Physicians and the health authorities: Key partners in an influenza pandemic

By participating in the pandemic planning process and sharing information in the event of a pandemic, physicians and health authority staff will be able to mount a well-organized response to a major emergency.

ABSTRACT: The province of BC and all of its health authorities have pan demic plans, and continue to develop them. In the pre-pandemic period, physician involvement in preparedness at local and regional levels will help ensure workable plans that are well tested and appropriately disseminated. In the event of an influenza pandemic, the health care system in BC will need to make significant adaptations. Various health authorities will adapt differently, depending on local resources and demands. A strong working relationship between physicians and the health authorities will be an important predictor of an effective response. During a pandemic, physicians will need to receive timely and accurate infor-

mation about diagnostics, therapeutics, and local epidemiology from the health authorities. In return, the health authorities will need physician support of public health measures, and cooperation with surveillance and control activities in order to ensure a coordinated and effective response. It is impossible to know exactly what impact the next influenza pandemic will have on the health care system in BC given the unknown clinical and epidemiological features, but we do know that building strong relationships between physicians and health authorities before the pandemic occurs will be part of ensuring appropriate communication and cooperation during the pandemic.

n effective response to an influenza pandemic in British Columbia will require cooperation between phy sicians and health authorities. In their pandemic preparedness plans, health authorities recognize the increased importance of this relationship in times of crisis. Health authorities also recognize the need to inform physicians of the adjustments they can expect in the health care system to address the increased demands resulting from an influenza pandemic.

Preparedness

When preparing for major emergencies, the health sector aims to minimize serious injuries, illness, and death, and to help limit societal disruption and economic loss.

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During a pandemic, health authorities will activate response plans that call for adapting health care services, expanding health surveillance, and increasing infection control activities. Health authorities also have the task of communicating to the public, the medical community, various levels of government, and other stakeholders about the spread of the pandemic, health care system adaptations, and appropriate individual and community responses.

Health authority pandemic influenza preparedness plans are updated on a regular basis, and link into local, provincial, national, and international preparedness activities. The major tasks of pandemic planning include:

- Estimating the potential health im pact of an influenza pandemic.
- Developing contingency plans for health care services in a pandemic.
- Consulting and sharing information with the health care community.
- Helping the private sector plan for business continuity.
- Ensuring that members of the public have the information they need to prepare.

The BC Ministry of Health web site offers a wealth of pandemic influenza planning information (www.health .gov.bc.ca/pandemic/planning.html) along with links to federal and provincial programs and individual health authority plans.¹

Legal and ethical obligations: Health authorities

In addition to fulfilling their duty to provide ongoing medical services, health authorities are specifically tasked with responding to the pandemic. Section 84 of the Health Act states that if any "contagious or infectious disease dangerous to public health is found to exist," then the health authority, through the medical health officer,

"must use all possible care to prevent the spreading of the infection or contagion." The same section also charges the health authority with effective public communications about such events.² Pandemic planning efforts aim to prepare the health authorities to meet these twin obligations of response and communications. providers.

 Providing direction to health care providers about the continued provision of health care services.

In addition to these legal obligations, health authorities have an ethical obligation in the form of the principle of reciprocity. As Upshur writes, "there is an obligation on a social enti-

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The BC Pandemic Influenza Preparedness Plan describes the responsibilities of the health authorities in greater detail. This document is updated as new evidence is developed and new structures are put in place. Under the provincial plan, responsibilities of the health authorities vis-à-vis the medical community include:

- Ensuring that key stakeholders (including physicians) are aware of and involved in the pandemic planning process.
- Holding mass immunization clinics.
- Distributing antiviral medications.
- Bolstering human and material resources.
- Implementing infection control measures.
- Maintaining priority health care services and keeping the public informed about how to access them.
- Participating in provincial surveillance activities and disseminating surveillance data to health care

ty such as a public health department to assist the individual or community in the discharge of their ethical duties." A functioning health care system will require front-line physicians and other health care providers to continue working despite real or perceived threats to their health. This ethical imperative implies an ethical (and pragmatic) imperative on the part of the health authority to ensure that health care providers have accurate information and resources to protect themselves, their families, and staff.

Legal and ethical obligations: Physicians

The legal obligations of physicians are mainly in the area of reporting. Section 2 of the Health Act Communicable Disease Regulation requires that "Where a physician knows or suspects ... a communicable disease, he shall ... make a report to the medical health officer if the disease (a) is listed in Schedule A, or (b) becomes epi-

demic or shows unusual features."5

Although influenza is not listed in schedule A, pandemic influenza would clearly satisfy the second of these two reporting requirements. Once the epidemic is full blown, reporting would be of little value and this obligation may no longer apply in practice.

Section 3 of the same regulation obligates physicians and others in charge of laboratories to report a disease listed on Schedule B, which includes all cases of influenza. It is important to note that sending a sample to the lab to be tested does not release front-line physicians from their obligations to report, as suspected cases must be reported even before they are confirmed.

Physicians in salaried positions may be under a number of contractual obligations. For those in private practice, ethical obligations may be the driving consideration, as closing their offices for the passing of the storm may be very tempting. The fundmental responsibilities elucidated in the CMA Code of Ethics may be applicable here. The code calls on physicians to "consider first the well-being of the patient" and "consider the well-being of society in matters affecting health." However, physicians may find conflicting responsibilities in the code: to "promote and maintain their own health and well-being."6 Here again we see the necessity of having an informed and protected physician community in order to adequately respond to an influenza pandemic.

Surveillance and control

During a pandemic, health authorities will enhance regional and local surveillance to detect the arrival and monitor the spread of the virus causing the pandemic. To help physicians make clinical decisions based on the most relevant information, health authorities will provide details of the

local epidemiology of the pandemic as it develops. The British Columbia Centre for Disease Control (BCCDC) will play a key role in surveillance activities. Regarding infection control, health authorities may institute public health measures such as closing schools and canceling public gatherings during a pandemic, depending on epidemiological information and community requirements.

In the primary care setting, physicians will play an essential role before and during a pandemic. Physicians are encouraged to continue educating their patients now on the steps that can help protect them from both seasonal influenza and pandemic influenza, including:

- Washing your hands often.
- Covering your mouth with a tissue when coughing or sneezing; discarding the tissue immediately.
- Avoiding touching your face.
- · Keeping at least 1 metre away from others during an influenza outbreak.
- Getting your annual influenza vaccination.

Health care facilities

An influenza pandemic will likely compel health authorities to reorganize certain services. The modeling for even a moderately severe pandemic shows that it would put significant pressure on the health care system. Hospitals and clinics that are already using resources to capacity will require creative solutions to meet these increased demands. For example, since hospitals will have limited ability to accept transfers from residential care facilities during a pandemic, these facilities will need to find ways to provide on-site care for patients with uncomplicated pandemic influenza.

Provincial estimates of the impact of a pandemic on health care indicate how the overall picture might look. In March 2005, 86% of hospital beds

across the province were occupied. Modeling suggests that during the peak of a moderately severe pandemic, the number of additional admissions would increase by as much at 49%. Given that some hospitals already operate at or beyond 100% of their allotted capacity, this excess demand will be particularly difficult to manage in certain areas.

The same modeling of a moderately severe influenza pandemic suggests that family doctors can expect to see an increase in visits of up to 38% during the peak weeks. Given the potential impact of a pandemic on the demand for primary care, health authorities will need to provide enhanced communication and support to family physicians during what could be a challenging time.

Health authority plans for a pandemic include measures to properly triage and care for influenza patients while maintaining essential medical services and keeping updated inventories of staffing, space, and essential equipment. Each health authority is developing its own specific plans for triaging procedures, which may include:

- Operating designated "fever clinics" for assessing and treating patients with probable pandemic influenza to help take the burden off family doctors and emergency rooms.
- · Working with municipalities and local agencies to identify possible alternate sites for triage and care of pandemic influenza patients.

As health authorities finalize plans for triaging patients, they will communicate these decisions to health care providers.

Resources will need to be carefully managed in acute care facilities during a pandemic. Health authorities are developing options for enhancing infection control, triaging incoming patients, reducing nonessential services, redeploying ventilators and other key

equipment, and managing human resources. Postponing elective surgery may be necessary to free up staff, equipment, and supplies. These will be extraordinary times, where normal ly accepted clinical practices may not be possible because resources are scarce. Participants (including physicians) at recent Vancouver Coastal Health planning forums stressed the need for clear and consistent clinical care protocols and guidelines that are tiered according to the pandemic activity at hand and the associated system capacity. The Ministry of Health and health authorities are working together to develop plans that balance the need for consistency across the province with the flexibility to meet local needs.

Absenteeism

More health care workers than normal can be expected to miss work because of their own illness, the illness of family members, or fear of contracting illness. Front-line staff will need up-to-date epidemiological information to help them make decisions about their own health. If evidence shows that pandemic influenza is predominantly community-acquired, this may help essential caregivers feel safer about working in their clinics and hospitals.

The Public Health Agency of Canada recommends planning for total absenteeism rates of up to 20% during the peak of the pandemic. It would be very unlikely for this level of absenteeism to last much longer than 2 weeks due to influenza activity alone. If workers stay home in large numbers out of fear, then absenteeism rates may be unpredictable.

Human resource planners in health authorities are developing creative staffing strategies to address expected absenteeism during a pandemic. Options include finding roles for health care students and retired staff, and asking staff to avoid taking holidays during the pandemic. Geographically adjacent health authorities such as Fraser Health and Vancouver Coastal Health will need to cooperate to manage overlapping human resource pools.

clinics to help reduce the burden on primary care. However, in remote areas, family physicians will likely need to deliver the majority of pandemic-strain vaccinations in their own clinics. The Vancouver Coastal Health pandemic response plan

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As with other major emergency events, health authorities will need to provide psychosocial support for front-line health care staff. This support will be crucial, as a pandemic will last longer than other emergencies, making the task of ensuring the physical and emotional well-being of members of the health care community more challenging.

Vaccines and antivirals

Provincial and national authorities are establishing priorities for vaccine and antiviral use. Each health authority is planning for distribution with input from all stakeholders. Government-stockpiled antivirals will be distributed through predetermined channels to clinicians in private clinics as well as to any fever clinics.

It is expected that when a vaccine becomes available, health authorities will organize mass immunization includes a tool kit called "Clinic in a Box," which will guide staff in setting up mass immunization clinics.

Communications

Experience with SARS taught us that information must be consistent, credible, and well-coordinated among the experts and at different levels of government. During a pandemic, health authorities will be responsible for providing health care workers and the public with timely and accurate information. For information that is relevant to their communities, physicians should look to their health authorities. Information from national and international sources may not be appropriate for making clinical decisions at the local level. Health authorities are working to ensure that these lines of communication are open, and that physicians have access to the information that they need in a convenient format.

To reduce the demand on primary care providers, health authorities will provide self-care information to the public during a pandemic. This will include details on how to stay healthy, what symptoms to look for, how to take care of your own illness, and when to seek medical care. The BC HealthGuide program (www.bchealth guide.org) has developed a pandemic self-care HealthFile to help start the education process, and the provincial government and health authorities have made checklists and other resources available online to help families and businesses prepare for a pandemic.1

Large-scale public health measures, such as school closures and banning of public gatherings, are most effective before an illness is established in a community. In some cases, there may be enough advance warning to implement such measures before the pandemic has a grip on a community. In these cases individuals may be reluctant to change their normal behaviors as they will not yet have experienced the effects of the pandemic. These measures will be more effective if physicians support such measures by explaining them to patients.

Physician involvement with planning

Health authorities will continue to engage physicians in an effort to learn what kind of support they will need during a pandemic. Informal discussions with family physicians to date support what recent surveys by the College of Family Physicians of Canada indicate:

- Family physicians are willing to keep their offices open during a pandemic, but they expect support from health authorities in the form of initiatives such as alternate-care sites for patients with suspected influenza.
- · Family physicians expect health au-

thorities to provide timely and accurate information for physicians and their patients.7

Effective testing and refining of pandemic response plans will require physician involvement, but to date only a small proportion of physicians have been able to commit to formally participating in formal pandemic planning. Physicians are encouraged to participate in key activities such as table-top and mock exercises, training in the use of personal protective equipment, and focus group discussions in their hospitals and communities.

Next steps

As health authorities refine their response plans, new issues, local hurdles, and questions are emerging. The Ministry of Health has convened provincial pandemic influenza steering and management committees under the leadership of the Office of the Provincial Health Officer. These committees are working to meet challenges and ensure a well-organized response to the next influenza pandemic.

An influenza pandemic has the potential to affect all our lives. It will have implications at every level, from international health care policy to clinical decision making in physicians' offices. Effective preparation, planning, and response will require communication and cooperation from all stakeholders. Physicians are encouraged to participate in their health authority's ongoing planning process so that all plans will reflect physicians' clinical expertise and knowledge of their local community's strengths and needs.

Competing interests

None declared.

References

1. British Columbia Ministry of Health.

- Pandemic influenza preparedness. www .health.gov.bc.ca/pandemic/planning .html (accessed 30 May 2006).
- 2. Province of British Columbia. Health Act. Victoria: Queen's Printer; 1996. www.qp .gov.bc.ca/statreg/stat/H/96179_01.htm (accessed 10 December 2006).
- 3. BC Ministry of Health and BC Centre for Disease Control. British Columbia pandemic influenza preparedness plan. August 2005. www.bccdc.org/contentphp? item=150 (accessed 10 April 2007).
- 4. Upshur RE. Principles for the justification of public health interventions. Can J Public Health 2002;93:101-103.
- 5. Province of British Columbia, Health Act Communicable Disease Regulation. Victoria: Queen's Printer; 1983. www.qp .gov.bc.ca/statreg/reg/H/Health/4_83 .htm (accessed 10 December 2006).
- 6. Canadian Medical Association, CMA Code of Ethics. policybase.cma.ca/Policy PDF/PD04-06.pdf (accessed 9 December 2006)
- 7. College of Family Physicians of Canada. New Poll: During a pandemic public health crisis, Canadians want family doctors to be there for them [news release] 9 December 2005. www.cfpc.ca/ English/cfpc/communications/news% 20releaes/2005%2012%2009/default.a sp?s=1 (accessed 8 June 2006).