PANDEMIC INFLUENZA PLAN
2017
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FOREWORD

The following is the 2017 edition of the Thunder Bay Regional Health Sciences Centre (TBRHSC) pandemic influenza plan. TBRHSC first had a draft pandemic plan in June 2005. The current version contains information from the 2005 plan, from key documents and stakeholder input, and from the following:

- World Health Organization Pandemic Influenza Risk Management (2013)
- Ontario Health Influenza Pandemic Plan (OHPIP) (2015)
- Ministry of Health and Long Term Care's (MOHTLC) Emergency Response Plan (2013)

It is important to note that information provided in this document should be used as a guide and be changed should the situation necessitate. Given that an influenza pandemic is an unknown and different scenarios may arise, it is important that this document be revised to reflect any current knowledge and/or new guidelines and best practice recommendations. This plan should be considered a "living document" as it will be updated with new information as further details are considered.

The many unknowns of an influenza pandemic also mean that some sections of this plan are incomplete and still in the process of being developed. The key to the pandemic planning process is that it ensures the relationships and communication mechanisms are in place to assist with future planning.

This document, prepared by the Pandemic Working Group is a living document meant to be reviewed annually (or more frequently) and revised to reflect current knowledge.
EXECUTIVE SUMMARY

PREAMBLE

Influenza pandemics are a natural phenomenon that has occurred from time to time for centuries – including three times during the 20th Century. They present a real and daunting challenge to the economic and social wellbeing of any country, as well as a serious risk to the health of its population.

Planning is a key component of emergency response. Regardless of whether the emergency is manmade, health-related or environmental in nature, good planning is what separates a successful response from an unsuccessful one. As circumstances and knowledge around the world change, a variety of local, national, and international factors will influence a plan’s content and future direction.

The Thunder Bay Regional Health Sciences (TBRHSC) Pandemic Influenza Plan is intended to be aligned with existing provincial and federal guidelines, regulations, and directions. The current pandemic plan is rewritten from the first edition in 2005 and has had several rewrites over the years. The planning assumptions have been updated to set the best course of action in an uncertain environment by identifying, assessing, acting on and communicating risks.

The document is divided into various sections based on the area/department affected. To use this plan, some individuals may find it necessary to read the entire document, while others may need to refer to their specific area only.

The TBRHSC Pandemic Influenza Plan continues to be a work in progress. Pandemic planning does not end, it evolves.

PLANNING APPROACH, ASSUMPTIONS, AND PROCESSES

The overall goals of the plan are: 1) to minimize serious illness and death and 2) to reduce societal disruption resulting from an influenza pandemic. The essential elements include assumptions, approaches, and processes. Other essential planning components include:

- Pandemic planning assumptions (i.e., course of a pandemic, extent and severity of illness, access to vaccines and antivirals)
- Internal and external pandemic and emergency response planning structures;
- Ethical framework (e.g., decision-making principles, core ethical values);
- Legislative authority

PANDEMIC PLANNING FRAMEWORK, COMPONENTS, AND ACTIVITIES

This section presents the basic framework of the plan, which aligns the WHO pandemic phases with local public health requirements outlined in the OHIP. The framework consists of the activities of specific components: 1) surveillance, 2) vaccine and antivirals, 3) communications, 4) health services, 5) infection prevention and control. Each component includes specific objectives within the framework as well as supporting documentation.

1) SURVEILLANCE

Pandemic influenza surveillance is the collection and analysis of data that determines when, where, and which influenza viruses are circulating. It determines those segments of the population that are at risk of illness, emergency department
visits, hospitalization, critical care admissions, ventilator usage, and influenza-related death. When the Assessment, Treatment, and Referral Centre is established, the number of visits will also be monitored. Surveillance information is used by decision-makers to guide a public health response. Also, surveillance efforts will concentrate on watching for the first signs of the introduction of pandemic influenza into the district of Thunder Bay. This chapter outlines the surveillance activities that are presently taking place.

2) **VACCINE AND ANTIVIRAL MEDICATIONS**

Influenza vaccination is an essential tool in preventing the harmful health effects of influenza in a pandemic situation; however, a vaccine will not be available until four to six months after the pandemic strain has been identified. Until such time, antivirals may be recommended, if directed by the both the federal and/or provincial government, for identified groups such as healthcare workers (HCWs), other essential service workers, and for the early treatment of cases.

3) **COMMUNICATIONS**

Well planned internal and external communications will be essential to support a coordinated and effective response to an influenza pandemic. Considerations include providing for and responding to public and provider communication needs. Clear, concise, and timely messages from a credible source are critical. A variety of communication channels will be used to disseminate pandemic information.

4) **HEALTH SERVICES**

The delivery capacity of healthcare services at TBRHSC will be challenged throughout the influenza pandemic. Healthcare capacity issues are already significant and will be further stressed with healthcare provider absenteeism due in part to illness and/or personal employee situations (e.g., caring for an ill relative) and the increased volume of patients seeking healthcare for influenza. Both physical and human resources surge capacity are addressed within this section. The TBRHSC must plan for the negative effects a pandemic will have on its workforce, and prepare to maintain essential services and/or functions accordingly.

5) **INFECTION PREVENTION AND CONTROL**

This section outlines the basic principles of infection prevention and control related to influenza. General information on influenza is presented including modes of transmission, incubation period, and symptoms. Infection control practices are outlined and adherences to these practices are essential to minimize the transmission of influenza. Hand hygiene and Personal Protective Equipment (PPE) may be the only significant preventive measures available, particularly early in a pandemic. Providing an effective response to an influenza pandemic requires a knowledgeable and well-trained staff.

However well developed, plans are unlikely to be successful without the active support of individuals and community partners. Therefore, a key part of the response will be to encourage the public to follow government advice and adopt basic hygiene measures to manage or reduce their own risk of catching or spreading the virus. Ensuring that everyone is fully aware of the necessary precautionary and response measures, and is prepared to cooperate actively with them and accept responsibility for helping themselves and others, must be an integral part of the overall preparedness strategy.


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This list is not exhaustive; there may be other persons that have not been included.
PREAMBLE

The TBRHSC is a 386-bed acute care facility that services the city of Thunder Bay as well as Northwestern Ontario.

Influenza pandemics are unpredictable but recurring events that can have serious consequences on a population. During the 20th century, the world experienced three influenza pandemics. The most deadly, the "Spanish Flu" of 1918-19, killed 40 to 50 million people worldwide.

In 2008, it was calculated by the Ontario MOHLTC that depending on the severity of the next pandemic, Ontario could see between 1.8 and 4.2 million outpatient visits, between 7,500 and 65,000 hospitalizations and between 2,900 and 19,000 deaths from influenza. In Thunder Bay that would mean based on a moderate attack rate of 35%, approximately 680 persons would require hospitalization with 158 deaths.

In June 2009, a global influenza pandemic was declared by WHO and lasted fourteen months. It was the first of the 21st century. It was thought that the effects of 2009 pH1N1 were mild; the pandemic was actually responsible for the deaths of 428 individuals and led to 8,878 hospitalizations in Canada.

Influenza, a viral respiratory disease, can cause high morbidity and mortality in humans and is known to affect some animal species. Clinical disease can range from mild to severe and in some cases results in death. While Influenza B remains a human disease, Influenza A viruses are found in humans, avian and some mammalian species. In addition, influenza pandemic occurs when Influenza A virus, to which most humans have little or no existing immunity, acquires the ability to cause sustained human-to-human transmission leading to community wide outbreaks. Such a virus has the potential to spread rapidly worldwide, causing a pandemic.

The following conditions are necessary for an influenza pandemic to occur:
- a new influenza A virus arising from a major genetic change, i.e. an antigenic shift;
- a virulent virus with the capacity to cause serious illness and death;
- a susceptible population with little or no immunity; and
- a virus that is transmitted efficiently from person-to-person.

An influenza pandemic starts when a new strain of influenza virus emerges that is different from common strains of flu. Because people have no immunity to the new virus, it can spread quickly and infect hundreds of thousands of people. Pandemic flu strains often develop when an animal or bird virus mixes with a human virus to form a new and different human virus. The majority of new influenza strains emerge in Southeast Asia where large human populations have close interactions with pigs and domestic fowl.

Given that an influenza pandemic is the public health event that is most likely to have a major national impact, a specific plan to address this emergency is needed.
Transmissibility vs. Clinical Severity

Transmissibility reflects the ease of movement of the virus between individuals, communities and countries.

Clinical Severity is determined by the following:
- the number of new cases that are occurring
- the age groups who become severely ill and die
- the types of illnesses and complications being seen
- a virus sensitive to antiviral agents
- the number of people that will become ill
- the impacts on the healthcare sector

Examples and Impact of Severity Scenarios (OHPIP 2013)

<table>
<thead>
<tr>
<th>Overall Severity</th>
<th>Characteristics</th>
<th>Examples</th>
<th>Impact on Health System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low transmissibility &amp; Low clinical severity</td>
<td>Cumulative attack rate &lt; 21%</td>
<td>Typical seasonal influenza epidemics; 2009 flu pandemic</td>
<td>Comparable to seasonal influenza</td>
</tr>
<tr>
<td>High transmissibility &amp; Low clinical severity</td>
<td>Cumulative attack rate 21%</td>
<td>1927-28 seasonal flu epidemic</td>
<td>Significant workplace absenteeism High burden on outpatient and acute services</td>
</tr>
<tr>
<td>Low transmissibility &amp; High clinical severity</td>
<td>Cumulative attack rate &gt;21%</td>
<td>1957 flu pandemic</td>
<td>High burden on critical healthcare services</td>
</tr>
</tbody>
</table>
PLANNING ASSUMPTIONS

- Understanding Pandemic Influenza Spread of influenza will be primarily through the community from person-to-person rather than in a healthcare setting.
- A pandemic wave will sweep across Canada in 1-2 months affecting multiple locations simultaneously. The influenza pandemic will occur in two or more waves. In any locality, the length of each wave of illness will be 6 to 8 weeks. The influenza pandemic will last 12 to 18 months and more than one wave may occur within a 12-month period.
- Most people will be susceptible because the population will have had little prior exposure. Children and otherwise healthy adults may be at greater risk if the pandemic is caused by a recycled influenza strain because the elderly may have some residual immunity from a previous exposure to a similar virus.
- More severe illness and mortality than the usual seasonal influenza is likely in all population groups.
- Regardless of the severity of the pandemic, there will be an illness attack rate of 35% over the duration of the pandemic, which means that over the entire course of a pandemic, about 35% of the population will be sick enough with influenza to take at least a half day off work.
- Subclinical infections will occur. Based on previous influenza pandemics, many people will only experience mild illness or have no symptoms, but still be able to transmit the virus to others.
- Individuals who recover from illness with the pandemic strain will be immune to infection from that strain.
- The only specific treatment option for influenza during a pandemic will be antiviral drugs, which must be started within 48 hours of the onset of symptoms. The efficacy of antivirals against the pandemic strain is unknown, but when antivirals are used to treat seasonal influenza, they have been shown to reduce the length of time people are ill, risk of complications, and hospitalizations.
- A vaccine will not be available for at least 4 to 6 months after the seed strain is identified, which means it will not be available in time for the first wave of illness. Vaccine may be available to mitigate the impact of the second wave.
- In a pandemic caused by a novel virus subtype, the population will not be able to benefit from cross-protection from previous exposure to related strains, and everyone may require two doses of vaccine to induce immunity.
- The MOHLTC will provide centralized purchase and distribution of certain PPE, vaccines/antiviral drugs, and other clinical supplies.
- Decision-making processes regarding PPE will include the application of the precautionary principle when there is scientific uncertainty.

The symptoms of influenza include fever and respiratory symptoms. Often the person feels very tired and has muscle aches. Occasionally it may progress to pneumonia. While vomiting, abdominal pain, and diarrhea may sometimes occur, the expression “stomach flu” is not caused by influenza virus.
Differences between Seasonal and Influenza (Flu) Pandemic

<table>
<thead>
<tr>
<th>SEASONAL FLU</th>
<th>PANDEMIC FLU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary flu happens every year.</td>
<td>Pandemic flu happens only 2 or 3 times a century.</td>
</tr>
<tr>
<td>Ordinary flu is usually around from November to April – and then stops.</td>
<td>Pandemic flu usually comes in 2 or 3 waves several months apart. Each wave lasts about 2 to 3 months.</td>
</tr>
<tr>
<td>About 10% of Ontarians get ordinary flu each year.</td>
<td>About 35% of Ontarians may get pandemic flu over the course of an outbreak.</td>
</tr>
<tr>
<td>Most people who get ordinary flu will get sick, but they usually recover within a couple of weeks.</td>
<td>About half of the people who get pandemic flu will become ill. Most will recover, but it may take a long time. In addition, some people will die.</td>
</tr>
<tr>
<td>Ordinary flu is hardest on people who do not have a strong immune system: the very young, the very old, and people with certain chronic illnesses.</td>
<td>People of any age may become seriously ill with pandemic flu, depending on the virus.</td>
</tr>
<tr>
<td>In a normal flu season, up to 2,000 Ontarians die of complications from the flu, such as pneumonia.</td>
<td>During a flu pandemic, Ontario would see many more people infected and possibly many more deaths.</td>
</tr>
<tr>
<td>There are annual flu shots that will protect people from ordinary flu.</td>
<td>There is no existing vaccine for pandemic flu. It will take 4 to 5 months after the pandemic starts to develop a vaccine.</td>
</tr>
<tr>
<td>There are drugs that people can take to treat ordinary flu.</td>
<td>These same drugs may also help people with pandemic flu but we may not have a large enough supply for everyone and we will not know their effectiveness until the virus is identified.</td>
</tr>
</tbody>
</table>

MOHLTC 2013

Appropriate planning for an influenza pandemic can reduce the number of people infected (i.e. the extent of the outbreak), the amount of illness, the number of deaths, and the level of socio-economic disruption. TBRHSC must be prepared to mobilize resources quickly and effectively to limit the impact of an influenza pandemic on patients, staff, and visitors.
### Estimated Impact

<table>
<thead>
<tr>
<th>Estimated Population 2016</th>
<th>Thunder Bay District 146,048</th>
<th>15% Attack Rate</th>
<th>25% Attack Rate</th>
<th>35% Attack Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages 0-14</td>
<td>21,850</td>
<td>3,277</td>
<td>5,462</td>
<td>7,647</td>
</tr>
<tr>
<td>Ages 15-64</td>
<td>95,930</td>
<td>14,389</td>
<td>23,982</td>
<td>33,575</td>
</tr>
<tr>
<td>Ages 65+</td>
<td>28,270</td>
<td>4,240</td>
<td>7,067</td>
<td>9,894</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#</th>
<th>Outcome</th>
<th>Source</th>
<th>Attack Rate 15%</th>
<th>Attack Rate 25%</th>
<th>Attack Rate 35%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2016 Estimated Population</td>
<td>2016 Census</td>
<td>146,048</td>
<td>146,048</td>
<td>146,048</td>
</tr>
<tr>
<td>2</td>
<td># of persons ill enough to remain home</td>
<td>% of Total Population</td>
<td>21,907</td>
<td>36,512</td>
<td>51,117</td>
</tr>
<tr>
<td>3</td>
<td># of persons that can be managed through social care</td>
<td>#2 minus 4.5 and 6</td>
<td>11,902</td>
<td>5,150</td>
<td>5,353</td>
</tr>
<tr>
<td>4</td>
<td># of persons that will require an outpatient visit</td>
<td>Fluid 2.0</td>
<td>9,757</td>
<td>17,054</td>
<td>20,750</td>
</tr>
<tr>
<td>5</td>
<td># of patients hospitalized that will recover</td>
<td>Fluid 2.0</td>
<td>199</td>
<td>687</td>
<td>912</td>
</tr>
<tr>
<td>6</td>
<td># of fatal cases in hospital</td>
<td>Fluid 2.0</td>
<td>49</td>
<td>131</td>
<td>173</td>
</tr>
<tr>
<td>7</td>
<td># of hospitalizations</td>
<td>#5 plus 70% of #6</td>
<td>233</td>
<td>868</td>
<td>1,447</td>
</tr>
</tbody>
</table>
PANDEMIC PHASE LEVELS

The WHO (World Health Organization) determines the current pandemic phase level. The pandemic influenza phases reflect WHO’s risk assessment of the global situation regarding each influenza virus with pandemic potential that is infecting humans.

The global phases describe the spread of the new influenza subtype, taking into account the disease it causes around the world. As the pandemic virus emerges, countries and regions face different risks at different times.

<table>
<thead>
<tr>
<th>Period</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpandemic Phase</td>
<td>This is the period between influenza pandemics</td>
</tr>
<tr>
<td>Alert Phase</td>
<td>This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur.</td>
</tr>
<tr>
<td>Pandemic Phase</td>
<td>This is the period of global spread of human influenza caused by a new subtype. Movement between the interpandemic, alert, and pandemic phase may occur quickly or gradually as individuated by the global risk assessment, principally based on virological, epidemiological, and clinical data.</td>
</tr>
<tr>
<td>Transition Phase</td>
<td>As the assessed global risk reduces, de-escalation of global actions may occur, and reduction in response activities or movement towards recovery actions by countries may be appropriate, according to their own risk assessment.</td>
</tr>
</tbody>
</table>

WHO Global Influenza Preparedness Plan 2013

Given that the severity of a pandemic cannot be known in advance, the anticipated response activities should be based on broad and robust surveillance and evidence-based planning, response and recovery: Reviewed and Updated 2011, 2014, 2017.
based risk assessment. Risk assessment is a systematic process for gathering, assessing, and documenting information to assign a level of risk. Risk assessment aims to determine the likelihood and consequences of events that impact public health. It provides the basis for taking action to manage and reduce the negative consequences of risks to the public.

In an all-hazards approach, risk assessments can be performed to identify and prioritize preparedness, including mitigation and prevention, activities, response and recovery programs.
GOALS OF THE TBRHSC PANDEMIC PLAN

- To protect patients and staff and to minimize serious illness and death
- To minimize the psychological, social and economic impact of the illness
- To minimize disruption in the facility and allow for ongoing day-to-day operations
- To develop a strategic approach to a possible pandemic in cooperation with the community and regional partners
- To identify and discuss all ethical considerations (i.e. lack of human resources supplies, and equipment, antivirals, vaccines, ventilators and beds)

CURRENT CAPACITY

The TBRHSC has 386 beds. Of these, there are 171 private rooms, 82 semi-private rooms and 11 ward (4-bed) rooms. There are 26 negative pressure rooms. Private rooms are positive pressure. Negative pressure rooms are the preferred location for any influenza patients as this ensures that air from the room is vented to the outside rather than back into the corridors. Once negative pressure rooms become full, pandemic influenza patients will be placed into the private rooms. If the capacity of the neutral private rooms becomes overloaded then influenza patients may have to be cohort ed together in semi-private rooms.
RELEVANT LEGISLATION FOR PANDEMIC PLANNING

Everyone has a role to play in planning for a pandemic. The Canadian pandemic planning framework includes coordination and collaboration among government and jurisdictions at all levels: internationally, nationally, provincially, and locally. Each level of government has different roles and responsibilities depending on their jurisdictional authority (OHPIP 2013).

To ensure that those responsible for managing a pandemic response have the legal authority to implement pandemic plans certain legislation is in place to guide this process including:

The Emergency Management and Civil Protection Act (EMCPA) is the most pertinent legislation in Ontario in the event of a pandemic. It governs all municipalities in Ontario, ministers presiding over a provincial ministry, and agencies, boards, commissions and other branches of the provincial government designated by the Lieutenant Governor in Council.

Summary of Key Emergency Orders that may be issued by Cabinet or its delegate under EMCPA: (from Ontario MOHLTC Emergency Response Plan, 2008)

- Implementing emergency plans
- Regulating or prohibiting travel or movement
- Establishing facilities such as emergency shelters and hospitals
- Closing any place, whether public or private
- Authorize facilities, such as electrical generating facilities, to operate as necessary
- Using and making available any necessary goods, services and resources
- Fixing prices for necessary goods, services and resources and prohibiting price-gouging
- Authorize those who would not otherwise be eligible to do so, to perform certain duties (e.g., allowing doctors from other jurisdictions to work in Ontario for the duration of the emergency)
- Requiring any person to collect use or disclose information that may be necessary to respond to the emergency

The activation of the pandemic plan will have a systematic approach and will begin with the World Health Organization (WHO) releasing an alert about the escalation of WHO phases. The Public Health Agency of Canada would then activate the Canadian Pandemic Influenza Plan (CPIP) and communicate information to the provinces and territories. In Ontario, the MOHLTC would activate the OHPIP through the Chief Medical Officer of Health (CMOH) and advise the health systems to activate their plans. Local public health units would activate their local coordinating pandemic plan followed by the activation of the TBRHSC pandemic plan.

The Health Protection and Promotion Act (HPPA) which makes it a legal responsibility for physicians, laboratories, school principals among others to report certain diseases, including influenza, as well as information on the patients to medical officers of health (MOH’s). People that pose a risk to public health can be given orders to comply with anything that may reduce the risk of disease transmission. Physicians are also required under this Act to report to the MOH the name and address of any person that is refusing or neglecting to continue treatment for an infectious disease.
This act provides new powers to the Chief Medical Officer of Health (CMOH). The CMOH has the authority to request information, collect, retain, and use lab specimens to investigate, eliminate, and or reduce health risks.

The MOHLTC, on certification of CMOH, to procure, seize, or acquire medicines and supplies (with reasonable compensation) when regular processes are not sufficient to meet Ontario’s needs.

The Health Systems Improvements Act (HSIA) came to power in June of 2007. Through this Act, amendments have been made to the HPPA that include new emergency public health powers. Highlights of this bill include:

- The ability to invoke these powers without the declaration of a provincial emergency.
- New authority for MOHLTC, after consultation with the Chief Medical Officer of Health (CMOH) to acquire medications and supplies necessary for the health organization to take immediate and decisive action in response to a health risk.
- Provisions for the CMOH to issue directives on precautions and procedures. Directives will be based on current scientific, technical, operational and occupational health and safety advice provided by the MOHLTC Scientific Response Team.
- Additional authority for CMOH to request information from health information custodians and to collect, retain and use pre-existing laboratory specimens to investigate eliminate or reduce the risk to health.

The Public Hospitals Act requires that hospitals obtain ministry approval prior to using additional sites for hospital services as well as authorizes cabinet to appoint a hospital supervisor on the recommendation of the Minister of Health and Long-Term Care. This Act also requires (as well as the EMCPA) that TBRHSC has plans to deal with any emergency situation where a greater than normal demand on services provided by the hospital may occur. The administrator, chief nursing executive, nurse managers are required to develop plans to deal with situations that could place a greater than normal demand on hospital services, or disrupt the normal routine, or lead to the failure to provide services by persons who normally provide services in the hospital.

The Occupational Health and Safety Act (OHSA) and the Healthcare and Residential Facilities Regulation (HCRF) state that an employer has the duty to take all reasonable precautions for the protection of a worker. Further, under the HCRF Regulation, there is a duty for employers in healthcare facilities to establish measures and procedures including the following:

- Control of infections
- Immunization
- The use of disinfectants
- The handling, cleaning and disposal of soiled linen, sharp objects and waste.

All roles, responsibilities, duties and authority outlined in the OHSA remain intact during an emergency. As worker safety is considered paramount, the OHSA cannot be overruled by the EMCPA or the new HSIA.
All policies and procedures associated with Occupational Health and Safety as well as Infection Prevention and Control currently in place at TBRHSC, and any new ones, will be applicable as well to any alternate assessment, treatment and referral sites.

Employers are also required to provide workers with relevant training and workers have a duty to ear or use personal protective equipment (PPE) provided by the employer.

Workers have the right to participate in identifying and resolving workplace health and safety concerns.

Regulations under the Ambulance Act include provisions concerning education, protection, prevention of disease transmission, reporting of possible exposure and sterilization of equipment. They also deal with issues surrounding the immunization of emergency medical attendants.

The Regulated Health Professions Act ensures the power to register physicians, nurses, and other regulated health professions, which is provided to the College, which governs the profession.

Temporary registrations will be provided in the event of an emergency, the Health Professions Procedural Code, and the health profession specific acts.

Other legislation currently in place that will have bearing on pandemic planning includes but is not limited to the Personal Health Information Protection Act, 2004, the Regulated Health Professions Act, 1991, Employment Standards Act, 2000, and the Coroners Act, 1990.
ETHICAL FRAMEWORK

The TBRHSC will adopt the provincial ethical framework laid out in the OHPIP (2013) to assist with difficult decisions necessary in the event of a pandemic. In addition to TBRHSC values (patient’s first, accountability, respect, excellence), the following values will guide our decisions concerning health services delivery during the pandemic: the healthcare worker’s duty to provide care, and priority setting (including the equitable allocation of resources, reciprocity, trust, and solidarity). The TBRHSC Bioethicist and Operational Ethics Committee where appropriate will be involved in decisions of care for pandemic influenza patients, keeping in mind that provincially the MOHLTC will make decisions at their level. The public and other stakeholders will have more confidence in the decision making process if the procedure is:

- Open and transparent – The process by which decisions are made must be open to scrutiny and the basis for decisions should be explained.
- Reasonable – Decisions should be based on reasons (i.e., evidence, principles and values) and be made by people who are credible and accountable.
- Inclusive – Decisions should be made explicitly with stakeholder views in mind and stakeholders should have opportunities to be engaged in the decision-making process.
- Responsive – Decisions should be revisited and revised as new information emerges, and stakeholders should have opportunities to voice any concerns they have about decisions (i.e., dispute and complaint mechanisms).
- Accountable – There should be mechanisms to ensure that ethical decision-making is maintained throughout the pandemic.
ACTIVATING THE PANDEMIC PLAN

The declaration of an influenza pandemic is made through the World Health Organization (WHO) and filters down through the federal, provincial and municipal levels of government. In Thunder Bay, the pandemic plan would be activated by the Medical Officer of Health or designate as directed by the Ontario Ministry of Health and Long Term Care’s Chief Medical Officer of Health.

Once a pandemic emergency is declared by the local Medical Officer of Health (MOH), the Emergency Operations Control Group (EOCG), made up of key representatives of essential service and community organizations, will meet at the Emergency Operations Centre (EOC) as instructed in the Thunder Bay and Surrounding area Pandemic Influenza plan.

At the TBRHSC the Outbreak Management Policy would be instituted which gives direction for the implementation of the Pandemic plan.
INCIDENT MANAGEMENT SYSTEM

The Incident Management System (IMS) is an international, standardized, coordinated approach to managing incidents that provides functional interoperability at all levels of emergency management. This structure has been adopted by Emergency Management Ontario (EMO) as the operation framework for emergency management in Ontario. It provides the basic structure and functions required to respond and manage an emergency effectively.

IMS will provide common procedures for how we plan, organize and utilize facilities, equipment, supplies, and personnel. Ontario’s IMS structure builds on the systems already in place, while ensuring the same management tools are available across the province. It will also contribute greatly to the province’s ability to send and receive assistance across provincial and state borders.

DESCRIPTION OF THE IMS STRUCTURE

The IMS structure is built around five sections:

1. Command;
2. Planning;
3. Operations;
4. Logistics; and
5. Finance.

The Command section includes several key positions (e.g. Incident Manager, Liaison Officer, Public Information Officer, Safety Officer, and Scribe) It determines the overall flow of emergency operations by identifying an operational (i.e. business) cycle and the strategic objectives to be achieved within operational periods.

The Planning section is responsible for assessing the situation, identifying strategic objectives, coordinating human resources, managing volunteers, and creating action plans so that objectives may be achieved within specific timeframes.

The Operations section is responsible for coordinating the operational activities of the agency or organization to achieve the strategic objectives identified by the Incident Commander.

The Logistics section is responsible for providing the physical space, services, materials, equipment, technology, and technical support necessary for all sections to achieve their objectives.

The Finance section tracks all expenditures, claims, purchases, employee timesheets, and service contracts.

The IMS system is applied in a pandemic to ensure consistency with the mutual aid response system. Below is the draft Incident Management Module for our facility. It identifies the recommended structure and would be subject to change if identified people change positions.

Of note is the placement of Occupational Health and Safety (OHS) in the event of a pandemic. In an emergency OHS usually falls under the structure of the Labour Pool, but with an influenza pandemic they would report to Human Resources as there would be many concerns about staff being well enough to work.

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SURGE CAPACITY

Despite the assumption that assessment centres (once activated) will decrease some of the pressure on the facility there will still be an increased demand for services that could overwhelm the system. Currently the TBRHSC operates already at full capacity with little accommodation for surge capacity. Refer to the following policies: Medical/Surgical Surge policy (UM-util-07), Overcapacity ICU Surge Management policy (CCS-3-05), Women and Children’s Program Overcapacity Surge Management policy (PAT-1-43), Overcapacity Emergency Department/Adult Mental Health Surge Management policy (PAT-1-40), and Overcapacity Emergency Department Surge Management policy (ER-V-07). OHPIP (2013) outlines some strategies (shown in the table below) to increase surge capacity in the event of a pandemic. TBRHSC will adopt these strategies as shown.

TO INCREASE PHYSICAL CAPACITY

- Defer any services for non life- or limb cases where no severe adverse health consequences are anticipated from the delay.
- Discharge Alternate Level of Care (ALC) patients to Long-Term Care homes when beds are immediately available.
- Discharge acute inpatients to home care when care can be provided safely in that environment.
- Discharge acute patients to family and self-care when care can be provided safely in that environment.
- Deploy freed-up beds for influenza patients.
- Cohort infectious patients and non-infectious patients. Cohorting of infectious (influenza) patients will take place on the “B” pods (Refer to Algorithm below: Bed Management if an Acute Influenza Outbreak Occurs)
- For surges of isolated patients in ED, refer to Isolation Management in ED policy (IPC-1-12)

* The above algorithm refers to adult inpatients and is not applicable to the paediatric population or the renal unit. For paediatric specific surge capacity plans, refer to the Paediatrics section.
TO INCREASE HOSPITAL STAFFING

- Re-deploy clinical staff from deferred services.
- Consider deferring staff holidays and leaves of absence until pandemic ends.
- For staff willing to work extra hours, establish 12-hour shifts up to the maximum recommended number of days per staff.
- Cross-train clinical staff for influenza care and other essential services during pandemic and other large-scale emergencies.
- Refer to Overcapacity Staff Expansion Plan policy (ADM-2-14)

CLINICAL PRACTICES

Adopt clinical care practices to optimize hospital capacity, pending further development of clinical guidelines.

REGIONAL PATIENTS

Regional patients admitted to TBRHSC are to be accepted back to their originating facility without delay when they are medically cleared for transfer.
SURVEILLANCE PLAN

Influenza pandemic surveillance poses many challenges. As with the seasonal influenza, the first indications of the arrival or beginning of an influenza pandemic may not be a definitive physician diagnosis or laboratory confirmation because only a portion of those with influenza seek medical attention and many who seek care are not tested. (OHPIP 2013)

The TBRHSC will work collaboratively with the TBDHU to ensure all data reporting requirements are met for both provincial and federal jurisdictions. As patients/visitors and staff are screened and monitored for ARI/ILI all clusters will be reported to public health. A cluster is defined as “a grouping of cases of a disease within a specific timeframe and geographic location suggesting a possible association between cases with respect to transmission”. (PIDAC, 2013)

Currently the Infection Prevention and Control department monitors, collects and reports surveillance data to TBDHU and will continue to do so during an influenza pandemic. Hospital staff will assess all patients for symptoms of ARI, vigilantly question about the travel history for those presenting with ARI (as necessary), and consult with local public health about appropriate laboratory testing.

Surveillance Activities in the Interpandemic, Alert and Pandemic Phases for TBRHSC:

- TBRHSC laboratory will continue to report confirmed cases of influenza to both TBRHSC Infection Control Practitioners (ICP) and TBDHU.
- TBRHSC ICPs will report any unusual ARI activity to TBDHU.
- TBRHSC is required by law (HPPA) to report all respiratory infection outbreaks to local public health (TBDHU).
- All patients will be assessed for symptoms of ARI (via active surveillance in inpatient/ER setting and a self screen for outpatient areas) and cases that have a travel history to a country with a health alert will be reported to local public health as well as clusters of ARI.
- In the later stages of the alert and pandemic-phases TBRHSC will increase surveillance (for ARI with travel history) through outpatient areas with active screening at point of entry.

Surveillance Activities in the Pandemic Phase at TBRHSC will include:

- Reporting of adverse antiviral events through physicians and the pharmacy department.
- Reporting to public health the numbers of visits to the assessment/treatment centre on a daily basis.
- Active screening at hospital entrances for patients, visitors and staff.
- Reporting to public health the number of ED visits and deaths daily.
- Reporting of aggregate respiratory outbreak information using the Ministry’s web-based surveillance system as set out by the MOHLTC.

SCREENING

- All areas of the facility (outpatient and inpatient) will practice heightened screening procedures as recommended by MOHLTC.
- Screening will include both passive screening and active screening. Passive screening would include posted signage that request any patient/visitor with new or worsening cough or shortness of breath and a fever to perform...
hand hygiene and don a surgical mask. (Definition of influenza-like-illness will be based on the most up to date epidemiology as recommended by the MOHLTC). Active screening includes asking patients the screening questions at time of triage as well as at time of booking for outpatient appointments.

- If the need for full visitor restrictions arises then all people accessing the facility (including staff) will be screened on entrance. Communication strategies include printed signage, brochures and public messaging. Policy Outbreak Management (IPC-2-06) and Screening at Entrances during Outbreaks (IPC-2-10) will be put into place.
INFECTION CONTROL PRACTICES

Healthcare workers providing care and/or services to individuals with influenza will be at risk of exposure to the virus. Influenza is primarily droplet spread; it can be directly transmitted from person-to-person when people infected with influenza cough or sneeze, and droplets of their respiratory secretions come into contact with the mucous membranes of the mouth, nose and possibly eyes of another person. The 2013 OHPIP advises that particles expelled by a coughing or sneezing person can travel some distance and may be inhaled by someone who is within two metres of a coughing sneezing person. The influenza virus is also spread via contact transmission as it can live for periods of time on surfaces or hands.

The risk to healthcare workers in the workplace may be higher when staff are performing procedures that generate aerosols on patients with pandemic influenza because droplets containing influenza virus may become aerosolized and can be spread through the air. The issue of whether influenza can also be spread by airborne transmission in other situations (i.e., other than during procedures that generate aerosols) is controversial.

Infection Prevention and Control measures are particularly important in the early phases of a pandemic, when there are small numbers and there may be an opportunity to contain the virus and slow community spread. Once the influenza pandemic strain is widespread in the community, healthcare workers and all other workers will be at risk outside their workplace, and strict workplace controls will not prevent community-based transmission.

Current scientific literature and experience with other influenza viruses does not conclusively confirm or rule out airborne transmission. Consequently, in Ontario, employers are required to take reasonable steps to protect health workers from exposure to the pandemic strain in their workplace. The recommendations are based on the precautionary principle as per Justice Campbell's final report on the SARS commission, which states: “We cannot wait for scientific certainty before we take reasonable steps to reduce risk”.

EDUCATION

The OHPIP, 2013 outlines key areas that should be included in pandemic influenza training for healthcare workers. Learning objectives include influenza pandemic background, infection control basics, personal and family care, system planning and business continuity in a pandemic, occupational health and safety, communication strategies as well as information on clinical care.

The clinical educators at TBRHSC will play a large role in ensuring that staff at our facility are knowledgeable and kept abreast of any new guidelines or recommendations put forth by the MOHLTC. Use of prepared material from MOHLTC will be encouraged to ensure consistent messaging.

RISK ASSESSMENT

During a pandemic, a rigorous approach to risk management is required to ensure that all employees are protected. Risk management is defined as the interactive process used by an organization to recognize hazards, assess the risk associated with them, control the risk to reduce the incidence of injury or illness, and evaluate the effectiveness of these controls. The process of risk management in the
workplace is a tool available to all people, which, when applied correctly, leads to a safer work environment (Adapted from Taylor, G., Easter K. & Heg. R (2004) Enhancing Occupational Health and Safety).

Health sectors therefore benefit from the use of the RACE approach to risk management:

- R – recognize the hazard
- A – assess the risk associated with the hazard
- C – control the risk associated with the hazard
- E – evaluate the controls

A point of care risk assessment (PCRA) is conducted by health workers before each interaction with patients or their environment to evaluate the likelihood of exposure to an infectious agent/source and to choose the appropriate safe work practices to minimize everyone’s (health worker, visitor and patient) risk exposure to an infectious agent/source.

PCRA is not new concept, but one that is already performed regularly by professional HCWs many times a day for their safety and the safety of patients and others in the healthcare environment. A risk assessment will be conducted with Occupational Health and Safety to determine the likelihood of an employee being exposed to a hazard and risk associated with that exposure. When there is uncertainty about the consequences of exposure, settings at TBRHSC will assume that the risk is high.

OHPIP (2013) has a sample risk assessment checklist for pandemic influenza (Appendix C) which will be adapted if a pandemic is declared. Protection of workers from infectious disease will be achieved through a hierarchy of controls, including engineering controls (i.e. physical barriers, ventilation systems, etc), administrative and work practices and personal protective equipment.

Among the administrative and work practices will be staffing plans that identify staff at high risk from influenza so that they may be reassigned. Those at high risk are required to provide Occupational Health and Safety with medical documentation supporting their requirement for accommodation.

TBRHSC will have/have a stockpile of personal protective equipment (gloves, gowns, N95 masks, etc) sufficient to last four weeks in a pandemic. The province will provide another four weeks supply once that supply is exhausted.

In the event of PPE shortages, employers will assess services and reprioritize to ensure staffs involved in high-risk activities are protected at all times including staff providing:

- Care for patients with active pulmonary or laryngeal tuberculosis
- Aerosol-generating procedures on patients with influenza
- Resuscitation of patients with influenza (emergency intubation, CPR)
- Care of patients with influenza-related pneumonia and other complications of influenza, if the person is still thought to be contagious.
EQUIPMENT AND SUPPLIES

TBRHSC will have an increased demand for equipment and supplies both to provide patient care and to protect healthcare workers. Traditional supply chains may not be effective as demand will likely be high throughout the world. On recommendation of MOHLTC, TBRHSC will establish and maintain a four-week stockpile of personal protective equipment and other critical supplies. This will help to ensure business continuity for the first wave of the pandemic. The MOHLTC is also developing a four-week provincial stockpile that will be accessible once local stockpile is exhausted. The MOHLTC will provide centralized purchase and distribution of certain personal protective equipment, vaccine/antiviral drugs and other clinical supplies.

In the event of a pandemic access to the stockpile can be established by contacting the 24-Hour Healthcare Providers’ Hotline 1 (866) 212-2272

An example of recommended supplies to stockpile is listed below:

<table>
<thead>
<tr>
<th>Category and Supplies</th>
<th>Care at Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hand Hygiene</strong></td>
<td></td>
</tr>
<tr>
<td>Liquid Soap</td>
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</tr>
<tr>
<td>Alcohol Based Hand Rub</td>
<td></td>
</tr>
<tr>
<td>Paper Towels</td>
<td></td>
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<tr>
<td><strong>Personal Protective Equipment</strong></td>
<td></td>
</tr>
<tr>
<td>Surgical/Procedure Masks (for both patients and staff)</td>
<td>ER</td>
</tr>
<tr>
<td>N95 Respirators (for HCWs only)</td>
<td></td>
</tr>
<tr>
<td>Paper Gowns</td>
<td></td>
</tr>
<tr>
<td>Non-latex Gloves</td>
<td></td>
</tr>
<tr>
<td>Safety Glasses</td>
<td></td>
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<tr>
<td><strong>Temperature &amp; BP monitoring supplies</strong></td>
<td></td>
</tr>
<tr>
<td>Thermometers (and disposable covers)</td>
<td></td>
</tr>
<tr>
<td>Temp-a-dots (for use by non-clinical staff screeners)</td>
<td>Ward</td>
</tr>
<tr>
<td>Stethoscopes (disposable if available)</td>
<td></td>
</tr>
<tr>
<td>Blood Pressure Cuffs (Child, adult and large adult sizes)</td>
<td>ICU</td>
</tr>
<tr>
<td><strong>Disinfectants</strong></td>
<td></td>
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<tr>
<td>Disinfecting Wipes</td>
<td></td>
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<tr>
<td>Surface Cleaner and disinfectant</td>
<td></td>
</tr>
<tr>
<td><strong>Diagnostics</strong></td>
<td></td>
</tr>
<tr>
<td>Nasopharyngeal (NP) swab specimen kit (a) NP swab (b) viral transport</td>
<td>ER</td>
</tr>
<tr>
<td>Testing Reagents (e.g. Rapid ELISA-based kits; viral transport media; cell lines and media)</td>
<td></td>
</tr>
<tr>
<td><strong>Cleaning</strong></td>
<td></td>
</tr>
<tr>
<td>Garbage Bags</td>
<td></td>
</tr>
<tr>
<td>One-use tissues</td>
<td></td>
</tr>
<tr>
<td><strong>Injection for pandemic influenza vaccine</strong></td>
<td></td>
</tr>
<tr>
<td>Needles 25 gauge 1”, 25 gauge 5/8”</td>
<td></td>
</tr>
<tr>
<td>Syringes</td>
<td></td>
</tr>
<tr>
<td>Alcohol Wipes</td>
<td></td>
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<tr>
<td>Sharps containers</td>
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<tr>
<td>Category</td>
<td>Items</td>
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<td>--------------------------------</td>
<td>----------------------------------------------------------------------</td>
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<tr>
<td><strong>Respiratory Care</strong></td>
<td>Medium Cotton Balls</td>
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<tr>
<td></td>
<td>Band-Aids</td>
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<tr>
<td></td>
<td>Oxygen tubing</td>
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<tr>
<td></td>
<td>Oxygen Masks- high concentration masks (non-rebreathers) and low</td>
</tr>
<tr>
<td></td>
<td>concentration masks</td>
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<tr>
<td></td>
<td>Nasal Prongs/cannula</td>
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<tr>
<td></td>
<td>Oxymeters and probes</td>
</tr>
<tr>
<td></td>
<td>Portable oxygen tanks with regulators</td>
</tr>
<tr>
<td></td>
<td>Ventilator Supplies</td>
</tr>
<tr>
<td><strong>Suction</strong></td>
<td>Disposable tips, catheters, tubing, canisters</td>
</tr>
<tr>
<td></td>
<td>Disposable manual resuscitators (BVM) &amp; filters (various sizes)</td>
</tr>
<tr>
<td></td>
<td>Inline suction catheters</td>
</tr>
<tr>
<td></td>
<td>Portable suction</td>
</tr>
<tr>
<td><strong>Ice Packs</strong></td>
<td>Cold Pack sodium or ammonium nitrate</td>
</tr>
<tr>
<td></td>
<td>Gel Pack soft cold pack</td>
</tr>
<tr>
<td><strong>Paper products</strong></td>
<td>Paper square absorbent table cover</td>
</tr>
<tr>
<td><strong>IV products</strong></td>
<td>Solutions</td>
</tr>
<tr>
<td></td>
<td>Tubing</td>
</tr>
<tr>
<td><strong>Deceased Body Management</strong></td>
<td>Body Bags</td>
</tr>
<tr>
<td><strong>Personal Identification</strong></td>
<td>ID bands for patients</td>
</tr>
<tr>
<td><strong>Instruction/Info Materials</strong></td>
<td>Instruction Manuals for Vaccinators</td>
</tr>
<tr>
<td></td>
<td>Self-monitor; self-care info for general public</td>
</tr>
<tr>
<td></td>
<td>Fact sheet for patients and families</td>
</tr>
<tr>
<td><strong>Forms</strong></td>
<td>Consent Forms for vaccines</td>
</tr>
<tr>
<td></td>
<td>Adverse reaction reporting forms (for vaccines and antivirals)</td>
</tr>
<tr>
<td></td>
<td>Assessment/health record forms</td>
</tr>
</tbody>
</table>

This supply list is not meant to be exhaustive and can be adapted as needed if the need for other equipment comes to light. Extra supplies will be stored at a yet to be determined location and an annual inventory will be conducted to ensure turnover of stock prior to any stock expirations. This may require additional storage space be obtained outside of the facility requiring financial resources. The inactive storage room has a limited potential to maintain a very minimal amount of priority supplies and may be used.

In the event of inevitable supply shortages, plans may have to be changed and decisions made by management on a frequent ongoing basis.
Discussions will take place about how best to ensure supply of specialty items that may not see an increase usage but may have normal distribution methods compromised. Plans for ensuring a supply of these specialty items will be included within this plan at a later date.
HUMAN RESOURCES PANDEMIC PLANNING

To keep the organization running smoothly, certain services may need to be cancelled, postponed or scaled back. This will ensure that staff is available to cover for the increasing numbers of people off work as well as cover for the increase in people admitted to the hospital requiring care for influenza.

To ensure coverage for ill staff members TBRHSC will take a competency-based approach to health human resource planning. This framework is a collaborative approach to deploying staff in a pandemic. A competency-based approach identifies the competencies available to deliver the services that people need during an influenza pandemic. This will ensure an increase in care capacity for the large number of influenza patients by making strategic use of the competencies of all available healthcare providers and students. One of the objectives of a competency-based approach to workforce deployment is to make available health professionals who are specially trained and competent in influenza care to focus on those patients who are in greatest need.

During the alert phase, Human Resources, Education, Patient Care Services and Professional Practice will collaborate to develop the appropriate frameworks for skill needs assessments and training programs.

To increase the work force, consideration will be given to redeploying staff members that are recently retired, using part-time staff members for extra shifts or for expanding the student role. Once an understanding is reached of the competencies required and the competencies of the existing staff, they can be matched to ensure needs are met.

When matching competencies, TBRHSC will consider the legislative framework of the Regulated Health Professionals Act (RHPA). The RHPA specifies a number of controlled acts that are authorized only to specific professions. TBRHSC will consider that although being in a registered profession assumes that a skill may be in their scope of practice, a staff member may not be competent to perform that act due to lack of skill, education, competency, or recency of use.

TBRHSC will structure care in such a way to make the most effective use of provider skills. Detailed care plans and algorithms will be used, driving reliance on a set pattern of care. Refer to Organization Overcapacity Staff Expansion Policy ADM-2-14. Instead of individual healthcare providers caring for one or two patients, a team that has a complete skill set and relevant experience collectively cares for a group of patients.

Staffing ratios will be determined at the time to make the best use of available resources.

The following steps will be followed in order to be prepared for the key obstacles in a pandemic:

1. Once a pandemic is determined, TBRHSC will first post an “expression of interest” for the Screener position. See attached TBRHSC and SEIU Letter of Understanding – Appendix D.
   a) If it is determined by Senior Management to restrict visitors, security will be utilized to monitor the entrances of the building.
b) If screening (temp, throat check) is completed, this will be done by trained screeners.
c) The employer may assign any SEIU employee, with the skills and abilities to complete the screening to do said work.
d) The employer will attempt to hire, orientate and train screeners as quickly as possible to meet the need to cover the entrances to the building.

2. Human Resources will access employee records to identify positions and departments that Nurses, Service employees and Clerical employees have worked in the past 4 years. This electronic table will be available for managers to review if/when necessary due to staffing levels. Critical areas will utilize staff with the most recent and related experience first, then if necessary, the employees with basic competencies to complete the required tasks.

3. Human Resources will have a contact list for all recent retirees, within last 5 years, and last known contact information will be provided to managers by department in which the employee retired from. Potential employees from this pool will be hired on a contract basis.

4. TBRHSC will then contact, if required, both Lakehead University and Confederation College, to hire students into temporary positions to be of assistance to the employees within TBRHSC that can supervise and provide guidance to the care plans of our patients. It is understood that these students will not be acting above their scope in compliance with the RHPA, but act as a support role for those staff.

5. Should a pandemic be declared the regular Volunteer Program will be stopped and the Volunteer Pandemic Plan be instituted (Appendix C). In extreme staff shortages, Human Resources may use the volunteer list for recruitment purposes. The volunteer would become an employee with full employment protection.

6. . . . If we reach a point where we are in a state of Emergency, determined by Senior Management - (Code Orange policy #EMER-01) Human Resources will then implement the Emergency Measures Plan Fan-out process (Policy # EMER-110). A pandemic, unlike a usual disaster or emergency can continue for a significant length of time (weeks to months) and the usual emergency measures plan would not be appropriate. In this instance however if there were to be a sudden influx of patients and a significant staff shortage, the emergency measures plan fan out process can be instituted to obtain staff for the short term, until alternate measures can be determined.
COMMUNICATIONS

In the event of a pandemic, TBRHSC will receive information through a communication system that has been arranged through all jurisdictions of government. The MOHLTC has developed an Information Cycle to be used in the event of a public health emergency. This cycle ensures that provider groups as well as the public and media receive regular timely reports. The MOHLTC will provide communication updates at the same scheduled time each day to ensure that providers know what to expect.

*Figure 12.1: MOHLTC Information Cycle in a Public Health Emergency*

Ontario Health Plan for an Influenza Pandemic, 2008

It is critical that front line staff receive the required information to work safely and to ensure this the MOHLTC will use a number of different mechanisms to communicate this information to workers and stakeholders. The MOHLTC will also have activated in a pandemic emergency the Healthcare Stakeholder Council, which is a group, made up of the CMOH, EMU and representatives from the professional associations, labour associations, regulatory colleges and regional offices. This group will be responsible for bringing forward issues, providing advice to the government and ensuring effective communication with their constituencies.

The MOHLTC Emergency Management Unit will have a Healthcare Provider Hotline, 1-866-212-2272 that all healthcare workers and stakeholders will be able to access.

The Ontario Hospital Association will also implement its own "Information Cycle in an Emergency" to ensure effective communications with member hospitals.

Based on both of these information cycles, TBRHSC will develop a communication cycle to facilitate consistent communications with key stakeholders, including staff, patients, families, TBDHU, NW-LHIN, and the community via regional and local media. To ensure a consistent message is delivered to the public, all communications activities will be channeled through the Community Core.
Communications Committee and for the most part public messaging will come from this group rather than from TBRHSC.

**INTERNAL COMMUNICATION PRINCIPLES TO CONSIDER DURING A PANDEMIC**

A variety of internal and external multi-media communication tools are available for pandemic messaging. These can be applied to disseminate targeted messages, as confirmed by the Community Core Communications Committee and the TBRHSC Incident Manager.

The list of Internal tools includes, but is not limited to, email, voice-mail, intranet, internet, all branded “paper and poster” strategies, PowerPoint presentations, web streaming, DVD, CD, organized media events, Patient and Family Centred Care strategies, computer screen saver strategies, Bulletin Boards, Roll Up Displays, before all meetings “latest news” strategies, Administrative leaders messaging to staff, and cheque message attachments, to name a few.

External media can be utilized. Media initiatives are coordinated by Communications, Indigenous Affairs & Engagement in partnership with Pandemic leads.

- Communications, Indigenous Affairs & Engagement to coordinate messaging on the website [www.tbh.net](http://www.tbh.net), social media, internal e-newsletters, and patient waiting area TV screens.
- Managers to use corporate workstation flat screens and nursing station screens as available, to communicate messages. The addition and removal of content is coordinated by IT/IS.
- Managers to develop “text and image” strategies for PFCC applications.
- Managers to ensure all their staff are responsive to unit and TBRHSC information. This should involve personal instruction and feedback meetings with staff.
- Managers to engage their VP regarding corporate issues that may require a response.
- Managers, using due diligence, to collaborate with leaders of other “patient units” when applications overlap. This collaboration should be shared with their V.P.
- Managers to mentor communication strategies for succession purposes.
**OCCUPATIONAL HEALTH AND SAFETY**

Healthy healthcare environments are essential for the health and safety of both healthcare workers and those for whom they care. Health sector employers are ultimately responsible for Occupational Health and Safety (OHS) in the health setting. However, all workplace parties have a role to play in the creation of safe and healthy workplaces that is appropriate to their role and function within the organization (OHPIP 2013).

In the pre-pandemic phases the Occupational Health and Safety department will follow direction from the Infection Prevention and Control department through MOHLTC direction as to staff surveillance and any work restrictions based on the current situation. This will include any restrictions for staff working that are symptomatic with possible novel strain as well as those that are asymptomatic but may have a positive travel history to an affected area.

**WORK RESTRICTIONS**

The terms “fit for work”, “unfit for work” and “fit to work with restrictions” will be used by the Occupational Health and Safety department to communicate a worker's ability to remain at or return to work depending upon their susceptibility to influenza and immunization status (during a pandemic). These terms also allow for the occupational health nurse to maintain confidentiality about a worker’s diagnosis, symptoms and immune status.

**FIT FOR WORK:**

HCWs are considered fit for work when:

- They are well or;
- They have recovered from illness during earlier phases of the pandemic or;
- They have been immunized against the pandemic strain of influenza or;
- They are on appropriate antiviral therapy.

**UNFIT FOR WORK:**

Ideally, staff with ILI are considered “unfit for work” and therefore will not work. Given the likelihood that there will be limited resources, HCWs may be asked to work provided they are well enough to do so.

**FIT TO WORK WITH RESTRICTIONS:**

Symptomatic staffs who are considered “fit to work with restrictions” should only work with patients with ILI. Those staff who must work with non-exposed patients are required to wear a mask and ensure that attention is paid to meticulous hand hygiene. Staff should not be assigned to areas such as the ICU, NICU, and newborn nursery or to dialysis or oncology or any other areas where there are severely immunocompromised patients (may be modified based on epidemiology of the circulating pandemic virus).

**FIT TESTING FOR STAFF:**

Plans should be in place to ensure fit testing is completed or can be completed quickly on staff that will require N95 masks. Priority will be given to staff working in patient care areas at first point of entry beginning with staff that have never been fit tested and working through to those that have not been fit tested in the past two years.
**VACCINE AND ANTIVIRAL MEDICATIONS**

Immunization is an essential component of the response to an influenza pandemic as it prevents influenza in individuals and minimizes its spread within the community. Both vaccines and antiviral drugs are part of Ontario’s comprehensive strategy to minimize illness and death. During an influenza pandemic, the vaccine is available at no cost to staff.

Vaccine is the most effective way of preventing disease and death from pandemic influenza. Unfortunately the addition of a vaccine effective against a pandemic strain will take up to 6 months and will likely not be available for the first wave of a pandemic. When first available vaccine will also be in short supply and decisions may need to be made about who can receive the vaccine when it is first received. Decisions regarding priority grouping for receipt of vaccine will be laid out provincially so that decisions are consistent throughout the province helping to maintain public trust.

Antiviral drugs can be used to treat and prevent influenza and will be important in the early wave of a pandemic when vaccine is not available. Antivirals used for seasonal influenza have been shown to reduce both the length of illness as well as length of hospitalizations and it is hoped they will have the same effect on a pandemic strain. Ontario currently has an antiviral stockpile to treat 25% of the population, which is the expected portion of the population that will be sick enough to require treatment with an antiviral.

Current provincial stockpile consists of both Tamiflu (oseltamivir) and amantadine. The drug of choice is Tamiflu due to side effects from amantadine therapy. Another drug, zanamivir (Relenza) is licensed for treatment only and is also being stockpiled to diversify the medication offered and to have something available for pregnant and lactating women.

To be effective for treatment of influenza antiviral medication needs to be given within 48 hours of onset of symptoms. For this reason a distribution plan for antivirals needs to be in place. During a pandemic the Ministry Emergency Operations Centre (MEOC) will be responsible for coordinating the distribution of antivirals across the province, and the public health units will be responsible for coordinating the distribution of antiviral drugs among healthcare organizations at a local level.

Current evidence is lacking that putting large groups of otherwise healthy Canadians on antiviral drugs in order to prevent influenza will slow or stop the spread of a pandemic. Antiviral prophylaxis requires considerably more drug than early treatment (four to five individuals could be treated with the amount of drug required to provide prophylaxis for one individual for a six-week period). The current recommendation while awaiting further discussion on the process is to use the National/Provincial antiviral stockpile for treatment only.

The TBRHSC has stockpiled a supply of antivirals sufficient to provide a 60-day supply to all staff members (not merely frontline). The provincial government has indicated that the stockpile will be considered in the provincial supply of antivirals and will need to be distributed accordingly. The OHA indicates that in absence of a provincial policy, some hospitals have chosen to make their own decision, weighing the benefits and constraints of stockpiling antivirals.
The Health Protection and Promotion Act (s. 77.5) authorizes the Minister of Health and Long-Term Care to procure, acquire or seize medications and supplies (subject to reasonable compensation) when regular supply and procurement processes are insufficient to address the needs of Ontarians.

The TBRHSC pharmacy will, in conjunction with the TBDHU develop plans for receiving and distributing antiviral medication for treatment of patients. The primary administration point for community will be through flu centres. It is anticipated that due to the size of the staff and numbers of patients through the facility, vaccine and antiviral distribution for this population will take place on site. The OHS department is prepared to administer pandemic influenza vaccine to all staff when it becomes available.

**Storage, Distribution and Administration of Antivirals**

TBRHSC currently has a stockpile of oseltamivir (Tamiflu) to provide all staff members of TBRHSC with a 60-day supply of the antiviral for prophylaxis. In order to distribute this medication appropriately the following needs to be considered:

- A medical directive has been developed to prescribe the antiviral and initiate mass prophylaxis if directed (see Appendix D: Antiviral Distribution Plan).
- Although direct observed therapy is the preferred method of antiviral distribution, the resources to do this may not be available. For this reason, TBRHSC will consider distributing to employees their entire supply at one time.
- The shelf life of Tamiflu is five years and a plan will need to be developed to include rotating of stock and keeping inventory.
- Tamiflu stockpiles in the event of a pandemic will require additional security, with possibly one security guard assigned to the pharmacy area. Currently the pharmacy has two locked doors to go through to obtain access to medication storage.

Since first development of this plan, the Pan Canadian Public Health Network Council’s (PHNC) Task group on Antivirals for Prophylaxis has made a decision about the use of antivirals for prophylaxis of large groups of the population. The new recommendations for the use of antivirals for prophylaxis are:

- During the implementation of the early treatment strategy, critical infrastructure workers have access to rapid assessment and early treatment in order to minimize societal disruption during the early pandemic alert
- Early treatment of cases and post-exposure prophylaxis of close contacts should be offered in Canada during the pandemic alert period
- No post-exposure prophylaxis of close contacts of cases during the early pandemic period in Canada
- No general post-exposure prophylaxis of close contacts of cases, with antiviral use focused on treatment of those with influenza;
- Use of antivirals for outbreak control, involving treatment of cases, and post-exposure prophylaxis of contacts, in closed healthcare facilities and other closed facilities where high-risk people reside during the early pandemic phase
- Antivirals for pre-exposure prophylaxis not to be stockpiled by governments during the pandemic alert
- The MOHLTC will use these policy recommendations to further develop their own provincial policy. Once developed, the policy at TBRHSC will be reviewed.

At time of development of this plan the Ontario MOHLTC does not have a provincial policy with regards to the use of antivirals for prophylaxis.

**VACCINES**

TBRHSC will obtain pandemic influenza vaccine once available (possibly 4-6 months after manufacturer’s receipt of the pandemic seed strain) from a distribution line with the TBDHU. The provincial distribution system will ship vaccine when available to local public health units. TBDHU will arrange for distribution of the vaccine through mass immunization clinics. It is anticipated that due to the number of staff at TBRHSC we will be able to hold our own clinic through the OHS department.

Although Ontario’s goal is to provide enough vaccine to immunize the entire population (25 million doses; based on two doses per person) vaccine in the early stages will be in short supply. For this reason the TBRHSC will follow provincial direction (communicated through the Thunder Bay District Health Unit) on priority groups for influenza immunization. Priority groups for influenza pandemic vaccine are currently under review both federally and provincially.

TBRHSC will use the provincially developed reporting form for adverse effects from antiviral drugs. Adverse vaccine associated events should continue to be reported through the current system.

**VACCINE AND ANTIVIRAL DISTRIBUTION:**

Vaccine will be administered to staff through the Occupational Health and Safety Department (as directed by the MOHLTC) by way of a mass clinic on a sequence of days. Staff lists will be forwarded to OHS and vaccine administered in the early stages based on direction from TBDHU. It is anticipated that in the early stages, vaccine will be in short supply and may need to be distributed based on priority groups from the MOHLTC. Consideration will be given to pulling in other staff members to assist with the vaccination campaign, as current OHS staff would be overwhelmed with the large numbers at the clinics.

Appendix D (Antiviral Distribution Plan) outlines the process for distributing antivirals to staff and patients.

Appendix E (OHS Mass Vaccination Plan: Influenza Pandemic Mass Immunization Plan) outlines the plan for immunizing staff onsite in the event of a pandemic.
SECURITY

To ensure the safety of staff and patients during an influenza pandemic, the security department has developed a plan for times of restricted access to the facility. This plan also includes plans for ensuring the security of equipment and pharmaceuticals stockpiled for emergencies.

Should a decision be made by the Senior Management Team or by the Senior Management team in collaboration with the Thunder Bay District Health Unit to restrict access to the facility, security will adopt one of the following plans, dependent upon the level of restricted access being initiated.

**LEVEL 1 RESTRICTION**

*Limited Access to Unit/Suite*

Level 1 restricted access allows access to all non-inpatient areas throughout the Health Sciences Centre.

Appropriate signage and public communications will be made available to educate the public as to the restricted conditions within the building. Security may be called upon to redirect visitors and others from entering inpatient areas that have no reason to enter that particular department.

The Security Manager will be kept informed as to the ongoing status and activities resulting from a Level 1 Restriction and should the demands on the scheduled security detail become problematic, further consultation will be held with the Director of Environmental Services and the contracted Security Service Management team to provide additional personnel.

Based on recommendations of Senior Administration and Pandemic Steering Committee, Security may be required to lock certain public access doors to the TBRHSC to provide better control over access points and visitor travel.

**LEVEL II RESTRICTION**

*Limited Access to Inpatient Areas*

Level II restriction will effectively close all inpatient departments to visitors and others who are not authorized to access the departments.

Staff of these departments will be tasked to intercept persons not authorized to enter the departments. Appropriate signage is provided and will be posted at various entrances to the inpatient departments, by Staff informing visitors of the department closures and where to seek further information.

Security maybe called upon to provide assistance to redirect individuals upon request. A heightened sense of awareness will require ongoing roaming patrols to all areas of the facility. The Security Manager will liaise with the contract Security Service Management team and Site Supervisor should there become a need for additional resources.

**LEVEL III RESTRICTION**

*Limited Access to Health Sciences Centre*

Level III restriction will severely restrict access for both staff and visitors to the Health Sciences Centre during the affected period.
Should a Level III restriction be implemented, on-duty Security Guards will contact the Security Manager and/or Security Service Site Supervisor immediately so that additional resources can be requested and deployed.

During this level III Restriction, all access/egress doors will be closed and secured with access being granted for authorized staff only.

Ongoing evaluations of the situation may necessitate the need to further restrict access/egress to all staff and visitors. Should this decision be made, Security has the ability to deactivate card readers at all access controlled doors to ensure all staff and visitors utilize one or two controlled entrances to the building.

TBRHSC Security Service will have a number of “PUBLIC NOTICE” signs which will be stored in the main security office. These signs will be posted to inform Staff and Visitors to the TBRHSC of the “Restricted” access to the building. Upon receiving appropriate instruction from the Security Manager, Infection Prevention and Control or a representative of senior management, Security Guards will post these signs on all exterior access doors to the TBRHSC:

- Cancer Care West Entrance
- Main West Entrance
- Main Revolving Entrance (2)
- Main Door beside Revolving Entrance
- Emergency Entrance
- Labour And Delivery Entrance
- Cafeteria Entrance
- Renal Entrance
- Shipping and Receiving Entrance
- Staff Entrance “G”

Security will also post ‘NO EXIT’ signs on the internal side of the above doors along with all of the first and second floor fire exits. This is to dissuade staff and others from exiting the building through these doors and to prevent entry to the building inadvertently should one of these doors not close properly.

By direction of Senior Management, it may be necessary to restrict total access into the building exclusively via the Emergency Department, Cafeteria & Main entrances. This will allow hospital staff and Security to implement strict access measures and to better control pedestrian traffic into and out of the building.

Also by direction of Senior Management, it may be necessary to implement a staff, patient and Physician screening process at those entrances designated for entry into the hospital. Security will maintain a physical presence at these screening stations and render assistance to the screeners as required.

The Security Manager will liaise with the Director of Environmental Services, Manager of Pharmacy and Manager of Material Distribution in equipment stockpiled for pandemic emergencies. A suitable location will be identified to optimize security of stockpiled items. In the event of the distribution of antiviral medication for prophylaxis of staff, security will be assigned to the pharmacy to ensure safety during pharmacy operating hours. As well there may be the requirement of security for staff vaccine clinics, especially if the vaccine is in short supply at first and requires administration via priority groups.
The Security Manager, in conjunction with the Director of Communication and Director of Emergency Services, will assist with the coordination and collaboration of Emergency Responders to the TBRHSC during a pandemic emergency.

The Security Manager will liaise with the contracted Security Service to ensure that a current call out list of Security Guards is available and to initiate a call out process should additional personnel be required to maintain a safe and controlled environment.

Other areas that may impact on security and will need to be reviewed at the time include:

- Implementation of alternate care sites
- Forensic & Adolescent Psychiatric clients (inpatient & outpatient)
- Exposure (N95 fit testing, Routine Practices)
- Extended pandemic period (lack of resources)

**VISITOR RESTRICTIONS**

Communication strategies including already printed signage for certain scenarios are in place. These strategies will involve public messaging completed in collaboration with the TBDHU. A visitor restrictions checklist has been developed to assist with the process (see Appendix F: Visitor Restrictions Checklist).

Discussion has taken place with Superior North Emergency Medical Service (EMS) who will issue a directive to their paramedics at our request to restrict family members riding to the facility in ambulances. This will assist with limiting visitors in the Emergency Department. Superior North EMS can be contacted at (807) 625-3259.
ASSESSMENT, TREATMENT AND REFERRAL CENTRES

Provincially it has been determined that the healthcare system will use a three-stage process to determine whether someone has influenza: a self-assessment, a remote screening (either via telephone or face-to-face) or in hospital. The MOHLTC will distribute a self-assessment that individuals can complete themselves in the event of a pandemic. The province’s Telehealth program will also be expanded to handle the anticipated increase in calls during a pandemic. Residents with concerns are going to be encouraged to call Telehealth prior to coming to the emergency department to help decrease the influx into that department.

In order to decrease the demands on the Emergency department as well as outpatient medical clinics, plans have been put in place to have an assessment, treatment and referral centre set up in the event of an influenza pandemic. During a mild to moderate influenza pandemic, existing primary care services should have the capacity to provide influenza assessment, treatment and referral services and continue to provide the other primary care services that Ontarians will need. In the event of a moderate to severe pandemic these services may become overwhelmed and it will be necessary to start up the Flu Centres.

The recommended trigger by the MOHLTC for switching to this approach will be when the existing primary care system is no longer able to ensure that patients are assessed, diagnosed and treated with antivirals within 12 to 24 hours of developing symptoms. In our local area due to a shortage of primary care practitioners and the existence of only one acute care facility this “trigger” will likely happen at an earlier point than in other parts of the province.

These temporary community based centres will help give the public easier access to influenza services and decrease the pressure on existing services. The TBRHSC has taken the lead on developing one 24 hour/day, 7 days a week assessment centre for the city of Thunder Bay, which will be located at the 55 Plus Centre. Other potential sites are West Thunder Community Centre and the Current River Recreation Centre. For further information on this centre please refer to the Assessment Centre Plan.
EMERGENCY SERVICES

Emergency Services at TBRHSC will likely be challenged due to increased volumes of patients presenting to the ED.

Non-urgent patients will be encouraged to attend physician’s offices, walk-in-clinics or the assessment centres if they have “influenza-like” symptoms or questions about influenza.

Goals for a patient assessment and treatment plan for TBRHSC would include:

- Effectively screening and triaging patients to support efficient flow and minimize transmission of the influenza virus
- To identify patients requiring secondary assessment or admission and apply the appropriate management protocols or clinical pathways.
- To effectively build hospital surge capacity to accommodate both influenza and non-influenza patients requiring acute care services.

The developed assessment, treatment and referral centre will assist with keeping the flow of patients with influenza like symptoms away from the ED as much as possible. Patients with influenza symptoms will be directed to the assessment centre through public messaging or by referrals from Telehealth (unless condition is urgent or emergent). Patients presenting to the ED will be assessed in the designated area of triage and directed to the identified area reserved for patients presenting with symptoms of influenza to minimize traffic through the ED.

PATIENT FLOW

The patient flow through the Emergency department (ED) will be defined for patients with influenza-like illness and those without (see Appendix G: Emergency Department Patient Flow). Patients exhibiting influenza like symptoms on screening will be triaged in a separate area than those without symptoms. Patients identified to have an influenza-like illness will be triaged in a cordoned off area located in the South West corner of the main waiting room. This area is to be cordoned off with three isolation curtains and have a dedicated triage RN. The patients will then enter the ED and proceed directly to A1, designated for influenza patients. Discussion has taken place with regards to the organization of the Emergency department to keep influenza and non-influenza patients separated as much as possible. The ED public access doors will be used only for patients accessing the ED to eliminate traffic passing through the area.

- Development of identified area for patients with influenza-like-symptoms (ILI) will consist of 4 spots in the A1. In presentation to the ED, initial ARI screening is to be done by nurse/screener for initial self-identification of fever and new or worsening cough.
- Upon self-identification of ARI, patient is directed to a separated registration area, away from the usual triage area.
- The ED waiting room is divided in infectious and non-infectious (clean and dirty) area to further isolate the self-identified patients presenting with ARI.
- The patients that have self-identified will be triaged by an RN in the isolated(dirty area, (located at the South West corner of the ED main waiting room) to determine the severity of symptoms and to assign a triage level to the patient.
Upon determination of patient’s condition, the patient will then be directed to the A area of the ED.

A area will be utilized to assess, diagnose and treat patients that are able to ambulate on their own and/or with little assistance.

Patients with more serious presentation and symptoms will be directed to the isolation areas (C10, 11, 12, 15, 16, or Trauma rooms) within the main ED to facilitate easier observation of these patients.

Ideally staff will be assigned to work either with patients presenting with ILI or with patients with no ILI symptoms. Staff should not interact between the two areas.

If patient’s symptoms are more serious and they require a more acute area, he/she will be directed to the next available isolation room or if/when the patient’s condition changes or warrants him/her to be brought right in.

Manager or designate to communicate with other department managers or designate to facilitate the implementation of increased supplies for this increased activity within the ED, including the availability of extra respiratory supplies, pharmaceuticals, linen, and stores supplies.

NOTE: The pharmacy department has put consideration into stockpiling of additional pharmaceuticals that may be needed in an influenza pandemic and may or may not be in short supply. Currently they maintain approximately a one month’s supply of items that may be needed (i.e. antibiotics, bronchodilators, autonomic agents, antipyretics/analgesics, corticosteroids, etc). A list is maintained in the pharmacy department of items for pharmacy staff to monitor for reordering should supply begin to dwindle.

**Patients requiring Critical Care**

Surge capacity plans for Critical Care (ICU) will be triggered early in this process to allocate resources to further triage the sickest patients to Critical Care. Critical patients will be assessed by intake intensivist to determine if admission to Critical Care is appropriate. If patients do not meet criteria, placement will be made on an alternate unit.
CRITICAL CARE

Critical Care Triage will be necessary, as there will not be enough resources to respond to the number of people seeking care during an influenza pandemic. Prioritization of health resources will need to be considered. Three key principles support critical care triage.

- All patients will be cared for. This does not mean that all patients will receive critical care services but will ensure that those not appropriate will still be cared for at an alternate level of care.
- Triage protocol will ensure that the criterion is clear and transparent and will protect individuals from inequities.
- Critical care triage is NOT a first step towards rationing under ordinary circumstances and will be used only under extraordinary circumstances.

It is important to note that critical care triage is NOT the same triage as routinely practiced in the emergency department.

Refer to Appendix H: Critical Care Triage Protocol. This protocol may need to be updated when a pandemic occurs, as it is impossible to develop a perfect tool in advance without knowing certain factors (i.e. the pandemic strain, groups most likely to have poor outcomes, etc).

This strategy includes inclusion and exclusion criteria that identify those patients that may benefit from admission to critical care and those that will not.

Inclusion criteria are based primarily on respiratory failure because the ability to provide ventilator support is what differentiates the ICU from other areas of the hospital.

Exclusion criteria are divided into three categories:
- People with a poor prognosis/chance of survival even when treated aggressively in an ICU
- People that will need a level of resource that can’t be met during a pandemic
- People with underlying significant and advanced medical illnesses whose underlying illness has a poor prognosis with high short-term mortality even without their current concomitant critical illness

The final component of the triage protocol deals with the MQS (Minimum Qualifications for Survival) and the SOFA (Sequential Organ Failure Assessment) scale.

The Critical Care Triage protocol includes MQS that require patients to be reassessed at 48 to 120 hours as well as on an ongoing basis if the patient develops a SOFA score of ≥11 or any other exclusion criteria. The MQS attempts to identify patients that are not improving and are likely to have a poor outcome.

Once patients are deemed as appropriate for inclusion to ICU, prioritization of these patients still has to be determined. Patients currently on a ventilator prior to the initiation of the critical care triage protocol in an influenza pandemic will not be extubated even though there may be patients that do not meet this new criterion. Decisions should be reviewed by the TBRHSC ethical team and the Critical Care team.
Please refer to Appendix I: Critical Care Pandemic plan for more specific details for this area, including staffing plans.
PAEDIATRICS

Paediatric services will face unique issues and challenges during an influenza pandemic.

Certain factors will affect paediatric care during a pandemic, including:

- Children are at greater risk of infection from influenza and of spreading the virus
- Social, public health and other concerns may have an impact on services for children
- Influenza manifests differently in children and will require different treatment
- Parents reliance on family physician for paediatric care

Parents and families of children will require extra education, communication and instruction to care for their child at home and decrease spread of infection.

Children not well enough to stay at home or return home after assessment may need admission to hospital. Admission to hospital should be based on acute clinical need and presentation of acute ILI symptoms.

The Women & Children’s Program Surge Capacity Plan (PAT-1-43) will be implemented and all resource allocation strategies will be utilized. It is presumed that ALL children will receive care in one form or another (primary healthcare through walk-in clinic/community clinic, Emergency care, critical care, or general Pediatric care).

The TBRHSC will use telemedicine services to “coach and counsel” whenever possible with regards to paediatric care rather than sending out to other facilities that may already be overwhelmed with other patients.

The Neonatal Intensive Care Unit Guiding Principles include:

- Planning and decision making within context of ethical framework
- Appropriate level of care delivered within principles of safe and available resources
- The tool used to guide principles/decision making may need to be updated as healthcare professionals become aware of type pandemic strain, groups most likely to have poor outcomes, etc.
- Refer to Appendix J: Women & Children’s Program
- PAT-1-43 specific plan describes in further detail
PERINATAL CARE

Refer to Appendix J. Maintenance of obstetrical care during a pandemic will also require significant planning and preparation. Women that acquire influenza in the third trimester of pregnancy are at an increased risk of cardiorespiratory illness and more likely to experience early delivery or miscarriages and/or poor maternal fetal outcome.

Pregnant women – particularly those in the third trimester of their pregnancy – are at higher risk of illness, complications and death from pandemic influenza than the non-pregnant population. Depending on type of strain of virus and symptoms associated with illness supportive care, lowering of temperature, hydration, and severity of illness will determine disposition of patient within hospital.

Our facility must be able to assess and manage pregnant women who present with symptoms of influenza. Patients will be isolated with ILI symptoms from non-infectious patients, staff will follow routine Infection Control precautions plus any additional precautions recommended by identified strain of pandemic virus. Cohorting of patients with similar ILI will be performed as recommended by Infection Control dept. Non-symptomatic mother/newborns will be discharged home as soon as medically feasible. It is also essential that TBRHSC participate in community education campaigns for pregnant women with other health organizations to increase awareness of steps for pregnant women to take if they believe they have influenza through the Maternity Centre program and/or outpatient visits to Labour rooms.

Staff will be deployed and redeployed to ensure adequate coverage of obstetrics and critical paediatric services.

As per Canadian Pandemic Influenza Plan for the Health Sector, 2006, “NACI recommends that all pregnant women with chronic conditions (such as cardiopulmonary conditions, diabetes, cancer or anemia) and healthy pregnant woman in their second or third trimester receive the influenza vaccine...

Retrospective studies have found that no serious risk of adverse events or congenital anomalies have been reported in infants of women who received influenza vaccine during their pregnancy.

Increased influenza vaccine use during pregnancy has the potential to benefit both the woman and her infant through maternal transplacental antibodies and breast milk-acquired immunity.”
SURGICAL SERVICES

To increase surge capacity in the event of a pandemic, surgical services will be reviewed. It is anticipated that all elective surgery will be cancelled except for urgent cancer cases thus freeing up both patient beds and staff members to care for the surge of influenza patients and to accommodate for staff absences.

Surgical services will follow the Urgent/Emergency Surgical Priority Codes or “ABC” list for all non-elective surgeries. Non-elective cases are those considered urgent or semi-urgent where patients cannot safely wait to be booked into an elective block. This listing will be a guideline for case classification; however, a clinical decision must be made to classify each case.

The Priority Codes are as follows:
- Priority “A” – immediate threat to life or limb within 0-2 hours
- Priority “B” – 2 to 12 hours
- Priority “C” – 12 to 72 hours

The OR currently maintains this listing, which provides examples of which situations would fall into which category. The TBRHSC OR would be closed to the region except for emergent cases.

Cancellation of elective surgeries should open up the PACU and/or Recovery room overflow for patient admission. Maintenance of PACU beds for the non-elective surgery patients is essential but part of this area could be used for the admitted inpatient. It is anticipated that the higher risk (non-influenza) patient could be cared for in this area, as PACU staff would have the additional skill set to care for the higher acuity patient. Initially, 4 additional inpatient beds will be accommodated in this area with possibility of small expansion.

The Surgical Day Care area currently can accommodate an extra 4 patients during surge without impacting interventional radiology patient recovery, and up to 8 patients with cancelation of interventional radiology patients. Surgical Day Care has a defined border as well as a small pantry, shower and bathroom. Criteria for admission to this overflow area of the hospital will be the current criteria used for alcoves and recovery room overflow (see Appendix A: Overflow Patient Guidelines) which will assist with ensuring only non-infectious patients are admitted to the area. Meetings with management will need to take place at the time to determine the best allocation of staff and beds from this area dependant on the current situation.
OUTPATIENT AREAS (AMBULATORY CARE UNIT)

Many outpatient areas will have services either cancelled or deferred during a pandemic. Clinics have been prioritized for closure: both short term and long term (see Appendix N: Clinic Priority Listing).

Yet to be developed include plans for patients to continue with ambulatory care services (i.e. dressing changes). Ideally, patients would be maintained at home with community services for dressings, IV meds, etc, but these services may not be able to absorb the additional patient load so alternate arrangements will need to be made.

Further plans will be included in this section.
LABORATORY

In response to the threat of a possible influenza pandemic, provincial labs have increased capacity for the diagnosis of influenza and the early detection of emerging pandemic strains.

In a hospital laboratory setting, it is not considered practical to identify lists of tests that will or will not be performed during a pandemic. OHPIP (2013) outlines the primary role of hospital laboratories as to support the acute care provided in their facilities. The type of tests that may be reduced or curtailed will depend on the care needs of the patients at TBRHSC. TBRHSC will maintain all services required to safely and optimally manage all hospitalized patients within our facility.

It is advised that laboratory workers receive vaccination against the currently circulating strain of influenza (not mandatory but recommended). Although this will not provide protection against the pandemic or novel strain, it will decrease the opportunity for concurrent infections and the possibility of re-assortment of the novel strain with a strain already well adapted to humans and capable of human-to-human transmission.

Laboratory testing to diagnose influenza will take place at Public Health Laboratories and will not take place in house. Direction will be given by Public Health Ontario, as to what tests to order, what specimens to collect and what process to follow.

There are highly sensitive, efficient laboratory tests to diagnose influenza. Most often offered will be reverse transcriptase polymerases chain reaction (RT-PCR) as the NA (nucleic acid testing) test of choice for the screening and sub-typing of influenza viruses. All specimens identified as being from the pandemic strain will be sent to the National Microbiology Laboratory, or designated public health laboratory for confirmation.

It is essential that the laboratory requisition form be well detailed and completed as required (hospitalized or outpatient, recent travel history, febrile or afebrile, upper respiratory tract infection or pneumonia, any other major symptoms, etc).
BLOOD SHORTAGES

In the event of an influenza pandemic, there could be shortages in the provincial blood supply. The OHIP (2008) provides categories or phases of shortages of blood products in Chapter 17D, “Ontario Contingency Plan for Management of Blood Product Shortages”.

A hospital emergency blood management plan has been developed for the TBRHSC, which will be a component of the facility Emergency/Disaster Plan (Code Orange). For further information in the event of a blood shortage, call transfusion services at extension 6601.
CANCER CARE

The process for patients with influenza symptoms or urgent medical (non-cancer) issues will be as per the hospital pandemic plan. Plans for Cancer services of patients that do not have influenza have been developed through Cancer Care Ontario and are outlined in Chapter 17B of the OHPIP (2008). These guidelines were developed to determine priority for consultation and treatment of patients with cancer and ensure a consistent approach across the province. A cancer patient priority classification has been developed by the clinical programs to assist cancer programs in the management of patients referred with a cancer diagnosis.

Members of the Thunder Bay Regional Cancer Centre have been actively involved in adopting these criteria for use at this facility.

Patients receiving radiation treatment will be managed in accordance with procedures developed at TBRHSC and Cancer Care Ontario. In support of these procedures, a further detailed process specific to the radiation therapy operational network (RTON) provides guidance for modifying radiation treatment operations and prioritizing affected patients to ensure that treatment is delivered in an optimal manner when there is constrained capacity resulting from the impacts associated with a pandemic (see Appendix K: Prioritization of Radiation Therapy Patients during a Declared Pandemic).

The Regional Cancer Centre has also developed algorithms to assist with determination of prioritization for treatment and consultation. Two algorithms are available: one for systemic therapy patients and one for surgical oncology patients (see Appendix L: Systemic Algorithm and Appendix M: Surgical Oncology Algorithm).

Cancer Care
**CHRONIC AND ACUTE KIDNEY DISEASE PATIENTS**

For patients with end-stage renal disease, renal dialysis treatments and kidney transplants are their only treatment options. Dialysis treatment can be either in the form of hemodialysis or peritoneal dialysis depending on the patient’s condition and choice (OHPIP, 2008). TBRHSC will make every effort to ensure continuity of care for renal patients requiring dialysis.

It is anticipated that chronic kidney disease patients who have influenza will be at higher risk of influenza complications. It will be imperative to segregate patients with influenza like illness (ILI) from patients without ILI symptoms and treat as quickly as possible.

Prioritization of patient’s needs and services will need to take place to ensure continuity of essential services. This will be based on their stage of kidney disease, and actual/projected treatment efficacy.

**STAGES OF KIDNEY DISEASE**

(OHPIP, 2008 table 17C.2)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Glomerular Filtration rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>Kidney damage with normal or increased glomerular filtration rate (eGFR greater than or equal to 90 ml/min/1.73 m²)</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Kidney damage with mild decrease in GFR (eGFR 60-89 ml/min/1.73m²)</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Moderate disease in GFR (eGFR 30-59ml/min/1.73m²) or 3a GFR 45-59ml/min/1.73m² and 3b GFR 30-45ml/min/1.73m²)</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Severe decrease in GFR (eGFR 15-29 ml/min/1.73m²)</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Kidney failure (eGFR less than 15ml/min/1.73m² or dialysis)</td>
</tr>
</tbody>
</table>

**CRITERIA FOR PRIORITIZING PATIENT NEEDS**

<table>
<thead>
<tr>
<th>Priority</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority A</td>
<td>Patients who are deemed critical, whose condition is immediately life threatening. Their immediate need is greatest and Regional Programs must find ways (either within the geographic area of the pandemic or elsewhere) where treatment can be instituted or continued.</td>
<td>Acute kidney injury patients End stage renal disease patients Creation of body access to make dialysis possible Transplant patients</td>
</tr>
<tr>
<td>Priority B</td>
<td>Patients whose condition is not deemed life threatening, for which services can be deferred or discontinued over the course of a pandemic wave (6 to 8 weeks). Physicians will determine that these patients are not put at undue risk. If their situation changes they will be moved to priority A</td>
<td>Progressive Renal insufficiency Transplant patients Home dialysis program Those near the end of home training should complete training and be sent home.</td>
</tr>
<tr>
<td>Priority C</td>
<td>Patients whose condition is not deemed to be life threatening and for whom services can be discontinued for the duration of the pandemic.</td>
<td>Ambulatory clinics New installation for home hemodialysis</td>
</tr>
</tbody>
</table>
These patients are, for the most part, undergoing routine follow-up or screening can reasonably wait until all waves of the pandemic are over (i.e. 6 to 18 months).

<table>
<thead>
<tr>
<th>Follow-up clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pandemic Influenza Plan</td>
</tr>
</tbody>
</table>
CARDIAC CARE

Patients with heart disease and patient’s recovering from surgery and other procedures are at risk for complications associated with influenza. Essential cardiac services need to be maintained during a pandemic. For this reason, the Cardiac Care Network of Ontario has developed a plan for cardiac care during an influenza pandemic, which will be added to chapter 17 of the OHPIP (2008).

These guidelines were developed for adult cardiac care services only and have not given consideration to paediatric cardiac services.

Current cardiac clinical services provided by TBRHSC include:

<table>
<thead>
<tr>
<th>Program</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Acute Coronary Disease</td>
<td>• Emergency assessment, care and interventional procedures&lt;br&gt;</td>
</tr>
<tr>
<td>- Ischemic</td>
<td>• Introducing rescue angioplasty&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Critical care/intensive care&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Non-acute care</td>
</tr>
<tr>
<td>2 Acute Vascular</td>
<td>• Emergency assessment, care and interventional procedures&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Limited surgical intervention: do pacemakers but do not do implantable</td>
</tr>
<tr>
<td></td>
<td>defibrillators, post-op care&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Critical care/intensive care&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Non-acute care</td>
</tr>
<tr>
<td>3. Acute Electrophysiology</td>
<td>• Emergency assessment, care and interventional procedures&lt;br&gt;</td>
</tr>
<tr>
<td>- Heart Rhythm</td>
<td>• Critical care/intensive care&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Non-acute care</td>
</tr>
<tr>
<td>4. Congenital Heart Disease</td>
<td>• Emergency assessment, care and interventional procedures&lt;br&gt;</td>
</tr>
<tr>
<td>(ongoing supportive care</td>
<td>• Limited surgery and post-op care&lt;br&gt;</td>
</tr>
<tr>
<td>for chronic cases: NOT new</td>
<td>• Critical care/intensive care&lt;br&gt;</td>
</tr>
<tr>
<td>cases)</td>
<td>• Non-acute care</td>
</tr>
<tr>
<td>5. Heart Failure</td>
<td>• Emergency assessment, care and interventional procedures&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Critical care/intensive care&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Non-acute care</td>
</tr>
<tr>
<td></td>
<td>• Clinics</td>
</tr>
<tr>
<td>6. Cardiology/Diagnostics</td>
<td>• Emergency assessment&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>• Echocardiogram</td>
</tr>
<tr>
<td></td>
<td>• Stress tests</td>
</tr>
<tr>
<td></td>
<td>• CT scans</td>
</tr>
<tr>
<td></td>
<td>• Cardiac catheterization</td>
</tr>
<tr>
<td></td>
<td>• Nuclear imaging</td>
</tr>
</tbody>
</table>

To maintain these services a plan for prioritization of patient needs and plans to defer any type of non-urgent services are in place.

The Cardiac Care Network’s triage algorithm will be adapted by TBRHSC to assist with this prioritization of patients. Patients will be given an urgency rating score (URS) that will be used to calculate their Recommended Maximum Wait Time for advanced cardiac services. This triage algorithm and priority process should be...
applied consistently to all patients – in-hospital patients, transfers from other hospitals, and outpatients. The current referral system through the Cardiac Care Network will remain in place.

<table>
<thead>
<tr>
<th>OHIP Priority</th>
<th>CCN Priority</th>
<th>OHIP Priority Level Description</th>
<th>Examples (may include but not limited to)</th>
</tr>
</thead>
</table>
| Priority A    | Emergent     | Emergent cases: Patients who are deemed critical, whose condition is immediately life threatening. Their immediate need is greatest and Regional Programs must find ways (either within the geographic area of the pandemic or elsewhere) where treatment can be instituted or continued expeditiously. | Surgical conditions
  - Symptomatic Left Main coronary artery stenosis (transfer)
  - Unstable symptomatic Left Main or severe multi-vessel disease (transfer)
  - Balloon pump dependent (transfer)
  - Patients requiring use of a left ventricular assist device (LVAD)
  - Tamponade
  - Cardiac trauma
  - EP device failure

Non-surgical conditions
  - Shock
  - Failed reperfusion as evidence by recurrent chest pain, persistent ECG finding of infarction
  - Sudden heart failure
  - New murmur
  - Persistent or recurrent chest pain
  - Dynamic ECG changes with chest pain
  - CHF, hypotension or arrhythmia with chest pain
  - Moderate or high troponin rise (>5ng/ml)
  - Class IV NYHA heart failure
  - Tamponade
  - Balloon pump dependent
  - Life threatening bradycardia or tachycardia with or without hemodynamic instability
  - V block or symptomatic sinus node dysfunction
  - Incessant arrhythmias (ventricular tachycardia, incessant SVTs)
  - Syncope in patient with structural heart disease or primary electrical disease (LQTS, Brugada,)
  - ICD system failure (i.e. lead fracture) resulting in inappropriate shock
  - Wolf-Parkinson-White Syndrome with atrial fibrillation
### Priority B

**Urgent and Semi-Urgent***

Urgent cases. Patients who are deemed urgent and who need service within 14 days. It may be possible to defer these services for a few days, but not for the length of a pandemic wave. Physicians will determine that these patients are not put at undue risk. If their situation changes they will be moved to priority A.

<table>
<thead>
<tr>
<th>Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Patients who meet the Secondary Indication criteria for ICD implantation</td>
</tr>
<tr>
<td>- High risk coronary anatomy</td>
</tr>
<tr>
<td>- Acute endocarditis</td>
</tr>
<tr>
<td>- Class III/IV NYHA heart failure</td>
</tr>
</tbody>
</table>

**Non-surgical Interventions**

- TIMI risk score 3-4 (intermediate) including NSTEMI with small troponin rise (≥1 and <5 mg/ml) or ECG T wave inversion or flattening or significant LV dysfunction (EF < 40%)

### Priority C

**Elective***

Elective cases. Patients whose condition is deemed non-life threatening or can be managed with medication and for whom services can be deferred until the end of a pandemic wave (i.e., six to eight weeks).

| Stable coronary artery disease |
| Stable valve disease |
| Stable aneurysm |
| Patients who meet the primary indication criteria for ICD implantation |

* Urgent, Semi-urgent and Elective RMWTs will vary according to the type of procedure as per the CCN prioritization scheme.

It is important to remember that although a patient may not meet priority for acute cardiac intervention (due possibly to co-morbidities making chance of survival low); ALL patients will receive care in some form or another. All cardiac patients will require screening for ILI symptoms, same as other patients.

Elective outpatient cardiac services will be deferred and certain clinics (i.e. pacemaker clinic) will ensure patients are prioritized to determine which services cannot be delayed. Emergent cases will be cared for.
MENTAL HEALTH SERVICES

Mental health services will continue with heightened screening protocols in the event of an influenza pandemic. It is not anticipated that an influenza pandemic will increase the numbers of patients requiring mental health services but patients requiring care may now also have influenza in addition to any mental health concerns. Staff shortages can also be anticipated.

The Forensics unit has all private rooms with private bathrooms and showers for all patients. The adult mental health unit has a combination of private and semi-private rooms and one ward room.

Some outpatient services can be deferred but there are others that are considered essential and are a legal requirement of the patient’s treatment (i.e. sexual behaviors’ group). Refer to Appendix N: Clinic Prioritization listing for details of which clinics may be deferred and for how long. Methods of providing essential (legally mandated) outpatient clinics/group therapies will have to be reviewed with consideration for off site locations for group therapy and heightened pre-screening of clients before group commencement.

Alternate methods of care will be examined and may include a switch to phone interviews when appropriate. Community outpatient workers will communicate with patients (when there is a phone available) prior to appointment times to ensure that they do not have ILI symptoms.

The possibility of reduced staffing compliments due to staff illnesses/absences will have to be addressed to ensure both staff and patient safety in a high-risk environment.

A Mental Health and Addictions Working Group was established to engage in collaborative planning in order to identify issues and develop strategies to protect their clients and/or mitigate the negative effects of an influenza pandemic or other factors leading to prolonged service disruptions. Membership in this working group consists of managers of outpatient and residential mental health and/or addiction services from both St. Joseph’s Care Group and Thunder Bay Regional Health Sciences Centre. The working group members used the Pandemic Mental Health and Addictions Pandemic Preparedness Checklist (OHPIP, 2009) as a tool to evaluate and inform their planning.

Following this review, it was agreed that all mental health and addiction community based, outpatient and/or residential programs would be identified as “essential services” and would adopt the provincial standards for Maintaining Mental Health and Addiction Services. It was also agreed that programs would work in collaboration to share resources and/or space as needed in an effort to keep programs operating as long as possible in the event of a pandemic or other prolonged service interruption.

In keeping with the provincial standards for maintaining Mental Health and Addiction Services, representatives of the working group consulted with community partner agencies in the development of the pandemic plan.
MORTUARY SERVICES

In the event of an influenza pandemic, an increase in mortality would be expected but accurate predictions could not be made until the pandemic virus emerges. The World Health Organization advises that death rates are largely determined by four factors:

- The number of people who become infected;
- The virulence of the virus;
- The underlying characteristics and vulnerability of affected populations; and
- The effectiveness of preventive measures.

The 2008 OHPIP explains that an influenza pandemic would likely result in a "natural death surge" not a "multiple fatality event". A natural death surge can be defined as, "an increased number of deaths from natural causes that can occur over a period of time (weeks to months) rather than in one incident or event. The impact of an ongoing natural death surge may impact local systems and capabilities”.

In the event there is a natural death surge, there may be some changes made to our regular internal policies regarding pronouncing of death, completion of death certificates, registration of death, autopsies, etc. It is important to note that funeral homes have been active in pandemic planning and both the national and provincial boards of funeral services have published plans in place for pandemic influenza.

Currently there is capacity to hold 18 bodies in the event of a pandemic; 9 coolers in the autopsy suite and 9 in the holding morgue. In the event the morgue does exceed capacity funeral homes will be asked to transport bodies to the city designated temporary morgue as per the Thunder Bay and Area Pandemic Influenza Plan, April 2014, directed by the Emergency Operations Control Group.
APPENDIX A

OVERFLOW (PACU) PATIENT GUIDELINES

GENERAL INCLUSION GUIDELINES:

- Stable medical patients
- Stable, non-operative surgical patients (i.e. pancreatitis)
- Stable, post-operative surgical patients after initial 24 hrs
- Patients with open, non-infected wounds when dressing is applied
- Tele-medicine patients included

EXCLUSION CRITERIA FOR OVERFLOW BEDS:

- Active DT’s
- Diarrhea and GI bleeds
- Fever & Cough (FRI policy)
- Fever NYD
- Neutropenic patients
- Paediatric patients
- Isolated patients (i.e. infective process cellulitis – draining, FRI, suspect TB, Chicken pox or measles)
- Confused and wandering patients
- Tele-card and Med-card patients
- Involuntary, aggressive Mental Health patients
- Outbreak considerations
## APPENDIX B

**RISK ASSESSMENT CHECKLIST (OHPIP, 2008)**

<table>
<thead>
<tr>
<th>Table 7.2: Sample Risk Assessment Checklist for Pandemic Influenza</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Element</strong></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>Pandemic Alert Status</strong></td>
</tr>
<tr>
<td>Has a pandemic alert been declared by the Public Health Agency of Canada in conjunction with a Pandemic Period WHO alert of 6?</td>
</tr>
<tr>
<td>Has the MOHLTC declared a pandemic alert (i.e., clusters of novel virus activity in Ontario)?</td>
</tr>
<tr>
<td>Has an infectious agent been present?</td>
</tr>
<tr>
<td>Screening policies and procedures for ILI for patients, staff and visitors are initiated with PPE for screeners.</td>
</tr>
<tr>
<td>Patients/residents with ILI are placed in a separate room or cohorted.</td>
</tr>
<tr>
<td>Internal and external reporting procedures are in place for reporting ILI in clients and staff.</td>
</tr>
<tr>
<td>Clients with symptoms of ILI are asked to perform hand hygiene, wear a surgical mask and remain in a separate area or at a distance from other clients and staff.</td>
</tr>
<tr>
<td>Patients/residents with ILI can comply with cough etiquette.</td>
</tr>
<tr>
<td><strong>Healthcare Worker</strong></td>
</tr>
<tr>
<td>Staff with direct patient contact have been identified.</td>
</tr>
<tr>
<td>Staff with indirect patient contact have been identified.</td>
</tr>
<tr>
<td>Staff that perform aerosol-generating procedures have been identified.</td>
</tr>
<tr>
<td>Staff report occupationally acquired ILI to their supervisors.</td>
</tr>
<tr>
<td>Supervisors/employers report occupationally acquired ILI to JHSCs/Health and Safety Reps, WSIB and MOL.</td>
</tr>
<tr>
<td>Return to work policies and procedures are in place.</td>
</tr>
<tr>
<td>The immune status of the worker is known.</td>
</tr>
<tr>
<td><strong>Engineering Controls</strong></td>
</tr>
<tr>
<td>HVAC systems are properly maintained and inspected to reduce risk of transmission.</td>
</tr>
<tr>
<td>There are accessible hand hygiene stations in appropriate locations with signage and instructions for staff, clients, visitors and volunteers on when and how to practice hand hygiene.</td>
</tr>
<tr>
<td>Airborne Infection Isolation Rooms (AIIR) are available for aerosol generating procedures.</td>
</tr>
</tbody>
</table>
Biological Safety Cabinets are available for aerosol generating laboratory procedures.

### Administrative and Work Practices

- Hand hygiene is performed before seeing the client, after seeing the client, and after removing and disposing of PPE.
- Invasive ventilation procedures that could result in coughing are avoided on clients with ILI when possible.
- Only experienced staff perform aerosol-generating procedures on clients with ILI if required.
- Close contact is minimized by sitting beside rather than in front of a symptomatic client.
- The work environment is kept clean; contaminated areas are cleaned and then disinfected after each client visit. Visibly soiled surfaces should be cleaned and disinfected.
- When transferring a client identified with ILI, information is provided/received to/from the other organization regarding the assessment.

### Personal Protective Equipment

- Gowns, gloves, face protection (if risk of splashing or spraying) are worn by staff if indicated by routine practices.
- N95 respirators are available, workers are fit tested, and know how to conduct seal checks.
- Workers know how to properly don and doff personal protective equipment.

### APPENDIX C
Volunteer Services Plan

TBRHSC Volunteer program has a high percentage of volunteers who are within the high-risk age ranges for acquiring influenza and therefore should a pandemic be declared the regular Volunteer Program will be stopped and the Volunteer Pandemic Plan instituted.

The utilization of volunteers on site in clinical and public areas during a pandemic is a risk. Volunteers are not employees ("workers"); therefore, they are not protected by the Employee Standards Act, WSIB or hospital insurance.

If there is a need for clerical, scheduling or phoning volunteers could be utilized, provided they could work off site or in a non-public, non-clinical location. These volunteers would be protected as staff and given full protection i.e., antiviral medication. Volunteers will not perform the duties of the bargaining unit.

In extreme staff shortages, Human Resources may use the volunteer list for recruitment purposes. The volunteer would become an employee with full employment protection.

<table>
<thead>
<tr>
<th>Pre-Pandemic</th>
<th>Task</th>
<th>Responsible Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Determine need for volunteers performing duties outside of the Hospital</td>
<td>Consult with Managers re need for supportive roles</td>
</tr>
<tr>
<td>2</td>
<td>Prepare role descriptions for clerical duties, phoning, scheduling, and supportive duties.</td>
<td>Role Descriptions</td>
</tr>
<tr>
<td>3</td>
<td>Survey volunteers who would have healthcare experience and training</td>
<td>Skills assessment</td>
</tr>
<tr>
<td></td>
<td>Survey volunteers for clerical, scheduling, supportive, and teaching skills who would be willing to work from home.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Education to volunteers on Pandemic Plan</td>
<td>Distribution of Educational Materials</td>
</tr>
<tr>
<td>5</td>
<td>Education to volunteers on hand hygiene, isolation and infection control</td>
<td>Distribution of Educational Materials</td>
</tr>
</tbody>
</table>

Pandemic Declared

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All Volunteer Service suspended</td>
</tr>
<tr>
<td>2</td>
<td>Contact Volunteers who have previously stated they would be willing to perform duties from their home or in a non-patient care area within the Hospital</td>
</tr>
<tr>
<td>3</td>
<td>Arrange for departments requesting service to receive volunteer contact information</td>
</tr>
<tr>
<td>4</td>
<td>If required provide HR with list of volunteers with healthcare experience for recruitment purposes</td>
</tr>
<tr>
<td>5</td>
<td>Regular on-going communications to all volunteers with updates on TBRHSC pandemic, infection control practices</td>
</tr>
</tbody>
</table>

Post Pandemic

<table>
<thead>
<tr>
<th>Task</th>
<th>Responsible Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Volunteer program reinstated</td>
</tr>
<tr>
<td>2</td>
<td>Thank you or celebratory event to recognize volunteers returning</td>
</tr>
</tbody>
</table>
Volunteer Services Survey Form

Dear Volunteer:
The Volunteer Services department is gathering a preliminary list of names of volunteers who may be interested in supporting TBRHSC during the Influenza Pandemic.

All active duty volunteers are being asked to complete the following Questionnaire and return it to Volunteer Services by {insert date}.

I understand that:
- I am under no obligation to volunteer.
- All volunteers working with TBRHSC would be given anti-viral medication, if required.
- Proper training and education will be provided.

I am interested in supporting TBRHSC during an Influenza Pandemic
Yes No

If No, please sign and return this form to Volunteer Services.

If you answered Yes, please answer the following questions to determine your eligibility to volunteer.

Do you live with and take care of young children?
Yes No

Do you live with and take care of the elderly?
Yes No

Do you live with a child/teenager who volunteers in a healthcare facility?
Yes No

If you answer Yes to the above questions you will not be eligible to volunteer. Please sign and return this form to Volunteer Services.

If you answered No, to any of the above 3 questions in Question 2 -- Please continue with the rest of this form.

Do you volunteer at another facility?
Yes No

If yes where:
__________________________________________
__________________________________________

Would you be willing to commit your services to TBRHSC?
Yes No

Volunteer Roles during a Pandemic
Assurance/phone support Scheduling
Training/Teaching Orientation
Driving Telephone/emailing
Working in Staff Support Centre

If in the event of a Pandemic Influenza, I agree to have my name and contact information added to the TBRHSC Volunteer List. I agree that my participation is optional and I may refuse or stop my volunteer work at anytime.

__________________________________________
Signature

__________________________________________
Date
**Volunteer Skills Form**

*(Please Print)*

<table>
<thead>
<tr>
<th>Last or Surname</th>
<th>First Name</th>
</tr>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Address</th>
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<table>
<thead>
<tr>
<th>Postal Code</th>
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<table>
<thead>
<tr>
<th>Phone</th>
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<table>
<thead>
<tr>
<th>Email</th>
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</tbody>
</table>

The chart below lists various skills and abilities that may be required in the event of an Influenza Pandemic. Please place a check mark (√) beside all of the skills that apply to you. A database of skills will be created to assist in assigning job placements. This gives us an idea of what skills might be available.

<table>
<thead>
<tr>
<th>Office/ Clerical Experience</th>
<th>Health Care Experience</th>
<th>Computer Experience/ Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phoning</td>
<td>RN</td>
<td>Word</td>
</tr>
<tr>
<td>Telephone Communications</td>
<td>Healthcare Aide</td>
<td>Excel</td>
</tr>
<tr>
<td>Photocopying</td>
<td>Laboratory</td>
<td>Email</td>
</tr>
<tr>
<td>Typing</td>
<td>Pharmacy</td>
<td>Other Programs</td>
</tr>
<tr>
<td>Filing</td>
<td>X-Ray</td>
<td></td>
</tr>
<tr>
<td>Record keeping</td>
<td>Physiotherapist</td>
<td></td>
</tr>
<tr>
<td>Data Entry</td>
<td>Occupational Therapist</td>
<td></td>
</tr>
<tr>
<td>Message taking</td>
<td>Medical Secretary</td>
<td></td>
</tr>
<tr>
<td>Paging</td>
<td>Medical Records knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Worker</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Experience/Skills</th>
<th>Language(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>English</td>
</tr>
<tr>
<td></td>
<td>Chinese</td>
</tr>
<tr>
<td></td>
<td>Dutch</td>
</tr>
<tr>
<td></td>
<td>French</td>
</tr>
<tr>
<td></td>
<td>Finnish</td>
</tr>
<tr>
<td></td>
<td>German</td>
</tr>
<tr>
<td></td>
<td>Greek</td>
</tr>
<tr>
<td></td>
<td>Italian</td>
</tr>
<tr>
<td></td>
<td>Oji/Cree</td>
</tr>
<tr>
<td></td>
<td>Ojibwa</td>
</tr>
<tr>
<td></td>
<td>Cree</td>
</tr>
<tr>
<td></td>
<td>Russian</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
</tr>
<tr>
<td></td>
<td>Ukrainian</td>
</tr>
</tbody>
</table>

Other Experience: 

- Accounting/Banking
- Shipping/Receiving
- Purchasing/Ordering
- Meal preparation
- Ontario Drivers License

Thank you for completing this form. Please return it to Volunteer Services Your name, contact information and skills will be added to our database.
## APPENDIX D

### PANDEMIC ANTIVIRAL DISTRIBUTION PLAN ANTIVIRALS – REVISED JULY 9, 2009

<table>
<thead>
<tr>
<th>Item</th>
<th>Assumptions</th>
<th>Action Plan</th>
<th>Responsibility</th>
<th>Concern/Questions</th>
</tr>
</thead>
</table>
| Dispensing of antivirals (oseltamivir) | • Pandemic influenza has been announced by CEO or delegate  
• Oseltamivir is required for prophylaxis  
• Strain is sensitive to oseltamivir  
• Province of Ontario has not appropriate hospital supply | • Oseltamivir to be dispensed to staff upon declaration of pandemic influenza at TBRHSC and the need to administer prophylaxis (according to OH&S policy OHS-OH-128)  
• HR to provide up to date list of hospital staff  
• Security to station a person in the pharmacy waiting room during the time that pharmacy is open.  
• Pharmacy will be open from 0800 to 1800 to dispense antiviral medications  
• Antivirals to be dispensed to staff on a daily basis (assumes that staff are able to enter into hospital to obtain medication)  
• Employees will be provided with daily medication and must take the medication at the time that it is dispensed. Pharmacy and/or security staff to perform directly observed therapy (DOT) (assumes pharmacy has sufficient staff to dispense antivirals and perform DOT)  
• Hospital staff names on badge shall be cross referenced against HR list  
• Patient information leaflets shall be made available to all hospital staff  
• Adverse effects shall be documented as required  
• List of staff receiving antivirals shall be sent to Occupational Health and Safety Department | • Pharmacy  
• Pharmacy  
• Pharmacy  
• Pharmacy, IT? | • Sensitivity of strain to oseltamivir  
• Is sensitivity to antivirals available in a timely manner to TBRHSC?  
• Will zanamivir be available (hospitals have reported difficulty in obtaining zanamivir)?  
• Is 0800 to 1800 appropriate?  
• Will there be sufficient pharmacy staff to dispense antivirals and perform DOT (vs. dispensing for a set number of days prescription)?  
• Should dispensing of antivirals occur at another location? If so, where?  
• Capacity of Pharmacy staff to fill daily, especially during weekend hours.  
• There is no “stockpile” of Tamiflu |
APPENDIX E

OCCUPATIONAL HEALTH AND SAFETY MASS VACCINATION PLAN

INFLUENZA PANDEMIC STAFF IMMUNIZATION PROGRAM

All staff members will be eligible for vaccination with influenza vaccine once available through the Occupational Health and Safety office. Staff names will be provided to the department by Human Resources and if advised by public health will be sorted out into priority groupings for vaccine administration.

October 15, 2008

“This plan refers to the immunization of staff only. In the event of the use of antivirals for prophylaxis, the pharmacy department has previously requested that they would be responsible for the dispensing of the antivirals to the staff. At this time antivirals will be used for treatment only.”

Mass vaccination refers to the process of setting up a vaccine clinic in order to administer vaccines to a large number of staff in a short period of time. The volume during a mass vaccination clinic will far exceed that of our annual influenza clinics. The speed with which mass vaccination must be implemented is an important consideration. The annual influenza vaccination clinics takes 4-6 weeks to prepare for and operates for weeks, and mass vaccination clinics for pandemic may require activation within days or hours.

The clinics will need to be larger, more staff will be required and there may be a need for multiple clinic sites within the hospital or roving clinics and clinics will need to be set up quickly.

Vaccination is not expected to be available in the initial stages since it takes 4-6 months to produce. A vaccine against pandemic influenza will likely require two doses; the Ministry of Health and Long Term Care will provide direction on the vaccine dosing. Priority groups will be determined federally and these recommendations will be adapted at the provincial level.

The MOHLTC will ensure that healthcare workers are provided with accessible, useful and accurate information recommendations, guidelines and directives will be communicated to healthcare workers by the MOHLTC, through the hospital.

Goals:

- The goal of the mass immunization plan is to mobilize the internal resources to provide mass immunization to staff in a timely and efficient manner in order to minimize staff absences.
- To provide immunization safely, and as quickly as possible, in order to prevent the spread of the disease to the staff.
- To document the administration of vaccines, report any adverse reactions

Planning Assumptions:

- Stockpiles of the vaccine/medications will be available at the provincial level
- More human resources will be assigned to OH&S
- Supplies will be available through stores and they also have been stock piled
• Consideration needs to be given to the need for double the supplies in the event of requirement for a second dose of the vaccine

Immunization Clinic Process:
1. Before the clinic ensure all the supplies etc are ready - see the spread sheet Attachment #1
2. The staging of mass immunization clinics’ will require adequate supplies of both human and material resources
3. Vaccine will be delivered by the TBDHU and other supplies have been stock piled and purchasing is responsible for those supplies.
4. Human Resources Required for Clinics in the OH&S Office for One 12 hour Shift per Day:
   • 5 Nurses - 4 vaccination stations and one nursing float
   • Secretary - 2 to manage the flow, distribute consents, information sheets input the stats into park lane/staff rite (if we are giving two doses documentation needs to be current) - Data entry will be required in staff rite and Park lane
   • Volunteers – 1 or 2 to assist with flow and help the secretary

Considerations:
• If clinic to run more than one shift per day the staffing numbers need to be adjusted
• Will there be need for crowd control? Likely need security assigned.
• Do we need to develop job descriptions for staff or just provide orientation to staff assigned to assist us
• Post vaccination adverse reactions some staff may require waiting time up to 20 minutes where can we keep them
• Safety and security are considerations that will require measures in place to address safety of vaccine/staff
• MOHLTC will develop fact sheets on immunization etc.
• Will there be a priority list within the hospital
• Who will deal with the other staff issues while clinics are going on example - evaluate and manage symptomatic and ill HCW - screening of staff - to determine who may be fit to work or needs to go home etc. - provide psychosocial services to HCW

The following is a summary of roles as identified by the OHPIP (2008):

**CLINIC ROLES:**

**TBDHU** - staff will be available to respond to clinical management questions for concerns arising that may require consultation include clarifying contraindications, medication interactions, medical status concerns or other medical issues requiring further investigation prior to or after immunization

**OH&S Manager and Occupational Health Nurse** - leads the overall management of immunization clinics oversee staffing requirements, ensure directive developed and signed, deal with issues that require policy decision making, oversee the vaccine supply Coordinator binder anaphylactic fact sheet on dosage / medical directives / adverse reaction reporting forms / incident reporting forms etc. Ensure clinic staff wear the PPE the province will provide appropriate guidance and direction for PPE selection
Nursing Staff - staff with the appropriate influenza care competencies to ensure informed consent and safe administration of immunization, health screening, follow up with unexpected reactions etc.

Screen for medical/infectious process and assess for contraindications

Secretary/ Volunteers - direct service staff support - staff will be required for managing the flow, distributing consents, registration and the collection, computer input and collation of immunization date

Security Liaison Officer - During the initial phase of the pandemic, when vaccines are expected to be in short supply distribution and transportation will need to be manages Security may be needed to ensure vaccine security and orderliness

Communication Officer - Development of a Staff Hot line – A staff hot line would allow staff the opportunity to call re: influenza immunization what when etc.

Planning for an influenza pandemic will continue to evolve as the provinces additional guidelines/directives and as new information becomes available.

Actual Clinic

Stage 1- Initial intake -Secretary -registration and screening, staff to review information and sign their consent then proceed down the hall to an immunization station

Stage 2 –Immunization Station- Nurse -review the consent, provides additional information, immunize and advise re: need for second dose

Stage 3-Post immunization waiting areas for about 15 min

Summary:

An occupational health plan has been developed.
- A system for rapidly delivering vaccine to HCW
- The system has been tested during an influenza season.
- A method for prioritizing HCW has not been recommended.
- A system for detecting symptomatic HCW before they report for work has been developed. (FRI Screening tool) This system has been tested during SARS.

To be developed
- A policy/procedure for modifying the work locations of HCW who are at high risk for influenza complications (e.g., pregnant women, immunocompromised HCWs)

Documentation:
The consent form will become the staff record for the purposes of documentation related to mass immunization administration. Documentation will be in accordance with legislative and College of Nursing Standards’ requirements. Additional information will be added to the back of the consent as needed

Personal information collected under the appropriate legislative requirements and standards include:
- First name, surname and date of birth
• Address and phone number

Nursing documentation will include:
• Relevant information that was collected during the screening process
• Name of vaccine
• Date vaccine administered
• Route of injection and dosage
• Site of injection
• Vaccine lot number and manufacture
• Signature and professional status of nurse who administered the vaccine
• Any unexpected response to the vaccine or any unexpected incidents
• Withheld vaccine and rationale, or documentation if a second injection required due to aspiration of blood or staff movement during administration etc.

Staff will be given a record of the immunization they received and advised that it will be their certificate of immunization required for a second dose. No other record will be given to staff.
### APPENDIX F

**VISITORS RESTRICTIONS CHECKLIST**

<table>
<thead>
<tr>
<th>Checklist for Visitor Restrictions</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine if visitor restrictions or screening required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confer with TBDHU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visitor restrictions can be managed by Security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restrictions in place to prevent community spread into hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical managers provide lists of visitors daily for security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TBDHU would advise of increasing community spread</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss restrictions with vendors, departments, student contacts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare media release</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activate lockdown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post appropriate signage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone access at all unlocked entrances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need tables at unlocked entrances (Main Entrance, Emergency, Renal Dialysis)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need ABHR at these entrances (large hand washing stations could be used - move into place at Main Entrance)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need writing material – pen and paper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need staff at two exits from CC second and third floors – cannot be locked inside</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two security personnel at each entrance – Security to arrange</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determine if restrictions for Out-patient Clinics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include this in media release</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determine how to screen for out-patient visits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call patients to cancel/reschedule (who would make these calls)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What about regional patients?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If screening required then notify HR re: hiring of staff/other workers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide training for Screeners (what is required i.e.) temperature) Temp-a-dots can be used (order more)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active screening checklist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 screeners at each unlocked entrance during shift change and one at all other times</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security required in addition to Screeners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media release</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In conjunction with TBDHU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At beginning of lockdown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At any change in the status of lockdown</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When lockdown is declared over</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX G
ED ALGORITHM FOR INFLUENZA LIKE ILLNESS

Patient enters ED and approaches Triage Desk

Receiving Triage RN performs initial ARI screening for identification of fever and new or worsening cough.

Upon identification of potential ILI, give patient surgical mask to wear. Patient will then be directed to register in cubical #2 (cubical #2 to be used only for potential ILI patients).

After registration, Clerk will direct the patient to cordoned off area of the main waiting room (located at the South West corner of the ED main waiting room) to be triaged by a dedicated ILI triage RN.

If the patient meets the ILI inclusion criteria, they are to wait in the cordoned off waiting area until being called into A1. Patients presenting with more serious symptoms will be directed to the isolation areas within the main ED C10, 11, 12, 15, or 16 to facilitate easier observation of these patients. All resuscitation patients will be treated in Trauma rooms.

Human Resources
- Increase 1 Triage RN 24 Hrs.
- Increase 1 RN 24 Hrs. for A1

Fast Track Inclusion Criteria
- Patient ambulatory
- Based on clinical appearance patient appears in no distress
- Cellulitis
- IV antibiotic administration
- Dressing change
- R/O DVT
- Crush injury to extremity
- Stable suspected fracture
- Ears/Nose/Throat concerns
- Stable (no SOB/resp distress)
- Pediatric concerns
- Lacerations
- Lumps/Bumps and Calluses
- Mouth/Dental pain
- Muscle strain/injury

Fast Track Exclusion Criterion
- Abnormal vital signs (based on clinical appearance or numbers)
- Persistent vomiting
- Any contact isolation precautions

MD to assess in room A1

If diagnostic tests are required, patients will take all belongings with them and return to A-1 wait area

If patient condition worsens, move patient to acute patient care area

Treatment as per normal care routines, with the addition of proper PPE

Reassessment and Discharge

MD to assess in acute patient care areas

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ED ALGORITHM FOR INFLUENZA LIKE ILLNESS

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- Lumps/Bumps and Calluses
- Mouth/Dental pain
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Human Resources
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- Based on clinical appearance patient appears in no distress
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- Stable (no SOB/resp distress)
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- Lacerations
- Lumps/Bumps and Calluses
- Mouth/Dental pain
- Muscle strain/injury

Fast Track Exclusion Criterion
- Abnormal vital signs (based on clinical appearance or numbers)
- Persistent vomiting
- Any contact isolation precautions

MD to assess in room A1

If diagnostic tests are required, patients will take all belongings with them and return to A-1 wait area

If patient condition worsens, move patient to acute patient care area

Treatment as per normal care routines, with the addition of proper PPE

Reassessment and Discharge
APPENDIX H

CRITICAL CARE TRIAGE

The first protocol for triage of critical care resources, known as the Ontario protocol, was published in 2006. Although initially developed for use in an influenza pandemic, this protocol can potentially be used for any event in which critical care resources may be overwhelmed. Among those who have adopted or are in the process of modifying the Ontario protocol for local use are New York State; British Columbia; the European Society of Intensive Care Medicine; and a task force for mass critical care that includes representatives from the American College of Chest Physicians, the Society Care Medicine, the American Association of Critical-Care Nurses, the American Association of Respiratory Care, and the American Society of Health-System Pharmacists.

The Ontario protocol consists of 3 elements: inclusion criteria, exclusion criteria, and minimum qualifications for survival (MQS), which place a ceiling on resource expenditures for each patient. The exclusion criteria and MQS both utilize the Sequential Organ Failure Assessment (SOFA) score to identify patients likely to benefit from treatment as well as those who are too sick to recover despite care. The benefit of using SOFA scores (Table 13-2), and of the Ontario protocol in general, is that neither is disease-specific. In addition, a prioritization tool aids users in applying the protocol (Table 13-3). Although it is a solid early attempt at a tertiary triage protocol, the Ontario protocol is complex, requires laboratory investigations, and has not been thoroughly evaluated.

<table>
<thead>
<tr>
<th>Variable</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PaO2/FiO2 mm Hg</td>
<td>&gt;400</td>
<td>=400</td>
<td>&lt;400</td>
<td>=200</td>
<td>=100</td>
</tr>
<tr>
<td>Platelets x 10^9 /uL (x 10^9/L)</td>
<td>&gt;150</td>
<td>&lt;150</td>
<td>=150</td>
<td>=100</td>
<td>=50</td>
</tr>
<tr>
<td>Bilirubin mg/dL (µmol/L)</td>
<td>&lt;1.2</td>
<td>1.2-1.9</td>
<td>2.0-5.0</td>
<td>6.0-11.9</td>
<td>&gt;12</td>
</tr>
<tr>
<td>Hypotension</td>
<td>None</td>
<td>MABP &lt;70 mm Hg</td>
<td>Dop &gt;5</td>
<td>Dop &gt;15, Epi = 0.1, Norep = 0.1</td>
<td></td>
</tr>
<tr>
<td>Glasgow Coma Score</td>
<td>15</td>
<td>13-14</td>
<td>10-12</td>
<td>4-9</td>
<td>&lt;4</td>
</tr>
<tr>
<td>Creatinine mg/dL (µmol/L)</td>
<td>&lt;1.2</td>
<td>1.2-1.9</td>
<td>2.0-3.4</td>
<td>3.5-4.9</td>
<td>&gt;5</td>
</tr>
</tbody>
</table>


If exclusion criteria or SOFA >11 occur at any time, change triage code to blue and palliate.
## APPENDIX I

### CRITICAL CARE SURGE PLAN

<table>
<thead>
<tr>
<th>KEY ELEMENTS</th>
<th>100 % Capacity</th>
<th>MINOR (100 % capacity + 15% Capacity)</th>
<th>MODERATE &gt; 20% Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>22 beds full with up to 13 ventilated</td>
<td>Minor Surge 23 - 25 beds and/or up to 15 ventilated patients, (excludes BiPap)</td>
<td>Moderate Surge 26 or greater beds and/or up to 16 ventilated patients (exclude BiPap)</td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td>Internal Hospital response</td>
<td>Internal Hospital response</td>
<td>LHIN &amp; provincial response</td>
</tr>
<tr>
<td></td>
<td>Daily Bed Rounds</td>
<td>Daily Bed Rounds</td>
<td>See moderate plan to consider deferral to outside LHIN.</td>
</tr>
<tr>
<td></td>
<td>ICU prioritized for patient flow to transfer patients in order to continue to admit.</td>
<td>Emergent Bed Rounds Meeting</td>
<td>Invoke repatriation Policy &amp; Kenora Level II ICU accept Intermediate level care patients</td>
</tr>
<tr>
<td></td>
<td>Re-assess every 4 hours</td>
<td>Re-assess every 4 hours</td>
<td>Re-assess every 4 hours</td>
</tr>
<tr>
<td></td>
<td>Green – ready for transfer</td>
<td></td>
<td>De-escalate elective surgery</td>
</tr>
<tr>
<td></td>
<td>Yellow – transfer within 36 hours</td>
<td></td>
<td>De-escalate elective cardiac cath</td>
</tr>
<tr>
<td></td>
<td>Red – not ready for transfer</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Human Resources</strong></td>
<td>Increase nursing staff to 14 (by 2/shift) from within department resources. RT – 2 on days, 1 on nights. Ask for helpers from organization.</td>
<td>Increase nursing staff to 16 per shift. RT – 3 on days, 2 on nights. PCI recovery area to manage STEMI patients post cath/PCI overnight and transfer to 2C in am. Excludes patients with temporary pacemakers and select infusions as per IV manual. Consider extra on-call cath lab nurse to manage post PCI patients up to 4 hours in alternate location. May require ICU RN for support.</td>
<td>Increase nursing staff to 18 per shift. RT – 4 on days, 3 on nights</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Second ICU staff from alternate depts. (i.e. cardiac rehab, 2C, cath lab, recovery room). Consider collaboration with SJCG second RT. Consider Support Workers, Safety Attendants and RPNs.</td>
</tr>
</tbody>
</table>
| **Physical Space** | **Ask Cath Lab PACU staff to assist if possible.**
  By 1500 consider, cardiac patients going for cath/PCI to stay in PCI holding overnight with plan to transfer to 2C in am.
  At 1600, review yellow patients for readiness for transfer. | **Utilize PACU RNs to care for post ops i.e. thoracotomies or esophagectomies.**
  Neuro Surgery to care for Intermediate level neuro patients and sagittal splits in Neuro Observation area.
  Stroke/Neuro Surgery staff trained to “buddy/collaborative” care for thrombolized strokes within 24 hours in Neuro Observation Area
  Refer to ICU staff and enhanced skill-set staffing inventory. Consider ED nursing staff to be assigned to ICU.
  Contact IPE/CNS/NP to support as required.
  Within scope of practice and ANS skill set nurses (to assist in care only in collaboration with ICU RN)
  Consider holding vented patients in the PACU or ED for short-term management.
  DO NOT reassign MET (Medical Emergency Team) RN to ICU as this resource is required to support wards.
  RPN/Support Worker/Safety Attendant and NRT nurses to assist in the ICU.
  Utilization coordinator, social worker, and clerical support as required. | **Decant to Angioplasty Post Recovery Area – 1-2 cardiac patients.**
  Decant elective surgery to neuro observation – sag splits, endarterectomies.
  Absorb Cancer surgery into ICU and utilize PACU RN to care for this intermediate type patient.
  Move 3 patients out from 3 Medicine to inpatient bed or Sunroom based on criteria.
  Utilize up to 3 3 MEDICINE beds for ICU patients. Staff with ICU RN or enhanced skill RN or collaborative model. | **Decant to post PCI recovery area – 1-3 cardiac patients**
  Cath Lab to consider scaling back elective caths.
  Consider postponement/cancellation of or decant elective surgery to neuro observation – sag splits, endarterectomies.
  Move up to a total of 5 patients from 3 MEDICINE to ward to accommodate ICU patients ventilated.
| **Physician** | Intensivist still MRP until transfer of care complete. |
| **Equipment & Technology** | Ventilator Inventory: 13 conventional + 3 LTV = 16 total (TBRHSC)  
MOH Stockpile Inventory = 7 (4 Avitas & 3 Eveas) refer to Ventilator Stockpile Access algorithm.  
RT to maintain updated vent inventory list daily.  
PACU/3 MEDICINE equipped with monitored beds. Access bedside tables from ICU.  
ICU out crash cart services this area. Surge supply cart Procedure cart as required. Cart from ICU to PACU/3 MEDICINE  
Medication Review complete and Pharmacy can respond to need. | Ventilator Capacity: 13 conventional + 3 LTV = 16 Total (TBRHSC)  
MOH Stockpile Inventory = 7 (4 Avitas & 3 Eveas) refer to Ventilator Stockpile Access algorithm.  
RT to maintain updated vent inventory list daily.  
PACU equipped with monitored beds. Access bedside tables from ICU. Surge supply cart and Procedure cart from ICU to PACU/3 MEDICINE.  
ICU out crash cart services this area. Medication Review complete and Pharmacy can respond to need. |
| **Process** | ICU Admission/Discharge Policy PAT -1-04  
Daily Patient Tool ("Traffic Light") implemented.  
Transfer Orders written during morning rounds.  
Admission/Discharge Algorithms developed.  
Identification of discharge patients and assign beds daily at 0945 “Bed Rounds”.  
Communicate with OR re: ventilator availability and admission location. Discuss cancelling elective surgery if cannot decant.  
Notify Pediatrician of minor surge.  
Admitting to assign ward beds within 4 hours of transfer order. Once bed assigned, transfer to ward within 30 mins. | Continue ICU Admission/Discharge Policy PAT -1-04  
Daily Patient Tool ("Traffic Light") implemented.  
Transfer Orders written during morning rounds.  
Admission / Discharge Algorithms developed.  
Identification of discharge patients and assign beds daily at 0945 “Bed Rounds”.  
Admitting to assign ward beds within 4 hours of transfer order. Once bed assigned, transfer to ward within 30 mins. |
| **Communicate with OR re**<br>bed availability and timing. **Hospital response to improve through-put to assign transfer beds within 12 hrs of transfer order. Repatriate regional patients when appropriate for level of care.** | **Collaborate with SJCG for chronic vent transfer. Repatriate regional patients when appropriate for level of care.** | **Repatriation of regional patients up for medical transfer. Discharge patients if medically stable. Consider Kenora Level II ICU to transfer stable ventilated patients or other appropriate patients. TBRHSC Intensivist will support ventilation management in Kenora via video teleconference.** |
APPENDIX J

WOMEN & CHILDREN’S PROGRAM PLAN

PANDEMIC PLANNING – WOMEN & CHILDREN’S PROGRAM

a) Utilize the Women & Children’s Overcapacity Capacity Plan PAT-1-43

b) Predicted Supplies Increase: Medical Surgical supplies in ALL areas

plus CAMHU will require - medical surgical supplies for admission of medically fragile children oxygen flowmeters, suction regulators, suction canisters, oxygen and suction supplies

PLAN

1. Facilitate early discharge for appropriately identified patients in ALL Women & Children’s areas.

2. CAMHU patients (8 beds) will be discharged or transferred to Adult Mental Health Services if appropriate and/or wherever Adult Mental Health patients are being reallocated. RNs, RPNs, CYWs assign to workload on Paediatric in-patient unit if patients discharged from CAMHU and not needed to care for mental health youth admitted.

3. Paediatric overflow patients will be admitted to CAMHU.

4. Paediatric Outpatient unit will be closed.

   a) Patients requiring follow-up may be seen:

      i. by paediatricians in their offices (Paediatricians need to be consulted)

      ii. by paediatricians in the hospital for chronic disease management purposes ONLY.

      iii. Redeploy outpatient staff to Paediatric in-patients when POP dept closed

5. When Phase 2 declared routine ambulatory or elective visits to be cancelled. Discontinue non-essential pediatric services and redesign Surgical Day care areas of Paediatric Outpatient dept to receive pediatric pts requiring admission to hospital. Cohort Non-influenza-like (NIL) patients and/or Influenza-like illness (IL) patients. Consult with Infection Control dept as necessary.

6. MNB Unit will not be used for Paediatric Pandemic Overflow. This unit should not be used to house pandemic patients from general units including Paediatrics.

7. A pandemic surge in the MNB admission will be managed between the L&D and MNB areas. Earliest possible discharge will be promoted.

8. NICU does not have a large surge capacity. Refer to Women & Children’s Overcapacity Surge Plan PAT-1-43.

9. Use isolation room #1 and #2.

10. Use beside # 9, #8, #7, cohort patient requiring airborne/droplet precautions.

11. 4 babylog ventilators + 2 SiPap machines available.

12. Cohort neonates not requiring isolation.

13. Clear Stabilization area of stored equipment and care for 2 non-infectious pts – may utilize portable Drager monitor from LDR for use in this room. Only limited monitoring capabilities in Stabilization area.

14. Use multi-purpose workers to restock items, answer phones/inquiries, and perform general duties.
ADDITIONAL CONSIDERATIONS:
Social services must continue as Child Protection is an essential service
APPENDIX K

Policies, Procedures, Standards, Guidelines

<table>
<thead>
<tr>
<th>TITLE:</th>
<th>Prioritization of Radiation Therapy Patients During a Declared Pandemic</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER:</td>
<td>RT-PC-11</td>
</tr>
<tr>
<td>CATEGORY:</td>
<td>Patient Care</td>
</tr>
<tr>
<td>DEPARTMENT/PROGRAM:</td>
<td>Radiation Therapy Operational Network</td>
</tr>
<tr>
<td>PAGES:</td>
<td>4</td>
</tr>
<tr>
<td>POLICY:</td>
<td>Procedure</td>
</tr>
<tr>
<td>GUIDELINE:</td>
<td>Standard</td>
</tr>
<tr>
<td>INTERNAL DISTRIBUTION:</td>
<td>Radiation Therapy Operational Network</td>
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<tr>
<td>EXTERNAL DISTRIBUTION:</td>
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<tr>
<td>APPROVED:</td>
<td>[Signature]</td>
</tr>
<tr>
<td>APPROVAL DATE:</td>
<td>Nov 2, 2009</td>
</tr>
<tr>
<td>REVISED:</td>
<td></td>
</tr>
</tbody>
</table>

Policy:
During a pandemic, patients requiring radiation treatment are to be prioritized in accordance with a pre-established systematic process.

Purpose:
To mitigate risk to patients, staff, and the public during a declared pandemic, patients receiving radiation treatment will be managed in accordance with global procedures established by the TBRHSC (re: SAF-2-23 Infection Control: Outbreak Management) and Cancer Care Ontario (re: Guidelines for Clinical Care of Patients with Cancer During an Influenza Pandemic of the Ontario Health Plan for an Influenza Pandemic, August 2008). In support of these procedures, a further detailed process specific to the RTON provides guidance for modifying radiation treatment operations and prioritizing affected patients to ensure that treatment is delivered in an optimal manner when there is constrained capacity resulting from the impacts associated with a pandemic.

Procedure:
1. The availability of personnel is unpredictable during a pandemic so the following is intended to provide guidance on operational and treatment decisions for those members of staff that are available to maintain operations. Whenever possible, such decisions should be deferred to those responsible under normal operating conditions.

2. Ensure the presence of appropriate personnel in the various departments of the RTON to safely manage case load in accordance with the following minimum staffing levels:

   2.1. Operation of one accelerator for a standard operational workday (10 hours):
   2.1.1. One (1) radiation oncologist, on site or available remotely.
   2.1.2. One (1) medical physicist.
   2.1.3. Four (4) radiation therapists.
   2.1.4. One (1) radiation oncology primary care nurse.
   2.1.5. One (1) support staff (e.g., receptionist, porter).

   2.2. Operation of one accelerator for extended workday (12 hours):
   2.2.1. One (1) radiation oncologist, on site or available remotely.
   2.2.2. One (1) medical physicist.
   2.2.3. Five (5) radiation therapists.
   2.2.4. One (1) radiation oncology primary care nurse.
   2.2.5. One (1) support staff (e.g., receptionist, porter).
2.3. Operation of two accelerators for a standard workday (10 hours):

2.3.1. One (1) radiation oncologist, on site or available remotely.
2.3.2. One (1) medical physicist.
2.3.3. Eight (8) radiation therapists.
2.3.4. One (1) radiation oncology primary care nurse.
2.3.5. One (1) support staff (e.g., receptionist, porter).
2.3.6. One (1) physics associate (or additional medical physicist).

2.4. Performance of high dose rate brachytherapy (HDRB) procedures would require, in addition to the minimum staffing required for the previously outlined scenarios for accelerator operation (re: 2.1 through 2.3):

2.4.1. The identified radiation oncologist has to be on site.
2.4.2. One (1) additional radiation therapist.

2.5. Performance of simulations would require, in addition to the minimum staffing required for the previously outlined scenarios for accelerator operation (re: 2.1 through 2.3):

2.5.1. Two (2) additional radiation therapist.
2.5.2. One (1) treatment planner.

3. No staff members are to be reassigned to areas other than those that accommodate RTON operations unless those operations have been suspended.

4. When a pandemic imposes constraints on RTON operations, patients are to be prioritized in accordance with established procedure (re: RT-PC-10 Prioritization of patients for radiation therapy), which defines priority categories A, B, C, and D, with further consideration for the following:

4.1. The treatment environment has to be safe for both patient and staff.
4.2. All patients that are already under treatment when the pandemic is declared are to be given priority to complete their treatments with due consideration given to any means to expedite those treatments (e.g., bid on remaining fractions).
4.3. As evidence suggests that in general there is no safe period for which commencement of treatment can be delayed, radiation therapy treatment should be initiated with as short a delay as feasible.
4.4. The risk posed to patient treatment outcomes as a result of any delay is to be balanced against the risk to patient health posed by commencing treatment during a pandemic situation.
4.5. The operational capacity will constrain new patient treatment starts as follows:

4.5.1. One accelerator in operation for standard workdays (re: 2.1):

4.5.1.1. Only Priority A patients may start treatment if no simulations are being performed.
4.5.1.2. Priority A and B patients may start treatment if simulations are being performed.

4.5.2. One accelerator in operation for extended workdays (re: 2.2):

4.5.2.1. Only Priority A patients may start treatment if no simulations are being performed.
4.5.2.2. Priority A and B patients may start treatment if simulations are being performed.

4.5.3. Two accelerators in operation for a standard workday (re: 2.3):

4.5.3.1. Only Priority A and B patients may start treatment if no simulations are being performed.
4.5.3.2. Priority A, B, and C patients may start treatment if simulations are being performed.
4.5.4. No HDRB courses of treatment requiring more than a single fraction are to be started during a declared pandemic but, depending on the available resources (re: 2.4), those already started are to be completed.

5. Follow up patients are to be grouped into low risk and high risk categories.
   5.1. Low risk follow up patients are to be rescheduled.
   5.2. As resources permit, telephone follow ups are to be pursued with high risk patients.
   5.3. High risk patients are to be brought on-site only if a significant clinical issue is identified.

6. Patients requiring review are to be grouped into low risk and high risk categories.
   6.1. Reviews for low risk patients are to be rescheduled.
   6.2. Telephone reviews are to be pursued with high risk patients
   6.3. Reviews of high risk patients are to be performed on-site only if a significant clinical issue is identified.

7. In the event of a TBRHSC facility-wide lockdown where access is limited to only one entranceway at which strict screening measures are in place, the entranceway located by Radiation Therapy reception will be secured, i.e., no one (personnel, patients, or public) are to use the door. The only exception would be to exit the building as required under emergency code conditions.

8. If RTON operations are suspended due to insufficient staffing then staff that are available may be reassigned to duties in other areas of TBRHSC operations.
APPENDIX L
SYSTEMIC ALGORITHM FOR REGIONAL CANCER CENTRE PATIENTS

Is the patient a new patient?

Is the treatment urgent/curative?

Will patients already receiving therapy require ongoing treatment?

Priority A
- Aggressive tumors (e.g., some leukemias, lymphomas, tumors of the central nervous system, or transplant related)
- Patients with life-threatening situations (e.g., leukemias, leukaemias, or medical emergencies such as fibrinogenopenia and hypercalcemia)
- Some patients already receiving treatment

Priority B
- Majority of patients requiring chemotherapy (not in A or C)

Priority C
- Patients receiving oral hormone therapy
- Well follow-up patients
- Patients on IV bisphosphonates, if that is the only IV treatment required

Patients with life threatening symptoms with potentially curable cancers are given priority for treatment

Are there sufficient resources to treat all curative/urgent cases?

Treatment will be delayed

Have any new problems developed? Is there a life threatening situation?

Begin Treatment

Ambulatory (treatment strategies required)

Only non Chemo Treatment

DRAFT
SYSTEMIC

Pandemic Influenza Plan
APPENDIX M
SURGICAL ONCOLOGY ALGORITHM FOR REGIONAL CANCER CENTRE PATIENTS

DRAFT

Would a delay in surgery result in serious threat to life or limb?

Can treatment be postponed indefinitely?

Priority A

Patients with obstruction, bleeding or perforations
Emergent and very aggressive tumors

Priority B

Most solid tumor cases
- Breast
- Colon
- GI
- Head and neck

Priority C

Malignant tumors
Well differentiated thyroid cancers
Early prostate cancers
Non melanoma skin cancers

Oncology triage system via telephone

Contacted with appointment immediately

Are sufficient staff/beds available?

Surgery at BMRHSC, ASAP

High likelihood for survival if treated?
(Consider age, other medications)

Consider transferring to Toronto/Winnipeg

Prioritized, will have surgery here when/if possible

Weekly phone call

Phone consultation (checkups), have symptoms/needs become more urgent?

Weekly phone call checkup will continue, appointment made with triage list

Contacted, surgery postponed until pandemic ends

Contacted, put on waiting list, surgery postponed

Weekly phone call

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## APPENDIX N

<table>
<thead>
<tr>
<th>TBRHSC OUTPATIENT CLINICS</th>
<th>PRIORITY LEVEL (1-5) 1 = HIGHEST PRIORITY TO MAINTAIN CLINIC SCHEDULE</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Team</td>
<td>1 to 3</td>
<td>Some service required to continue for the most compromised clients serviced by program</td>
</tr>
<tr>
<td>Adult Mental Health</td>
<td>2</td>
<td>Reduce staffing possible</td>
</tr>
<tr>
<td>Ambulatory Care</td>
<td>2</td>
<td>For some procedures; 1A accommodates outpatient chemotherapy patients for Dr. Malik. This happens sporadically and is booked through Admitting. We also accommodate Cancer Clinic outpatient chemotherapy over stat holidays when Cancer Clinic is closed. These are also booked through admitting. If the Cancer Clinic has initiated the chemo then it would be up to the physician to determine if Dr. Malik’s patients would be a low priority (not cancer patients) as we often reschedule depending on be availability</td>
</tr>
<tr>
<td>Chemotherapy - 1A Outpatient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac Catheterization</td>
<td>1-3</td>
<td>Only elective cases could be cancelled/deferred</td>
</tr>
<tr>
<td>Cardiac Rehab</td>
<td></td>
<td>Off site- and could continue to operate</td>
</tr>
<tr>
<td>Cardio Respiratory/ Diagnostic Imaging</td>
<td>2 (patients booked as a priority 1, 2 or 3)</td>
<td>All priority 4 (routine OP exams) could be cancelled</td>
</tr>
<tr>
<td>CAMHU STUC (short term urgent care)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Chemotherapy Unit Outpatient Cancer Centre</td>
<td>1-2 with modification</td>
<td>Once treatment has started it usually cannot be delayed</td>
</tr>
<tr>
<td>Chronic Disease</td>
<td>3-5</td>
<td>Priority 3 for some follow-ups but could quickly move to 5</td>
</tr>
<tr>
<td>Community Treatment Order and Management</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Community Mental Health and Psychology</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Cystic Fibrosis</td>
<td>5</td>
<td>Only runs 2 times per year</td>
</tr>
<tr>
<td>Cystoscopy</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Endoscopy</td>
<td></td>
<td>Need to provide on call service for GI bleeds</td>
</tr>
<tr>
<td>Forensic Outpatient</td>
<td>2</td>
<td>Both would remain open and staff would see the patients in the community - if</td>
</tr>
<tr>
<td>Clinic and Forensic Case Management</td>
<td>decompensating the staff would bring the patient to see the attending psychiatrist</td>
<td></td>
</tr>
<tr>
<td>Fracture Clinic</td>
<td>5</td>
<td>Would be priority 2 for referral from ED</td>
</tr>
<tr>
<td>Gynecology</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Hemophilia Clinic</td>
<td>5</td>
<td>Would need to provide on call services for bleeds/potential bleeds</td>
</tr>
<tr>
<td>Hemodialysis</td>
<td>1</td>
<td>All clinics would be cancelled unless individual patient circumstances required assessment</td>
</tr>
<tr>
<td>Home Hemodialysis Clinic</td>
<td>5</td>
<td>Patients come on Thursday for Aranesp Injections</td>
</tr>
<tr>
<td>Kidney/Transplant Clinics/ Peritoneal Dialysis Clinics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Laser Clinic</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Laboratory Clinics</td>
<td>4</td>
<td>Close outpatient laboratory services (need time to cancel patients with standing orders)</td>
</tr>
<tr>
<td>Labour &amp; Delivery (NSTs +OB assessments)</td>
<td>1</td>
<td>High-risk obstetrical cases require assessment</td>
</tr>
<tr>
<td>MHAT Mental Health Outpatient</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Maternity Centre</td>
<td>3</td>
<td>Prenatal care essential to maintain but felt that some areas could be scaled back</td>
</tr>
<tr>
<td>Medication Outpatient Adult Mental Health Pharmacy</td>
<td>2</td>
<td>Could arrange pick up at patient’s own drugstore</td>
</tr>
<tr>
<td>Northwestern Sexual Behaviours Program</td>
<td>4</td>
<td>Can reduce for a short time but due to patient’s legal requirements that they attend the clinic</td>
</tr>
<tr>
<td>Nutrition Counseling Outpatient</td>
<td>5</td>
<td>OP counseling services (which is connected with many of our programs as well) could be coordinated in several different ways: appointment canceled and deferred/rescheduled. Counseling done off site, over phone or videoconference</td>
</tr>
<tr>
<td>Ontario Breast Screening Coach</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Ophthalmology Clinic</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Pediatric Outpatient Clinic</td>
<td>2</td>
<td>Same day surgery could be cancelled; Children with chronic diseases may still need ongoing treatments (chemo, infusions) and ED consults. Consult with Chief of Pediatrics</td>
</tr>
<tr>
<td>Preadmission Clinic</td>
<td>1 or 5</td>
<td>Would function as long as OR remains in operation. If the OR cancelled electives surgeries then could be a 5</td>
</tr>
<tr>
<td>Radiation Therapy Clinics Cancer Centre</td>
<td>1</td>
<td>Once started usually cannot be delayed</td>
</tr>
<tr>
<td>Radiation Pre and Post Clinics Cancer Centre</td>
<td>1</td>
<td>Possibly with some modification. Once treatment has started it usually cannot be delayed</td>
</tr>
<tr>
<td>Service</td>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>Regional Stroke Program</td>
<td>1-5</td>
<td>TIA's from ED are seen within 48 to 72 hours and are considered 1; the other patients can have their appointments delayed but not for extended period (beyond one to two months)</td>
</tr>
<tr>
<td>Regional Joint Assessment Centre</td>
<td></td>
<td>Off-site, could continue to operate</td>
</tr>
<tr>
<td>SADVT</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Systemic Pre and Post Clinics Cancer Centre</td>
<td>2</td>
<td>New patients &amp; patients requiring treatments of wound need assessments/ some follow-up appointments could be delayed; could modify schedule</td>
</tr>
<tr>
<td>Telemedicine Outpatient</td>
<td>5</td>
<td>Telemedicine services increase and likely expand if needed for emergency needs. Appointments can be re-scheduled. Clinic visits are usually not urgent/emergent.</td>
</tr>
</tbody>
</table>
REFERENCES


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