an overview of the anticipated patient flow through the Flu Centre).

Implementation of Flu Centres

A province-wide approach to implementing Flu Centres is extremely difficult given the diverse geography and population, as well as the various approaches to health care service delivery locally. To ensure that local needs are met effectively, planning for the implementation of Flu Centres has been designated as a local responsibility in the OHPIP, with the support of the network of community health agencies involved in the development of the overall approach. In order to manage such a complex undertaking, communities are encouraged to establish an advisory committee now to support the planning process, which includes representation from the acute, community, public health and emergency medical services sectors, the volunteer community and the appropriate municipal emergency management organizations.

To assist communities in the planning process, the province has published generic guidelines for establishing Flu Centres, which include information on site management, staff requirements, infection prevention and control measures, clinical management, security and traffic control, overnight service and transfer protocols.⁷ The province has also estimated the number of Flu Centres that would be required for each public health unit catchment area based on assumptions regarding population and the estimated time for an individual to be assessed and treated through the Flu Centre. It is important to note, however, that these guidelines are not intended to be proscriptive and that local planners have the flexibility to implement Flu Centres that meet their local needs most effectively, as long as the Centre can perform the function described in the OHPIP.

Staffing Flu Centres

Local planners will have difficulty identifying staff for the Flu Centres given that health human resources will be severely limited across the health care system. To meet this challenge, the local community advisory committee tasked with leading the planning for the implementation of Flu Centres should follow the competency-based approach described in the OHPIP and utilize the tools provided to identify the appropriate skill sets for Flu Centre staff.⁸ It

should be noted that the Flu Centre will be an excellent site for utilizing volunteers. Local Public Health Units are a good source of information for the advisory committee in the area of staffing as the units have been encouraged to follow the competency-based approach for health human resources planning more broadly in the development of local health pandemic plans.

Next steps

The MOHLTC will continue to support the network comprising provincial associations from the community health sector, including community health centres, public health, family physicians, long-term care, home care and community care, and not-for-profit emergency management organizations in their work to enhance plans for the implementation of the community-based strategy for influenza assessment and treatment. This will include, but is not limited to, developing supplies and equipment lists for Flu Centres, addressing liability and financial compensation issues for staff and identifying funding requirements for municipalities to implement Flu Centres. While it is acknowledged that these are challenging issues that need resolution, municipalities are encouraged to start the planning process as soon as possible given that no one can predict when the next pandemic will occur.

The Ontario Health Plan for an Influenza Pandemic is an ever-green plan that continues to be updated and enhanced in collaboration with key health stakeholders and emergency management professionals based on emerging scientific evidence and input from stakeholders. The 2006 version of the plan is the third iteration and is posted on the MOHLTC web site at: www.health.gov.on.ca/pandemic

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