
Ontario's Critical Care Surge Capacity Management Plan

Moderate Surge Response Guide
Version 2.1

Critical Care Services Ontario
April 2015

Ontario's Surge Capacity Management Plan: Moderate Surge Response Guide

Version 1.0	Created 2009
Version 2.0	Updated September 2013
Version 2.1	April 2015
Next Review	September 2015
To be Read in Conjunction with	Ontario's Ventilator Stockpile Guidance Document Ontario's Surge Capacity Management Plan: Minor Surge Toolkit
Approved By	MOHLTC: Emergency Management Branch Provincial Lead for Critical Care and Trauma Director, Critical Care Services Ontario (CCSO) Criticall Ontario
For more information contact	Critical Care Services Ontario (CCSO) Email: CCSadmin@uhn.ca Fax: (416) 340-4920

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Introduction

Key Stakeholders

Critical Care Services Ontario (CCSO)

Critical Care Services Ontario (CCSO) is the managing organization responsible for the overall implementation and evolution of the Ontario's Critical Care Strategy. CCSO's mandate is to work closely with healthcare practitioners to implement programs that improve access, quality and integration of critical care services to meet the needs of critically ill patients. CCSO maintains and updates the Moderate Surge Response Guide and participates in Moderate Surge responses to facilitate support as necessary.

CritiCall Ontario

CritiCall Ontario is the 24/7 emergency referral service for Ontario physicians seeking emergency clinical advice and referral to an appropriate specialty service for patients requiring urgent or emergent care. In addition, CritiCall Ontario works closely with CCSO by collecting and analyzing data from the Critical Care Information System (CCIS), the province's comprehensive database of critical care statistics and information. CritiCall facilitates Moderate Surge responses according to the established protocols outlined in this document.

Index Hospital/Corporation

This is the hospital or group of hospitals that have self-identified as being in a Moderate Surge. They will have taken steps to manage processes internally, completed the SBAR reporting template, updated their bed availability in CCIS and Provincial Hospital Resource System (PHRS) and called CritiCall Ontario to initiate the Moderate Surge process.

Partner Hospital(s)

These are all other hospitals within the LHIN boundaries that will participate and provide support in the management of the Moderate Surge.

Emergency Management Branch (EMB)

In December of 2003, following Ontario's experience with the Severe Acute Respiratory Syndrome (SARS) outbreak, the EMB was created to plan, organize, manage and coordinate provincial responses to emergencies that affect and impact health. Since its creation, the EMB has undertaken a number of emergency management initiatives and programming.

Surge Capacity Management Plan in Ontario

Introduction

Critical care services meet the needs of patients facing an immediately life-threatening health condition in which vital organ systems are at risk of failing. At the core of the critical care system is the hospital intensive care unit (ICU). Specialized health care teams work 24/7 to save the lives of critically ill patients who are at risk of dying due to single or multi-system organ failure. Patients are admitted to the ICU from the emergency room (ER), hospital wards and following surgery.

Since 2006, the Ministry of Health and Long-Term Care (MOHLTC), through the Critical Care Strategy, has been working to improve critical care services in Ontario. This system improvement is the result of an on-going collaboration between critical care health care providers, hospital administrators, ministry officials and other partners. The overarching objective of the strategy is to improve access and quality, and to enhance the overall health system by addressing the policy and operational issues that impact on critical care services across the system.

In March 2009, CCSO started working with hospitals in the province to implement the Surge Capacity Management Plan. The purpose of the surge capacity planning was to provide hospitals and providers with the tools needed to better manage dramatic increases in the demand for critical care services at one or more hospitals. The plan:

- Ensures patients are transferred from the Emergency Room (ER) or Operating Room (OR) to critical care services, as quickly as possible. The plan has the potential to reduce ambulance offload delays as well as ER and surgery wait times.
- Mobilizes hospital staff, equipment and technology from other parts of the hospitals to handle the short-term increase in demand in the critical care department.
- Improves the lines of communication between hospitals in each of the regions covered by the province's 14 LHINs.
- Ensures quick responses to large critical care surges that require a coordinated response across each LHIN. It enables hospitals to work together and coordinate their resources to help a hospital facing an overwhelming increase in critical care patients.

This initiative categorizes surge responses into three levels: *Minor Surge* (requiring response within a hospital), *Moderate Surge* (requiring a LHIN level response), and *Major Surge* events (requiring a provincial response).

Who is involved in planning?

All Ontario hospitals in partnership with CCSO have been involved in implementing a standardized Surge Capacity Management Plan in the province. The ongoing aim is to achieve:

1. Expanded capacity by setting Surge Capacity Management Plan against a defined expandable capacity requirement at up to 15% above normal critical care capacity (>100% and <115%);
2. Establishment of pre-determined plans for management of health human resources, physical space, equipment and technology and a standardized response process;
3. Increased access to information via the CCIS.
4. A standardized, scalable framework for surge capacity management, which provides an opportunity to improve system design and coordination of critical care services.

Types of Surges

Surge capacity planning involves planning for situations where critical care demand exceeds available resources. The planning starts with individual organizations, but is expandable and scalable to address increasing demands from higher patient volumes within a LHIN. Although pandemic planning involves addressing large-scale infectious events, it is a specific example of one type of Moderate or Major Surge capacity planning. The plan outlined in this document and the framework provided in the Minor Surge Capacity Management Toolkit are designed to move hospitals to a state of preparedness during any cause and type of surge. The different levels of surges are described below:

Minor Surge: An acute increase in demand for critical care services, up to 15% beyond the normal capacity (>100% and <115%), where response is localized to an individual hospital. A Minor Surge could result in unplanned admissions from the OR, deteriorating patients on the ward, or going into a minor surge state for the purpose of accepting life or limb threatened patients from a referring hospital.

Moderate Surge: A larger increase ($\geq 115\%$) in demand for critical services that impacts on a LHIN level, where an organized response at the LHIN/regional network level is required. Occurs when a hospital in Minor Surge is no longer able to maintain services and needs to rely on the resources of other hospitals to assist with managing the surge. A Moderate Surge could also result from a single event (infectious or casualty) requiring the response of several hospitals in a region to respond to the increase in demand.

Major Surge: An unusually high increase in demand that overwhelms the health care resources of individual hospitals and regions for an extended period of time, where an organized response at the provincial or national level is required.

General Overview

This document presents the tools and protocol for declaring a Moderate Surge when at least one hospital in the LHIN is unable to sustain their critical care services, and requires the resources of the LHIN to ensure patients receive safe and timely access to care. Moderate Surge plan is the natural escalation from Minor Surge planning which involves hospitals managing surges within their own institutions. Building on the same elements and principles, this response guide will outline the frameworks and tools for hospitals to prepare for managing Moderate Surges.

In the event of a Moderate Surge, all the elements of a response to a Minor Surge would engage. In addition, the LHIN leadership (Critical Care LHIN Leaders) would lead the region in response to a Moderate Surge event. Resources will be allocated by the LHIN according to the regional demand.

The facilitation of a Moderate Surge requires the following pre-established concepts:

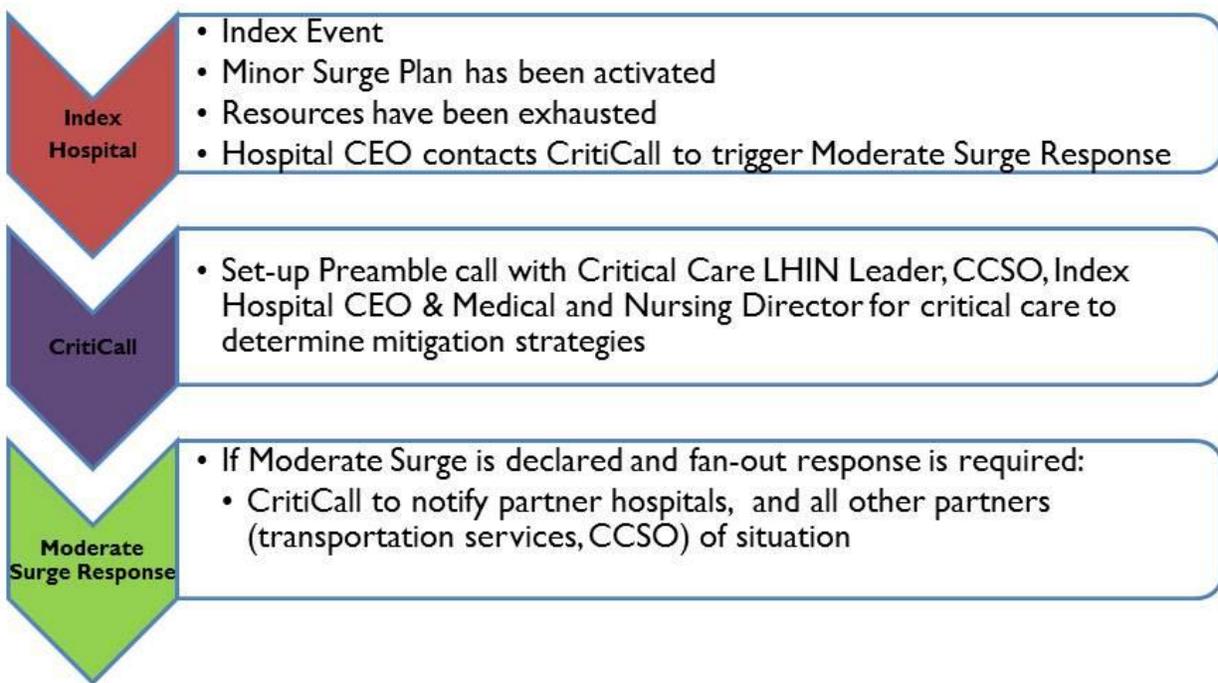
1. All hospitals involved in the LHIN will provide information regarding capacity/capability of their organization (e.g. by updating the bed availability tool in CCIS and PHRS).
2. There is an established cache and inventory of resources available to the LHIN.
3. There are defined decision and communication algorithms in the event of a Moderate Surge.
4. The accountability framework will be followed as outlined in Appendix A.

- During a moderate surge event, CritiCall will be utilized as the 'fan-out system' to notify hospitals. Each hospital will be expected to call into a teleconference and identify available capacity and resources to ensure the event is appropriately managed, and critical care services are maintained.

Escalating from Minor to Moderate Surge allows the application of a consistent approach with common principles, which enables the health care system to have a well-built infrastructure for responding to surge events, regardless of the cause. Figure 1 describes the framework for Moderate Surge, which starts with the activation of Minor Surge Plans within a hospital.

Figure 1: Moderate Surge Response Framework:

Moderate Surge Response Framework



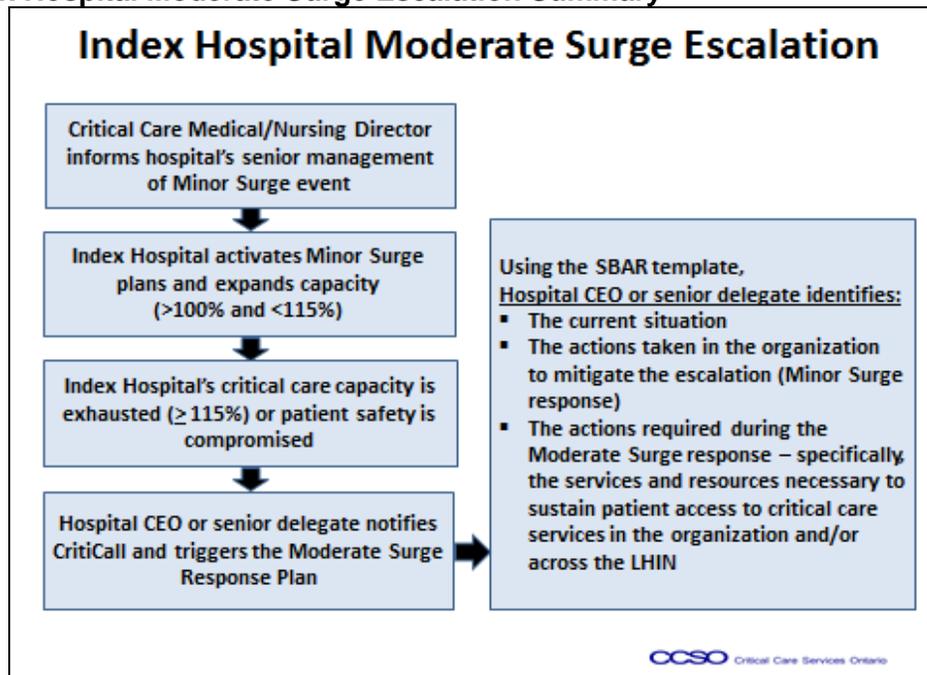
Index Hospital Moderate Surge Escalation

- If the Minor Surge event continues to progress and the Index Hospital is not able to provide or sustain critical care services, then the critical care gatekeeper (medical or nursing director) will notify the senior team.
- The Index Hospital CEO/senior delegate will notify CritiCall to begin the process of declaring a Moderate Surge event.

3. A preamble call is organized by CritiCall that includes CCSO, the Critical Care LHIN Leader, the Index Hospital's CEO/senior delegate and the Medical and Nursing director from Critical Care. The situation will be reviewed thoroughly (using the SBAR Reporting Template) and mitigation strategies will be considered.
4. If a Moderate Surge is declared, CritiCall will facilitate a second call, and contact the switchboards of partner hospitals in the LHIN to alert these hospitals that a Moderate Surge has been declared in the LHIN.
5. All hospitals will be expected to update their bed availability in CCIS and come to the call prepared with information on their current capacity/capability (using Partner Reporting Template).
6. The Index Hospital will need to articulate the needs and services of the patients that may need to be transferred (using the SBAR Reporting Template).
7. The teleconference will be chaired by the Critical Care LHIN Leader for the hospital declaring the surge.
8. Together, LHIN partners and senior delegates will determine which hospitals can accommodate any patients requiring transfer.
9. Call participants should alert receiving and sending physicians *who may not be on the call* that they should prepare to be connected via CritiCall as the next step.
10. Sending and receiving physicians are connected through CritiCall to communicate patient information.
11. Hospitals organize patient transport.
12. The LHIN Critical Care Lead will determine follow-up time and call with LHIN partners is scheduled to assess the situation.

Figure 2 describes the Index Hospital's response in the escalation to a Moderate Surge event.

Figure 2: Index Hospital Moderate Surge Escalation Summary



The SBAR form is located in appendices.

It is a communication technique that helps members of the health care team organize and present critical information about a patient's condition in an efficient and effective way. The SBAR tool consists of a script template in which the patient's information is entered. The script is then used to guide the conversation between members of the health care team during the preamble call.

Moderate Surge Response: The Step-by-Step Response Plan

This section describes in detail, the protocols for a Moderate Surge Response.

Step I: Declaration of a Moderate Surge

What has to happen before a Moderate Surge can be declared?

At the Index Hospital level, a tiered response will occur prior to escalation to the Moderate Surge response. The Index Hospital will have deployed their Minor Surge plans. Once the 5 elements of surge capacity management have been considered (as outlined in the Surge Capacity Management Plan: Minor Toolkit), and hospital resources have been flexed up to 15% above normal critical care capacity, but the ongoing demand exceeds the required resources, only then a Moderate Surge response will be triggered.

An important assumption regarding specialty services: If a hospital does not have the service required by a patient, or patient safety is likely to be compromised, the Index Hospital can escalate to Moderate Surge to ensure patient safety.

Who can initiate the Moderate Surge response?

Only the Hospital CEO/senior delegate can initiate a Moderate Surge. It is important to ensure that the CEO has all the required information regarding the situation to ensure that a solution is reached without compromising patient safety. The hospital that can no longer sustain their services will be referred to as the Index Hospital. All other remaining hospitals will be referred to as Partner Hospitals.

What communication tools or processes are available to the Index Hospital to help in the management of Moderate Surge?

The complexity of medical care, coupled with the inherent limitations of human performance, make it critically important that clinicians have standardized communication tools, create an environment in

which individuals can speak up and express concerns, and share common “critical language” to alert team members to unsafe situations¹ Establishing a standardized communications system in a critical care environment provides a consistent mechanism of reporting between team members.

It is essential to establish a mechanism that quickly communicates the status of the critical care unit as a whole. To ensure a consistent approach to this communication method, it is necessary to triage patients daily based on their acuity to provide a standardized practice in critical care units. This triage process will be communicated via the communication board (commonly known as the White Board) that will be in a central location in the critical care unit. It will identify which patients are ready to be transferred out of the unit, which patients must remain in the unit and lastly those patients that could be reassessed and potentially be transferred out of the unit. The following is the triage methodology/traffic light system that will be used for the Moderate Surge response plan:

- RED:** Patient remains in the ICU as they require life-sustaining interventions
- AMBER/YELLOW:** Possibility of transfer within 36 hours
- GREEN:** Patient is ready to be transferred from ICU

On a daily-basis, patients will be scored as red, yellow or green as part of the traffic light system. This triage methodology is aimed at embedding a daily practice to allow this communication tool to be used as part of the common language in planning for patients in your critical care area. During times of surge, the scoring methodology will be utilized to quickly identify patients who are ready to be discharged or reassessed for potential discharge.

We recommend that anyone who will be involved in managing a surge in your hospital is familiar with the provincial Surge Capacity Management Plan. It is imperative to ensure management, physicians and frontline-staff are familiar with the tiered escalation process from Minor to Moderate surge outlined in this document. Identify the individuals within your organization who are likely to participate in a surge response and make sure they are aware of the process and their roles.

This includes notifying your switchboard that they may receive calls requesting surge designates be notified of a surge event that requires a response spanning across the LHIN or several LHINs. During a surge response it is vital that switchboard operators have access to this information so the appropriate people from your organization can participate in a timely manner. Each hospital that participates will be asked to provide information regarding capacity and capability to ensure a timely response. CCSO will be providing communication tools and checklists for participating hospitals (refer to attached appendices).

How does a hospital document/record a surge response as it escalates through the response framework?

As a quality measure and monitoring tool, the hospital critical care team will complete the Minor Surge worksheet (found in the Surge Capacity Management Plan: Minor Toolkit) as the hospital escalates to a

¹M Leonard, S Graham, D Bonacum. [The human factor: the critical importance of effective](#)

Minor Surge. This tool will provide a mechanism of monitoring responses for hospital teams who are able to mitigate the situation using an internal Minor Surge response. This will also allow hospital teams to review Minor Surge events as a team and identify process improvements within their organizations. The information collected in this form mirrors the information required in the SBAR (Situation, Background, Assessment and Recommendation) tool developed for Moderate Surge responses.

As a response situation escalates and requires the resources of a LHIN or the Province, further detailed information will be required for reporting. As such, the SBAR Tool has been developed to provide a consistent method of reporting situations which require escalation. The SBAR methodology is a well-known communication aid that helps members of the health care team organize and present critical information about a patient's condition in an efficient and effective way. SBAR form can be found in Appendices section.

It is recommended the SBAR form be completed by the critical care team (critical care manager, director or other delegate) and be provided to the Hospital CEO/senior delegate prior to the preamble call organized by CriteCall. Once it is confirmed that additional resources from another hospital or LHIN are required, a Moderate Surge response is triggered and the Index Hospital CEO/senior delegate calls CriteCall at **1-877-ONT-SURGE (668-7874)**.

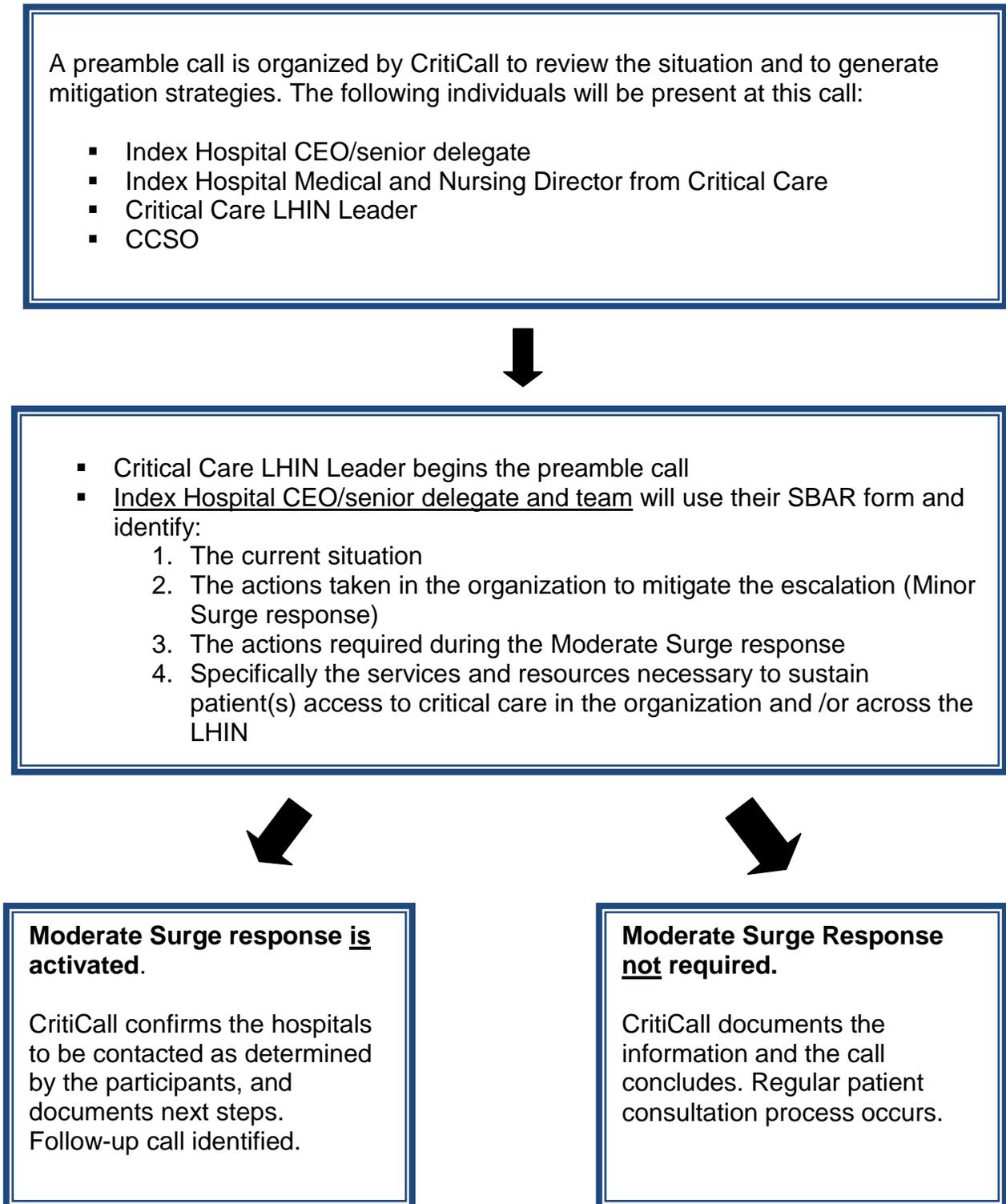
Step II: CriteCall Facilitates Preamble Call

After the Moderate Surge response has been requested by the Index Hospital, CriteCall will facilitate a preamble call with CCSO, the Critical Care LHIN Leader, and the Index Hospital Senior Lead and team to discuss the situation, and determine whether a LHIN-level response (i.e. moderate surge) is necessary.

Critical Care LHIN Leaders will assign appropriate coverage by a neighbouring Critical Care LHIN leader during periods of unavailability. A notification communication must be sent to CCSO and CriteCall.

Figure 3 describes the preamble call algorithm and possible outcomes.

Figure 3: Preamble Call Algorithm



Step III: Moderate Surge Fan-Out Response

The preamble call will determine the required next steps and determine who needs to participate in the mitigation process for the Index Hospital's surge response. Each required Partner Hospital in the LHIN will be contacted by CritiCall. CritiCall will provide teleconference information and detailed information on next steps.

Will all hospitals be required to participate?

A partner hospital is any hospital in the LHIN or local region that could provide the services required and assist in alleviating capacity pressures at the Index Hospital. In some cases, partner hospitals will also be outside the LHIN for those LHINs that do not have specialty services. **The Critical Care LHIN Leader will decide who needs to participate.**

Who contacts the senior person in my hospital?

When CritiCall calls a hospital's switchboard, the switchboard operator will record and then relay the required information to the Hospital CEO/senior delegate who will be expected to provide information about current available critical care resources in their hospital.

Figure 4 is an example of switchboard information sheet (also in Appendix C). This tool should be distributed to switchboard operators and updated as required to ensure a seamless call transfer.

Figure 4: Switchboard Information Sheet

**If you receive a call from
CRITICALL ONTARIO: (800) 668-4357**

Identifying a Moderate Surge Response is in effect for the LHIN, please take the following actions:

1. Notify your Hospital CEO/Delegate that a LHIN-wide surge response is in effect
2. Provide them with CritiCall teleconference details
3. Notify the critical care team (Medical and Nursing Director) and have them complete the *Partner Hospital Reporting Template* prior to joining the teleconference

[Insert Contact Names, Titles]

- Extension: xxxx
- Pager: xxxx
- Cellular: (xxx) xxx-xxxx





What does my hospital have to do prior to participating in the Moderate Surge call?

In order to properly manage a surge event it is important that all hospitals in the LHIN provide up-to-date information regarding capacity, and capability of services available in their organization. We ask that partner hospitals ensure that their CCIS bed availability tool is updated daily.

Additionally, a Partner Hospital Reporting Form (see appendices) has been developed to assist with the collection of this information. This form should be completed prior to joining the LHIN teleconference.

Step IV: LHIN Teleconference

Figure 5: LHIN Partners Call Algorithm

CritiCall contacts hospitals identified in the preamble call through their switchboards. Switchboard relays conference call details to the Hospital CEO and asks that they consider including an appropriate physician on the call so medical and patient acceptance decisions can be made.

Participants call into conference line at specified time



CritiCall connects the hospitals, transport services and other required members via teleconference.

The call is led by the Critical Care LHIN Leader to discuss the following:

1. Review of Moderate Surge event and needs of Index Hospital
2. Confirmation of available resources from other LHIN hospitals (Bed Availability Tool and other tools determining capacity)
3. Action plan required to manage the Moderate Surge event
4. The frequency of follow-up reporting cycle is determined - every 1, 2, 4, 6, or 8 hour(s)



Patient Transfer Process:

- CritiCall contacts Index Hospital for patient details
- CritiCall connects Index Hospital to identified leads at partner hospital(s)
- Transportation is arranged by the Index Hospital for patients
- CritiCall facilitates patient consultation as per normal protocol
- CritiCall will call to confirm patient arrived at accepting hospital

What happens once my hospital joins the LHIN Moderate Surge response call?

Once CritiCall connects all the required participants, a review of the surge event is led by the Critical Care LHIN Leader. They will confirm resources available at other hospitals in the LHIN using information provided by each partner hospital (using the Partner Hospital Reporting Form), or using available tools including the Bed Availability Tool and other resources like the Patient Referral Framework and Services Inventory. An action plan to manage the Moderate Surge event will be discussed and agreed to during the call.

It is expected that all partner hospitals will provide all services for which they have the capacity and capability, including patient transfer and repatriation to other lower acuity centres.

Once the teleconference ends, is our hospital required to do anything else?

Once the plan of action has been determined, participants on the call will alert their sending and receiving physicians that CritiCall will be contacting them. Prior to ending the call, a follow-up time and call sequence will be determined to ensure that the status of participating hospitals is stable, moving towards a stable state, or whether further escalation is required for stabilization.

After the teleconference, the hospitals will facilitate patient or equipment transfers to alternative centers.

CCSO will contact the LHIN CEO (with copy to Critical Care LHIN Leader) to apprise them of the situation occurring in their LHIN.

Step V: Follow-up Teleconference to Determine Sustainability

At a pre-determined time, participants will call back into a teleconference to provide updates on the situation of the surge event. The Critical Care LHIN Leader will decide if the Moderate Surge status of Index Hospital and the partner hospitals is stable. If the situation is stable, the Critical Care LHIN Leader will declare an end to the surge response, retain the documentation and conclude the call.

If the Index Hospital is still in a Moderate Surge situation or cannot sustain their services, the Critical Care LHIN Leader will collaborate with the Index and partner hospitals to determine next steps. This process is continued until the situation is deemed stable by the Critical Care LHIN Leader.

Preparing for Moderate Surge at the Hospital-Level

1. Review Surge Capacity Management Plan with Senior Team and Hospital Board.
2. Conduct an in depth review of current Minor Surge plan and review the Moderate Surge response process.
3. Educate front-line and pertinent staff (e.g. nurse supervisors), administration, switchboard, the ED and critical care physicians on the Moderate Surge response process and escalation plan.

What should my hospital do with critically ill paediatric patients if we are not a paediatric centre?

- Contact CritiCall Ontario for assistance **(1-800-668-4357)**

Appendices and Forms

Appendix A – Response Accountabilities

Each level of surge response will follow the following response principles:

Readiness to act for all categories of surge

- All participating hospitals are required to educate and support their frontline staff to ensure the appropriate level of response is taken to manage the surge event.
- All hospitals will have pre-determined Minor Surge plans in place for human resources, space and equipment, as outlined in the *Surge Capacity Management Plan: Minor Toolkit*.

Response built on partnerships

- All hospitals are accountable to respond in accordance to the principles of Surge Management.
- All hospitals must communicate and actively support partnerships to ensure patients are kept as priorities in the response plan.
- All hospitals are accountable to align organizational capabilities to ensure the critical care system is maintained and resources are not overwhelmed.
- All hospitals are accountable to support partnerships across organizational departments to ensure seamless coordination of patient care is maintained.

Tiered-escalation response

- Surge events must first be managed with a Minor Surge response within the organization prior to escalating to the next level of response.
- If the patient requires a service or level of care that is not provided by the hospital, the hospital will immediately activate Minor/Moderate surge and associated transfer processes to ensure the patient receives the appropriate level of care within an appropriate timeframe.

Operational capabilities will be scalable, flexible and adaptable

- Surge events can vary in size and complexity, each organization will remain accountable to ensure a minimum capability of a Minor Surge response to a maximum of a Major Surge response.
- Each organization will be accountable to report the following for each surge event that requires escalation to a Moderate Surge response:
 - Cause of the minor surge event;
 - Effect on the organization;
 - Required interventions;
 - Resources that were utilized in the response;
 - Required resources that are required to maintain patient safety.

Appendix B – Quick Reference Cards

Moderate Surge Response Card (For Critical Care LHIN Leader)

Index Hospital: Hospital experiencing the surge event

Partner Hospital: Other hospitals in the LHIN

Minor Surge: Critical care demand >100% and <115% of capacity

Moderate Surge: Critical care demand \geq 115% of capacity

Major Surge: Critical care demand overwhelms LHIN

1. As the CC LHIN Leader, you are required to participate in the Moderate Surge response.
2. CritiCall will inform you that (Index) Hospital in your LHIN has requested a pre-amble call for a possible Moderate Surge.
3. Pre-amble call (organized by CritiCall), will include:
 - i. Critical Care LHIN Leader,
 - ii. Index Hospital – CEO and Medical Director,
 - iii. CCSO.
4. The purpose of the call is to determine the need to declare a Moderate Surge within the LHIN.
5. On the pre-amble call, the Index Hospital CEO will provide you with a concise summary of the surge situation, their response so far and assistance they require (using SBAR form).
6. If you decide to declare a Moderate Surge, CritiCall will arrange a second call with partner hospitals to discuss and decide on appropriate resources options for Index hospital.
7. The CC LHIN Leader will chair this second teleconference.
8. Follow-up calls with LHIN partners will continue until the surge event has been properly addressed and Moderate Surge concluded by the CC LHIN Leader. CritiCall will document.

Moderate Surge Response Card

(For Index Hospital)

Index Hospital: Hospital experiencing the surge event (you)

Partner Hospital: Other hospitals in your LHIN

Minor Surge: Critical care demand >100% and <115% of capacity

Moderate Surge: Critical care demand \geq 115% of capacity

Major Surge: Critical care demand overwhelms LHIN

1. Only the Index Hospital CEO/senior delegate can initiate a Moderate Surge by calling CitiCall and requesting a preamble call
 - **CitiCall: 1-877-ONT-SURGE.**
 - Before a Moderate Surge can be declared, Minor Surge response must be exceeded at your hospital.
2. Pre-amble Call will include:
 - Hospital CEO, Medical and Nursing Director at your (Index) Hospital,
 - Critical Care LHIN Leader,
 - CCSO.
3. The SBAR form should be completed by your critical care team and used to provide a status report on the preamble call.
4. The Critical Care LHIN Leader will chair the preamble call.
5. If a Moderate Surge is declared, CitiCall will contact the appropriate/identified partner hospital(s) and facilitate another teleconference to review possible solutions to address your surge event.
6. After the call, ensure your critical care team is aware of the solution(s) and prepared for subsequent calls from CitiCall.
7. Subsequent follow-up calls will occur until the surge event has been properly addressed and the Moderate Surge has been concluded by the CC LHIN Leader. CitiCall will document.

Moderate Surge Response Card

(For Partner Hospitals)

Index Hospital: Hospital experiencing the surge event

Partner Hospital: Other hospitals in your LHIN (potentially your hospital)

Minor Surge: Critical care demand >100% and <115% of capacity

Moderate Surge: Critical care demand \geq 115% of capacity

Major Surge: Critical care demand overwhelms LHIN

1. If a Moderate Surge is declared, CritiCall will contact the appropriate/identified partner hospital(s) – *potentially including your hospital* – for a teleconference to review possible solutions for the Index Hospital.
2. **Partner hospitals must make sure their CCIS and PHRS bed availability is updated and reflects current capacity** – all hospitals in the LHIN are required to do this.
3. **Partner hospitals must also complete the ‘Partner Hospital Reporting Template’** prior to joining the moderate surge LHIN teleconference.
4. After the call, ensure your medical team is aware of solutions and to prepare them for calls from CritiCall.
5. Follow-up phone calls will continue until the surge event has been properly addressed and the Moderate Surge has been concluded by the CC LHIN Leader. CritiCall will document.

Appendix C – Switchboard Information Sheet

If you receive a call from CRITICALL ONTARIO: (800) 668-4357

Identifying a Moderate Surge Response is in effect for the LHIN, please take the following actions:

1. Notify your Hospital CEO/Delegate that a LHIN-wide surge response is in effect
2. Provide them with CriteCall teleconference details
3. Notify the critical care team (Medical and Nursing Director) and have them complete the *Partner Hospital Reporting Template* prior to joining the teleconference

[Insert Contact Names, Titles]

- Extension: xxxx
- Pager: xxxx
- Cellular: (xxx) xxx-xxxx



Appendix D – Communication Poster

Critical Care Surge Capacity Management

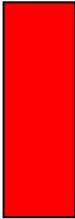
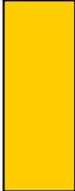
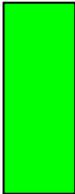
As part of the Provincial Surge Capacity Management Plan, CCSO has created a moderate surge response process to help hospitals manage **moderate-level critical care surges** (i.e. hospital critical care capacity or capability is greater than 115%).

Your Hospital CEO/delegate can initiate this process for your hospital by calling:

CritiCall Ontario: 1-877-ONT-SURGE (668-7874)



Appendix E – Rag Status Tool

RAG STATUS: RED/AMBER/GREEN				
Definition	Indicator	Response	Status	Required Reporting
<p>RED</p> <ul style="list-style-type: none"> Capacity requirement exceeds institutional capability. Both capacity and sustainability are at risk. Critical care capacity is at >115% or patient safety is compromised Services required by patient(s) are not available 	<ul style="list-style-type: none"> Index hospital is not able to sustain the services All hospitals resources are exhausted after Minor Surge plan has been activated. 	<ul style="list-style-type: none"> Situation is reviewed with senior team CEO or delegate, and a Moderate Surge is triggered. LHIN resources are required. 		<ul style="list-style-type: none"> Complete the SBAR form Notify CritiCall to activate Moderate Surge CritiCall notifies LHIN Leader – teleconference with Index Hospital for assessment LHIN partners identify the following criteria via teleconference: <ul style="list-style-type: none"> Situation Background Assessment Recommendations
<p>AMBER (YELLOW)</p> <ul style="list-style-type: none"> Capacity Required 100-115% Normal Capacity Sustainability of Critical Care service at risk Remedial actions in place (Minor Surge plan is activated) Services required by patient(s) are available 	<ul style="list-style-type: none"> Index hospital is able to sustain services. 	<ul style="list-style-type: none"> Minor Surge Plan activated Consider communication with Critical Care LHIN Leader. 		<ul style="list-style-type: none"> Complete the Minor Surge event form.
<p>GREEN</p> <ul style="list-style-type: none"> Normal level of attention Normal Capacity No actions required Sustainable Critical Care Service with Institutional tolerance. Services required by patient(s) are available 	<ul style="list-style-type: none"> Regional resources are not required. 	<ul style="list-style-type: none"> No required response. 		

Appendix F – Provincial Ventilator Stockpile

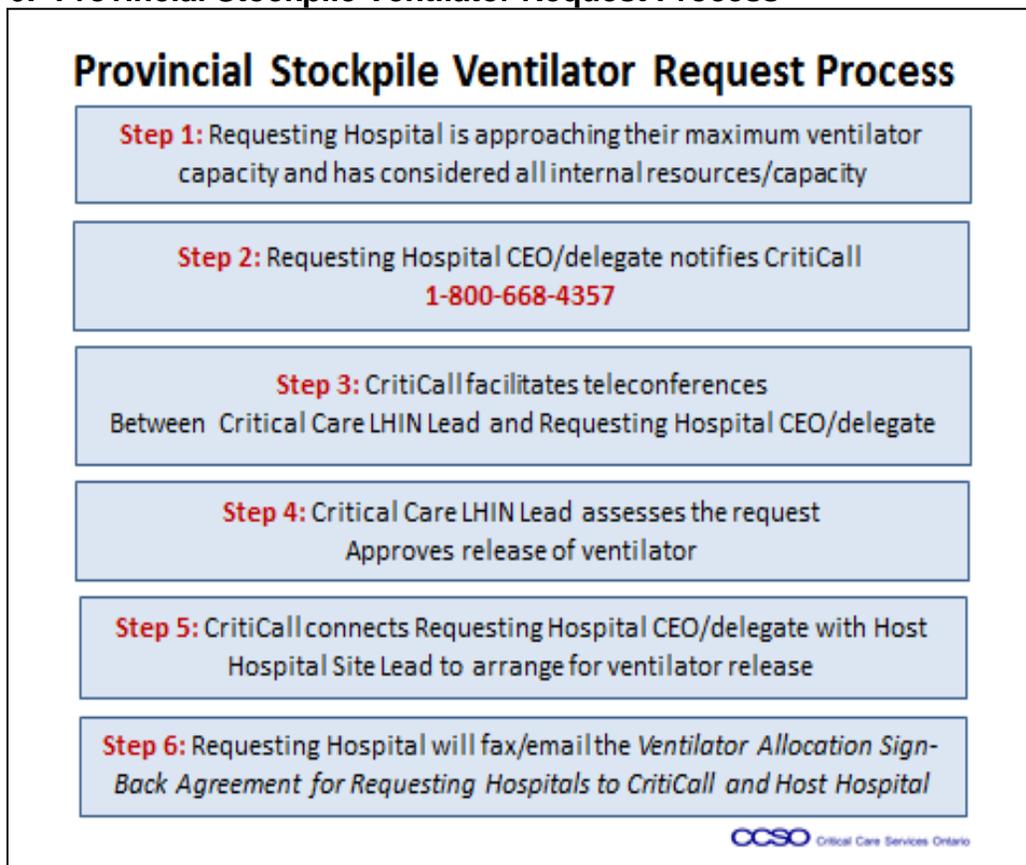
What if additional ventilators are required?

As the number of patients requiring critical care services increases, hospitals may find that they have the capability to care for additional patients but lack sufficient ventilator capacity to accommodate them. To mitigate this, a provincial process has been set up CCSO, whereby hospitals can borrow additional ventilators from the Provincial Ventilator Stockpile.

If an Index Hospital is approaching their maximum ventilator capacity, and has considered all site and corporation-level resources, the Index Hospital CEO will notify **CritiCall Ontario** by calling **1-800-668-4357** (different from number to declare a moderate surge), and formally request access to Ontario's Ventilator Stockpile. This process is shown in Figure 6 below.

NOTE: When an Index Hospital requests ventilators from the provincial stockpile, they will be referred to as a 'Requesting Hospital' – please refer to the *Ontario Ventilator Stockpile Guidance Document* for details.

Figure 6: Provincial Stockpile Ventilator Request Process



Appendix G – Glossary

CritiCall Call Agent: is responsible for making all connections with appropriate parties and distributing call-in numbers. In addition, they will coordinate participants via teleconference as required. They document resource status, outcomes and next steps

Critical Care LHIN Leader: is responsible for leading the teleconferences and facilitating collaboration among participants with the goal of resolving the surge event.

Critical Care Services Ontario (CCSO): is responsible for providing leadership and direction during a surge event, and will be contacted for assistance as required at the request of the Critical Care LHIN Leader.

Index Hospital/Corporation: the hospital or group of hospitals that have self-identified as being in a moderate surge. They will have taken steps to manage processes internally, completed the SBAR reporting template, updated their CCIS bed availability and called CritiCall Ontario to initiate process.

Minor Surge: an acute increase in demand for critical care services, up to 15% beyond the normal capacity (<115%), where response is localized to an individual hospital.

Moderate Surge: a larger increase ($\geq 115\%$) in demand for critical services that impacts on a LHIN level, where an organized response at the LHIN/regional network level is required

Major Surge: an unusually high increase in demand that overwhelms the health care resources of individual hospitals and regions for an extended period of time, where an organized response at the provincial or national level is required.

Partner Hospitals/Corporations: are contacted by CritiCall Ontario to assist by accepting patients from the index hospital

RAG Status: this refers to the red/amber/green status; it can be applied to the LHIN and is used as part of the traffic light system in all hospitals who participated in minor surge planning.

RED: Patient remains in ICU as they require life-sustaining interventions

YELLOW: Possibility of transfer within a 36 hours timeframe

GREEN: Patient ready to be transferred from critical care unit

SBAR: SBAR stands for Situation, Background, Assessment, Recommendation and is a well-known communication tool that helps members of the health care team organize and present critical information about a patient's condition in an efficient and effective way.

Appendix H – Moderate Surge Preparedness Checklist

MODERATE SURGE CHECKLIST– Index Hospital Team
<p>Definition of Moderate Surge: An increase in demand for critical care services, where one or more hospitals cannot sustain their critical care services that is the result of one more of the following:</p> <ul style="list-style-type: none"> ○ A local level response at the Index Hospital is not sufficient ○ Human resources in the Index Hospital are not sufficient to meet demand ○ Supplies in critical care and acute care services at the Index Hospital will not be sufficient to meet the demand ○ Physical space resources are no longer sustainable in the Index Hospital ○ Use of alternative hospital space is now being considered
<input type="checkbox"/> Have you reviewed the process for declaring a Moderate surge in your hospital? <input type="checkbox"/> Has this process been communicated to staff?
<input type="checkbox"/> Have you reviewed the process for accessing additional ventilators from the Provincial Stockpile? <input type="checkbox"/> Has this process been communicated to staff?
<input type="checkbox"/> Is the hospital up-to-date with their Minor Surge planning?
<input type="checkbox"/> Is there a communication structure in place for: <ul style="list-style-type: none"> ○ Informing senior management of the surge status? ○ Informing front line staff that a LHIN level response has been activated?
<input type="checkbox"/> Have communication tools been distributed: <ul style="list-style-type: none"> ○ Switchboard Tool? ○ Rag Status Communication Tool? ○ SBAR Form?
<input type="checkbox"/> Have you identified staffing models in the event that your hospital goes into a Moderate Surge?
<input type="checkbox"/> Have staff been made aware of the Moderate Surge process?

Appendix I – Index Hospital SBAR Form

SBAR Report		Date:
Time preamble call will start:	Call in Number at CritiCall: Participant code:	
Index Hospital & LHIN:		
Name of Index Hospital CEO/delegate:		
Title (of delegate):	Phone #:	
Situation: Please Provide Summary of the Situation in the section below		
<p>What is your current status? Please insert # :</p> <p>_____ critical care capacity at Moderate Surge level (≥ 115%)</p> <p>_____ critical care bed capacity (insert bed occupancy rate from CCIS)</p>		
Confirm that your CCIS bed availability is updated daily?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Confirm that the hospital's senior management team has been informed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Background: What Factors Led to the Moderate Surge Event?		
<p>Assessment: What are the threats to patients/operations (e.g. lack of vents/beds/staff)</p>		
<p>What is your current patient compliment? (Please insert the # of patients in each category)</p> <p>___ # patients are red (i.e. will remain in ICU)</p> <p>___ # patients are yellow (i.e. possibility of transfer within 1-2 days)</p> <p>___ # patients are green (i.e. ready to leave ICU immediately)</p>		
<p>What responses have been executed? (e.g. flexed up, activated fan-out/call-in, called other sites)</p>		

List of patients requiring possible transfer? Fill out section below:

NOTE: For patient privacy this portion of the form will be for internal use only

SBAR Reporting Form: Patients Needing Transfer

Pt #	Patient Identifier	Age	M/F	Diagnosis	Vented Y/N	Location	MRP Service	Necessity of Isolation? Y/N
1								
2								
3								
4								
5								

Recommendation

What are the recommended actions from the preamble call, proposed to sustain and provide safe patient care?

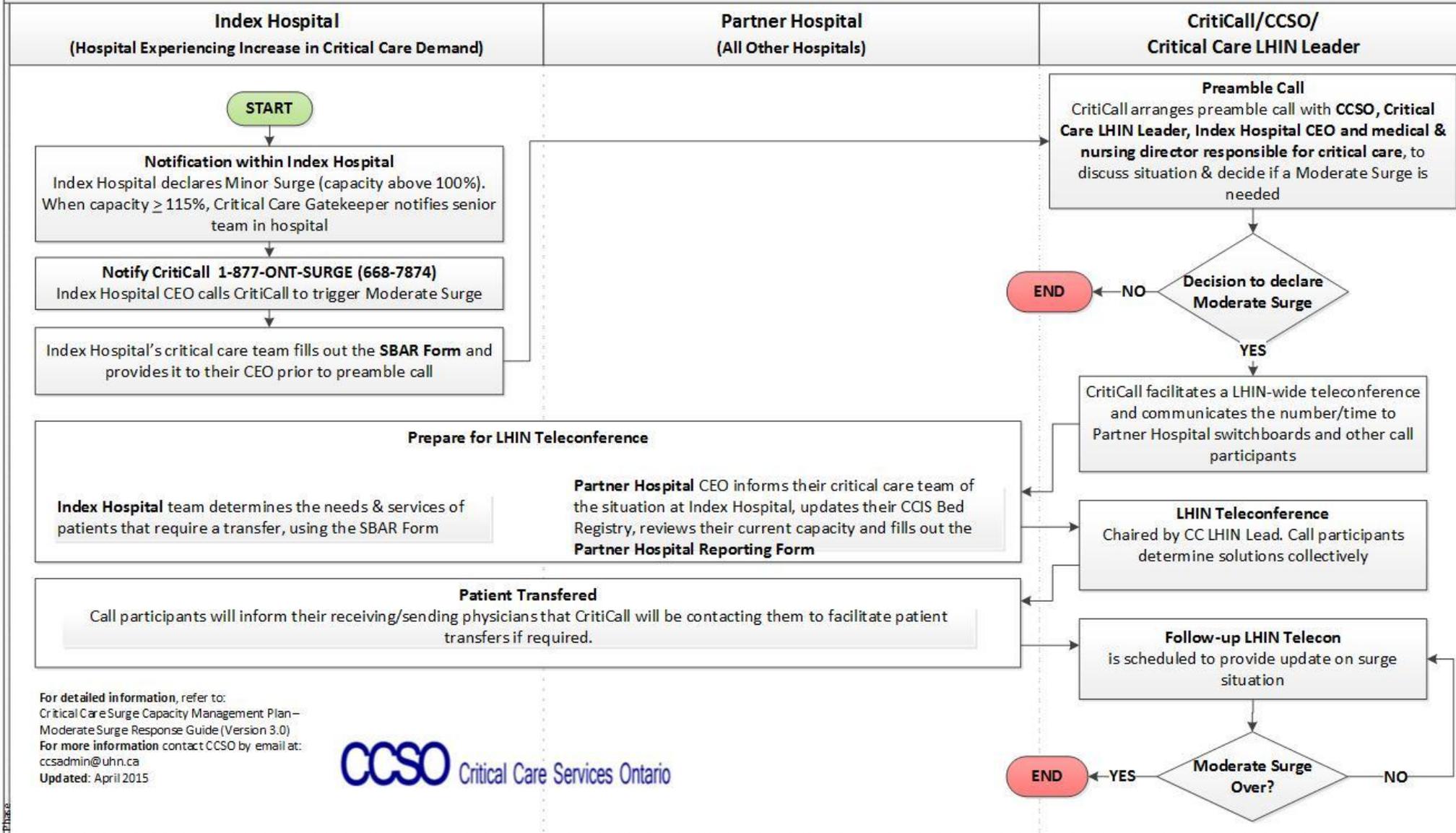
End of Form

Appendix J – Partner Hospital Reporting Form

Partner Hospital Reporting Template	
<i>Please complete prior to joining the Moderate Surge teleconference (organized by CritiCall)</i>	
Call-in Number at CritiCall: Time to call-in:	
Partner Hospital:	
Corporation:	
Name of participant on call: Title: Phone:	
Situation	
Date: Time:	
Identify your current critical care capacity:	<input type="checkbox"/> Moderate Surge , critical care capacity is $\geq 115\%$ <input type="checkbox"/> Minor Surge , critical care capacity $>100-115\%$ <input type="checkbox"/> Critical Care Capacity is $\leq 100\%$
What is your current patient compliment? (Please insert the number of patients in each category)	___ # patients are red (i.e. will remain in ICU) ___ # patients are yellow (i.e. possibility of transfer within 1-2 days) ___ # patients are green (i.e. ready to leave ICU immediately)
Current Capacity: <i>The number of beds available to provide care for a critically ill patient</i>	
Current Capability: <i>The resources available to you at the time of the event</i>	

End of Form

Process for Declaring a Moderate Surge



For detailed information, refer to:
 Critical Care Surge Capacity Management Plan –
 Moderate Surge Response Guide (Version 3.0)
 For more information contact CCSO by email at:
 ccsadmin@uhn.ca
 Updated: April 2015

