

Chapter 7 Health Services

7.0 INTRODUCTION

The delivery of health care services in the Region of Niagara during a pandemic will be extremely challenging. Niagara is already designated an under-serviced area in terms of availability of health care practitioners, and both community-based and hospital-based systems will be further stressed by employee absenteeism and the increased volume of patients seeking care.

Due to the sheer size of the numbers involved, care for influenza patients must be largely community-based care and, in many cases, home-based care. In spite of this, increased numbers of patients will require emergency and in-patient care. While all health care providers will be impacted by influenza pandemic, the following groups will absorb the greatest shock: primary care physicians and nurse practitioners, ER doctors, internists and paediatricians, and all nursing personnel in ER.

Optimal management of influenza in the Niagara Region will depend on 1) successfully supporting the efforts of community-based health care workers, 2) effectively utilizing scarce manpower and equipment resources in hospital and long-term care facility settings, and 3) strategically implementing alternative methods of health care delivery that are responsive, efficient, and needs based. The NRPHD pandemic plan for health services aims to facilitate the above by providing vision, education, leadership, communication tools, and limited manpower.

7.1 PRINCIPLES

Ethically Based

The following ethical substantive values guide decisions concerning health services delivery during influenza pandemic: the health care worker's duty to provide care, priority setting (including the allocation of scarce resources, such as ventilators, vaccines and antivirals), reciprocity, trust, and solidarity. In addressing these issues, and in the preparation of this plan, we adhere to the ethical procedural values that our decisions should be reasonable, transparent, inclusive, responsive, and accountable. (Stand on Guard for Thee)³

Scientifically Sound

Niagara Region Public Health Department will provide evidence-based and scientifically sound health information related to influenza pandemic. NRPHD will link to, and liaise with, the

³ Adapted from: Gibson, J. et al. Ethics in a Pandemic Influenza Crisis. Framework for Decision Making. Joint Centre for Bioethics. University of Toronto 2005.

Ministry of Health and Long-Term Care (MOHLTC), Canada Public Health Agency, World Health Organization, and regional networks, to ensure that our advice is current and consistent.

Responsive

NRPHD activities will vary with, and respond to, the pandemic phases as described by Health Canada and as declared by the provincial Chief Medical Officer of Health (CMOH). In this plan, the numbers at the end of a sentence indicate the pandemic phase(s) to which the actions described therein apply.

7.2 COMMUNITY-BASED HEALTH CARE

Numerous physicians and nurse practitioners work within the Niagara Region in a variety of practice settings, with variable methods of remuneration and serving patients in both official languages. To address the concerns documented by the College of Family Physicians of Canada that family physicians do not feel prepared or supported in the face of influenza pandemic, the NRPHD has surveyed all Niagara Region primary care physicians and ascertained their preferred methods of communication with respect to influenza pandemic [pandemic Phases 1-4]. Important information can be faxed or e-mailed to all members of this group within four hours [pandemic Phases 5-6].

A detailed, user friendly, Preparedness Plan for Niagara Physicians' Offices has been created (Appendix 7-A) to be used in conjunction with provincial and national materials, such as the MOHLTC emergency personal protective kit, MOHLTC educational materials, CPHA patient hand-outs, and others as they are produced [pandemic Phases 1-4].

Small group Continuing Medical Education (CME) accredited educational sessions have been, and will continue to be, organized for family physicians and their staff in each municipality, in order to disseminate the Preparedness Plans and receive local physician input on the usefulness of the presented materials [pandemic Phases 1-4].

NRPHD will remain up to date on all provincial directives and developments and report pertinent decisions to the primary care physicians. This includes but is not limited to the following: infection control practices (Appendix 7-B), the Patient Assessment Record (Appendix 7-C), triage criteria for transfer to acute care settings or discharge home (Appendix 7-D), establishment of Alternate Care Sites (Appendix 7-E), and distribution of vaccines and antiviral medications [pandemic Phases 1-6].

NRPHD will establish a call-in hotline and e-mail address for community physicians to address their questions and concerns [pandemic Phases 5-6].

NRPHD and NHS will work to keep abreast of progress made by the OMA, ONA, CPSO, and other professional bodies on these and related issues.

7.3 ALTERNATE CARE SITES

Niagara will need to have innovative solutions in place to support ill individuals when local health organizations become overwhelmed. Alternate Care Sites (ACSs) are one option for augmenting the provision of medical care during a pandemic. ACSs may be established as “satellite sites” of an existing facility or as “free-standing” sites.

To ensure that ACSs suit the needs of Niagara, a multidisciplinary team approach engaging Public Health Department staff, NHS staff, Hotel Dieu – Shaver, EMS, LTC, West Lincoln Memorial Hospital, and community health providers has been established. This team will address criteria for opening the site, site selection, insurance, equipment, command structure, staff requirements, staff recruitment, training, infection prevention and control, and clinical management [pandemic Phases 1-5]. In response to established criteria and observed influx of patients to established health care settings, the Alternate Care Site will be declared open [pandemic Phases 5 and 6] and closed [post pandemic Phase] by the pre-determined designated commander.

A second multi-disciplinary team, comprising staff from the Coroner’s office, Niagara Funeral Services, NHS, and NRPD will develop a body-disposal protocol.

7.4 SPECIAL GROUPS

The Niagara Region is home to one university, one college, and private schools with resident student populations. Because of the close living situations of students in residence and the absence of some of the usual supports found in a home, these groups will require special consideration. Representatives from Brock University, Niagara College, and the private schools will be encouraged in pandemic planning at their own institutions and will be invited to participate on NRPD pandemic planning committees.

Other special groups in Niagara with less ready access to health care include the homeless, the mentally challenged, and seasonal farm workers. Existing social agencies who serve these populations must be provided with information about influenza pandemic and be apprised of the availability of Alternate Care Sites when applicable.

7.5 ACUTE CARE FACILITIES

The Niagara Health System, through its eight sites, is responsible for the delivery of all acute hospital care in the Niagara Region. This integration can allow for a more co-ordinated response in the event of influenza pandemic. An AMOH of the NRPD heads the infection control committee at the largest hospital site and joint pandemic planning meetings have been held between the NHS and the NRPD. Focus of these meetings has been on the education of, and engagement of, health care personnel, assessment of surge capacity, criteria for admission and discharge, patient assessment records, personal protection of health care workers, and establishment of Alternate Care Sites [pandemic Phases 1-4]. Hospitals will be made aware of issues surrounding scarcity of resources and supply chain difficulties

[pandemic Phases 5 and 6] and be encouraged to develop their own emergency stockpile of medical supplies [pandemic phases 1-4].

NRPHD, through community physician leadership, will co-ordinate with the NHS to bring pandemic-related continuing medical education to hospitalists, internists, paediatricians, ER doctors, and critical care RNs.

It is likely that hospital ERs will be involved in surveillance tools developed for pandemic influenza [pandemic Phases 4 – 5 and post pandemic]. NRPHD will have a lead role in initiating and co-ordinating this.

Additional efforts will be made to forge useful links with the NHS and to support their pandemic planning efforts.

7.6 LONG-TERM CARE FACILITIES

There are Long-Term Care homes in Niagara Region. Long-term care facilities will need to address many of the same issues that will face acute care facilities, e.g. supply chain disruption; health care provider absenteeism; lack of volunteers; and use of personal protective equipment and other infection control measures [pandemic Phases 1-4].

Niagara's long-term care facilities will need to be made aware of provincial criteria regarding interfacility transfer of ill residents (to be developed by the Provincial Transfer Authorization Centre) [pandemic Phases 1-5]. However, there will be a need for long-term care homes to manage more of their residents in-house even as they develop more serious illness [pandemic Phases 5-6].

NRPHD has been providing education and support to our long-term care partners. A febrile respiratory screening tool is in place and respiratory outbreaks are reported to the NRPHD. These activities will continue in all pandemic phases.

7.7 Alternative Health Practitioners (e.g. Chiropractors, naturopaths, etc.)

NRPHD needs to develop ways to build bridges with this group, centering around our common goal of optimizing the health of the people of Niagara during pandemic influenza. Alternative health care providers can be allies in promoting good infection control practices, personal preparedness, no smoking policies, sound nutritional habits, and public health measures.

7.8 COMMUNITY Health Centres

Niagara has only one community health centre and it services the francophone population of Welland. Its resources are small. NRPHD will support this office as it would any other physician's office and will disseminate pandemic educational materials in the French language when available [pandemic phase 1-4].

APPENDIX 7-A PREPAREDNESS PLAN FOR NIAGARA PHYSICIANS' OFFICES STRUCTURE AND COMMUNICATION

- Assign responsibility for surveillance and detection advisories (regional, provincial, college).
Regional hotline: 905-688-8248, ext. 7765
www.health.gov.on.ca/english/public/program/pubhealth/flu
www.oma.ca
- Monitor and review influenza activity in your practice (i.e. weekly or daily number of patients calling or presenting with influenza-like illness [ILI]).
- All physicians office need to routinely undertake Febrile Respiratory Illness (FRI) screening according to the PIDAC lower case guidelines
<http://health.gov.on.ca/english/providers/program/infectious/diseases/icfri.html>
- Report number of office staff who are ill with ILI.
- Have a list of home and alternate phone numbers of all staff. Maintain a list in the office and distribute to each staff member to keep at home.
- Create a list of health care entities and their points of contacts with whom your office anticipates it will be necessary to maintain communications and co-ordination of care during a pandemic.
- Create database of patients with regularly scheduled visits who may need to be contacted during a pandemic for purposes of rescheduling office visits or assigning them to another point of care.

EDUCATION

Provide an education program for staff to ensure that all personnel understand the implications of, and control measures for, influenza pandemic.

- Circulate information sheets endorsed by the Public Health Department.
- Attend information/education sessions provided by PHD.
- Identify, obtain, and circulate informational materials for patients that are language and reading level appropriate:
- Review Pandemic Influenza “Flu Prevention Checklist” PHAC.
- Review Pandemic Influenza “Understanding Pandemic Influenza” PHAC.

TRIAGE AND INTAKE

When planning for triage and management of patients during a pandemic, it is recognized that much will rest on provincial directives and legal decisions regarding such issues as provision of Alternate Care Sites, reimbursement and malpractice coverage for telephone care, and reimbursement for provision of care at Alternate Care Sites, etc. However, physicians are encouraged to consider the following and adapt, where feasible, to your individual situations:

- Have a system for telephone triage of patients to determine who requires a medical evaluation, to limit office visits to those that are medically necessary.
- Display self-administered influenza-like illness (ILI) screening tool prominently on the front door to identify patients with ILI.
- Develop plans to manage patients at the height of the pandemic including these possibilities.
 - Temporarily cancel non-essential medical visits (e.g. annual physicals, wart treatments).
 - Designate separate blocks of time for non-influenza and influenza-related patient care.
 - Redirect influenza patients to alternate care sites.
 - Keep abreast of triage criteria for hospital-based care.

INFECTION CONTROL

An infection control plan, based on droplet precautions and one-metre distancing, and which includes protection of reception personnel at the initial point of encounter, is in place and includes the following:

- Where possible, a specific waiting room area for patients with symptoms of influenza pandemic. If not possible, put greater emphasis on use of masks as noted below.
- Hand hygiene stations near the entrance, reception area, and exam rooms. Instruct all entering persons to wash hands before approaching reception. Note: Alcohol-based hand rub is highly flammable and dispensers of this product should not be left in non-monitored areas. Provide individual hand sanitizers and lotion to all staff and encourage frequent use.
- Signage prominently posted about Respiratory Hygiene/Cough Etiquette, i.e. the following:
 - Use tissues or sleeve to cover cough or sneeze.
 - If coughing or sneezing, don a mask before approaching reception.
 - Wash hands after covering cough or sneeze.

- Provision of materials – masks for symptomatic patients (adult and paediatric sizes), facial tissues, and receptacles for their disposal.
- Practice of the above when seasonal influenza and other respiratory viruses are circulating.
- Designation of separate exam rooms for evaluation of patients with symptoms of influenza pandemic.
- Use of Standard and Droplet precautions (i.e. mask plus eye shield and gown) for close nursing or MD contact with symptomatic patients. (see Appendix 7-B “Infection Control”).

MANAGEMENT

Family physicians are the cornerstone of preventive health measures and patient education around the theme of staying healthy.

- In pre-pandemic phase, continue ongoing efforts around smoking cessation, obesity counselling, nutrition, and exercise.
- Promote seasonal flu vaccination.
- Follow Ministry and local guidelines for triage of patients to Alternate Care Sites, home self-care, or hospital-based care.
- Follow public health guidelines regarding distribution of antivirals and vaccine when available. These guidelines will be sent to physician offices via fax and e-mail and will be available on our website at www.regional.niagara.on.ca

BUSINESS CONTINUITY

An occupational health plan has been developed and includes the following:

- Instructions to staff to stay home when ill with influenza.
- Sick leave policy for personnel who have symptoms of illness during influenza pandemic.
- A policy for personnel who need to care for their ill family members.
- A statement about when to return to work after being ill.
- Education around fears related to working during influenza pandemic.
- Mental health and faith-based resources for counselling.

Planning for surge capacity has occurred and includes the following:

- Establishing possible sources of alternate personnel.
- Encouraging staff to develop alternate family care plans.
- Establishing minimum number of staff to keep office open.
- Anticipating consumable resources (masks, gloves, tissues, hand hygiene products, etc.) and keep an extra two-week supply on hand above usual requirements. Note: The Emergency Infection Control Kit contains supplies for a 7-10 day period only.

APPENDIX 7-B INFECTION CONTROL - NIAGARA PHYSICIANS OFFICE INFECTION CONTROL

Most influenza outbreaks amongst humans and animal studies suggest that virus-laden large droplets (particles >5µm in diameter) generated when infectious persons cough or sneeze are the predominant mechanism of influenza virus transmission (Emerging Infectious Diseases. www.cdc.gov/eid.Vol.12, No.1, January 2006). Transmission of influenza viruses by contaminated hands or other surfaces has not been well documented but the virus exists in diminishing titre on the surfaces of hands for 5 minutes, nonporous surfaces for 24 hours, and surfaces such as cloth and paper for 8-12 hours. The incubation period is 1-4 days and viral excretion peaks early in illness and exists prior to the development of symptoms.

Most of the information that follows is abstracted from the excellent publication *Infection Control in the Physician's Office* from the CPSO. Physicians are encouraged to read that document for a more in-depth treatment of other forms of infection control in the office.

Droplet Precautions

Droplet transmission refers to large droplets generated from the respiratory tract that are inoculated or directly deposited onto the mucous membranes of the eyes, nose, or mouth of the new host. These droplets can be propelled through the air a short distance (< 1 metre) during coughing or sneezing or during procedures that could generate aerosolization of respiratory secretions, e.g. taking a nasopharyngeal swab.

Compliance with droplet precautions in the primary care setting involves several steps.

Visual Alerts

Post visual alerts in appropriate languages at the entrance to outpatient facilities instructing patients with influenza-like illness, and those who accompany them, to practice hand hygiene and cough etiquette and to don a mask on entering the office. This will alert health care and reception personnel.

Prominently display the *Cover Your Cough* poster and provide an adequate supply of tissues and receptacles.

Hand Hygiene

There is evidence that alcohol-based hand sanitizers are at least as good as and possibly superior to soap and water, except in cases where hands are visibly soiled or contaminated. Since the contents are highly flammable, do not install these in unmonitored areas.

In areas with sink access, self-contained disposable liquid soap containers, as opposed to bar soap, should be used wherever possible to minimize contamination. If soap containers are reusable, never refill by topping up. Instead, wash, rinse, and dry the soap container

thoroughly, and then refill. When washing with soap, wet hands thoroughly and achieve a lather; rub vigorously for 10-15 seconds, covering all surfaces of hands and fingers, including nails; rinse and dry well with disposable paper towel; and turn off taps with towel and discard in a bin.

Encourage reception staff to wash their hands after registering each patient; and provide individual pump-type, alcohol-based, hand sanitizer dispensers and individual hand lotion bottles to prevent chapping of skin. Apply hand sanitizer to the palm of one hand and rub hands together, covering all surfaces of hands and fingers, until hands are dry.

Masking and Separation of Persons with Respiratory Symptoms

Procedure masks (i.e. with ear loops) or surgical masks (with ties) are adequate to contain respiratory secretions. N-95 masks are not required for general patient and personnel use. If possible, create separate waiting areas for persons with respiratory symptoms or encourage one-metre spacing of chairs.

Personal Protective Equipment

Reception and health care personnel should wear a mask and eye protection when in direct contact with a patient suspected of having influenza. Health care personnel should also wear a mask (type of mask to be determined) plus gown (gown must be removed after each patient contact) and glove when doing procedures involving close contact with patients and during which increased exposure may occur, e.g. taking nasopharyngeal swab. If caring for children, wear gowns and gloves at all times, as contamination of the environment is much more likely.

Masks which are moist no longer provide protection against droplet transmission and should be changed.

Gloves must be used only once and then discarded. Hands should be sanitized after glove removal. Non-latex, powder-free gloves are recommended.

Eye protection can be in the form of safety glasses, goggles, splash guards, or facial shields. Eyeglasses do not provide adequate protection.

Physical Environment

At the end of the office visit, wipe with a detergent solution all horizontal surfaces in the examining room that have been in contact with the patient, as well as equipment used to examine the patient.

APPENDIX 7-C - PATIENT ASSESSMENT OR PATIENT CARE RECORD

Under development.

APPENDIX 7-D – MOHLTC TRIAGE CRITERIA

Triage criteria for transfer to acute care facility.
Triage criteria for antiviral medication.
Triage criteria for discharge for Alternate Care Site.

Under development.