Ontario Critical Care Clinical Practice Rounds (OC3PR): COVID-19

January 23 2021

Maximizing Care through an Emergency Standard of Care
Preparing ourselves, our teams, our patients, and their families across the Health System

Chaired by Dr. Mike Sullivan and Dr. Dave Neilipovitz

Meeting Etiquette

- Participants will be muted and can use the chat function to converse with the panelists.
- Attendees can submit questions using the Q&A function on the Zoom menu. They can also "up vote" any questions their colleagues submit
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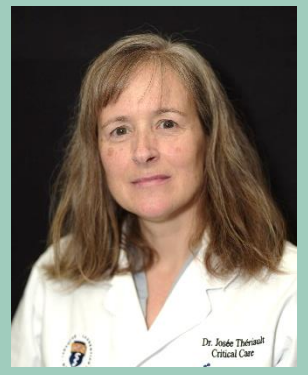
Welcome and Opening Remarks

The Ontario Critical Care Clinical Practice Rounds (OC3PR) Committee

Dr. Michael Sullivan

Dr. David Neilipovitz



Dr. Josee Theriault

Dr. Neill Adhikari

Dr. Bernard Lawless

Lynn Ward

Maria Cheung

Agenda

1. Why
2. What, Who and How
3. When and Where
4. Implications of Implementation
5. Questions & Answers

Speakers

Dr. Andrea Frolic

Dr. James Downar

Dr. Andrew Baker

Daphne Jarvis

Martin Lapner

Dr. Stephen Bellemare

What Do We Hope to Accomplish?

- Reassurance
- Support
- Courage

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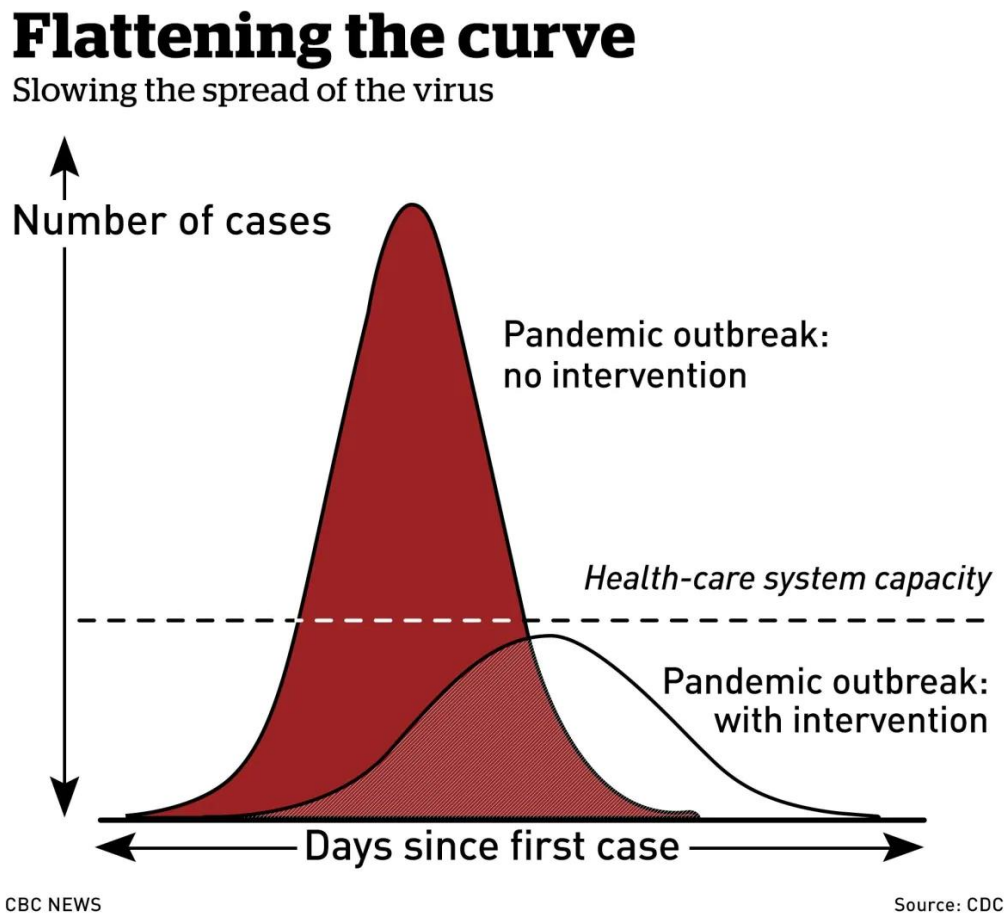
Underlying Assumptions - Prevention

All efforts should be used to *PREVENT* the need to enact

1. Smoothing- flattening the curve
2. Capacity Balancing
3. Increased Available Resources



1. Why

Dr. Andrew Baker
Incident Commander Ontario
Critical Care Command Centre,
Critical Care Physician
University of Toronto

Emergency Standard of Care

- Rationale

Why Would You Even Think About This?

1. What is it that we are thinking about?

2. Are we thinking about something that is already happening?

3. What happens if we don’t think about this?

Why Would You Even Think About This?

Let's be clear about the framing of the question:

Scarcity Perspective – *we would do it if only we had the (unlimited) resources*

versus

Most productive application of the incremental health care resource

Why Would You Even Think About This?

It is already happening:

1. The net effect of the system right now is that people with threatened (but better than 20%) 12 month survival are not getting usual access to care – with negative impact on morbidity and mortality;
2. The system is built on a utility decision analysis of relative productivity in a finite resource environment;
3. This discussion is occurring in terms of determinants of health including:
    1. Prevention versus treatment
    2. Social versus biological determinants

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What Happens if We Don't Think About This?

- More preventable deaths
- Regional (and socioeconomic) inequities
- Potential for implicit bias and divergent approaches

- Missed Opportunity
  - To introduce a systematic way of thinking about incremental resources
  - To show leadership and introduce both an evidence-informed and ethical and socially inclusive approach
  - For health care professionals (vs politics or administrators) to lead this already-existing issue

2. What, Who and How

Dr. Andrea Frolic
Director, Office of Clinical & Organizational Ethics.
Assistant Professor,
Department of Family Medicine,
McMaster University

Dr. James Downar
Critical Care Physician,
Palliative Medicine Physician,
University of Ottawa

Emergency Standard of Care

- What is it?
- Who will be involved?
- How will it actually work?

Short History of the Emergency Standard of Care (ESOC)

- 2006-09: CIHR – CANPREP research: stakeholder/public opinion re: ventilator allocation
- 2020: Ontario Covid-19 Bioethics Table
  - March: Draft Critical Care Triage policy
  - Careful alignment with professional ethics and principles
  - Engagement with Ontario Human Rights Commission/stakeholders
  - Consultation with +++ medical experts
  - *Proposed Framework* for Critical Care Triage (September)
- 2020: Ontario Critical Care COVID Command Centre (OCCCCC)
  - Protocolize *Proposed Framework* (Oct-Dec)
- 2021: Release of Emergency Standard of Care by OCCCCC

Critical Care Triage vs. Usual Care: "the yuck factor"

- Overt resource allocation vs. patient-centred decision-making
- Reducing preventable deaths vs. Saving the sickest
- Equity/Population focus vs. Individual focus
- High-stress decisions vs. Iterative decisions
- Protocol-driven vs. Discretionary clinical decisions

***Personal agency in life/death vs. Multi-factorial outcomes

Triage Worries

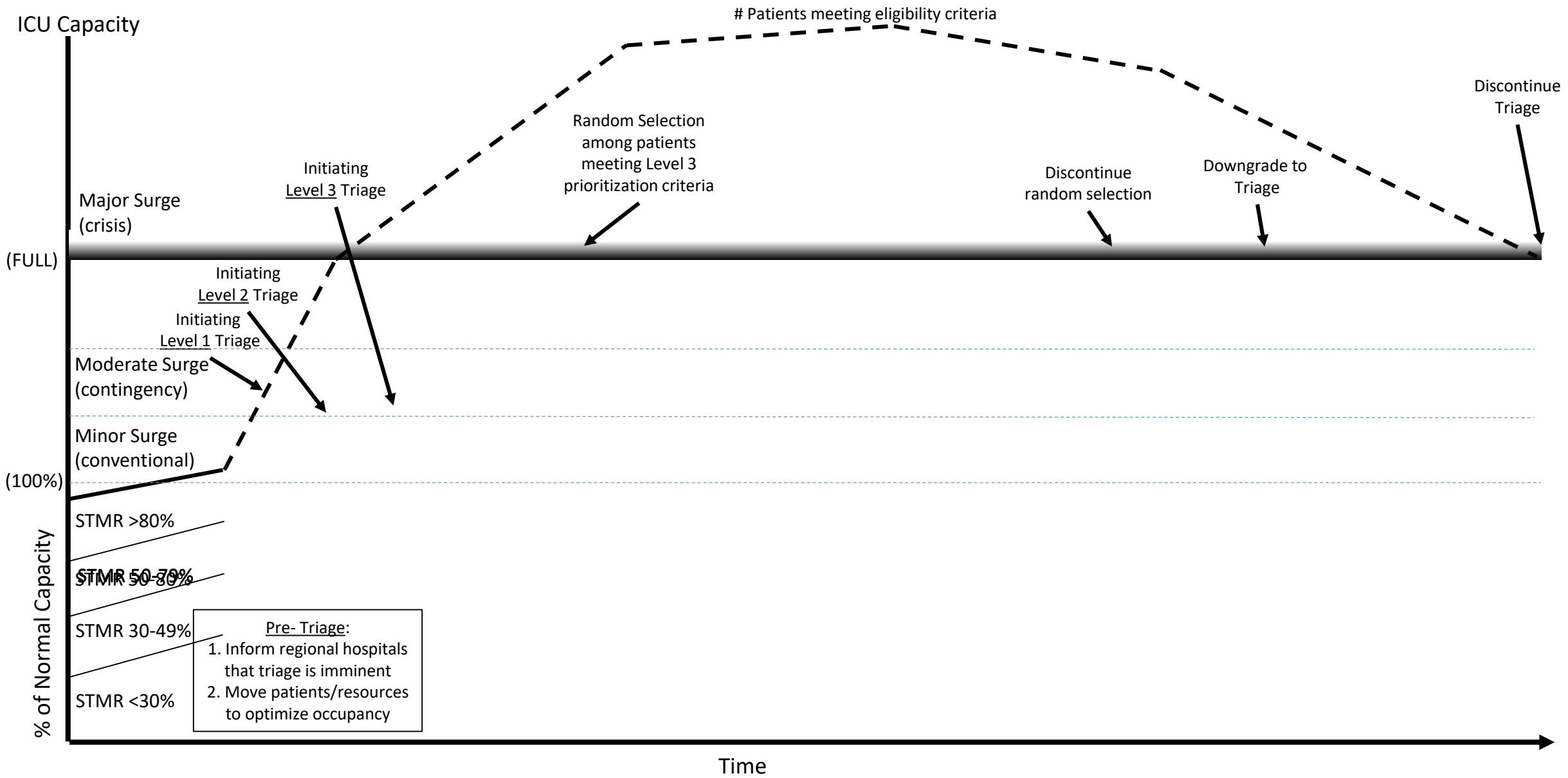
ESOC Supports

Approach to Triage – Prioritization criteria

Red	80-99% predicted short-term mortality risk
Purple	50-79% predicted short-term mortality risk
Yellow	30-49% predicted short-term mortality risk
Green	1-29% predicted short-term mortality risk

- STMR- Risk of death *in the 12m following critical illness*
  - Focus on mortality *risk* at 12m, <u>not</u> the estimated survival duration for an individual
  - Not based on estimated survival duration in the absence of critical illness
  - Individualized assessment informed by published data or expert opinion- clinical indicators suggested

Surge and Levels of Triage in a Pandemic



Triage Process

1. Admission to Hospital

- Clarify patient goals of care, inform about possible triage

2. Application of Triage Criteria

- MRP determines if pt meets (or will meet) eligibility for ICU, STMR
- Second MD (ICU) independently determines STMR
- If both MDs feel that pt does **not** meet prioritization, pt will not be offered CC admission
- If 2 MDs disagree on STMR, the more optimistic STMR prevails
- If patient urgently needs intubation/ventilation before assessment is complete, patient should be intubated pending assessment *if appropriate in non-pandemic times*

Triage Process

3. Communication with Patient/Family/SDM

- Clear indication of decision and rationale
- Documentation
  - Copy in medical record
  - Copy to *administrator on call*

4. Triage Review Committee

- Monitors practice/QI
- Supports standardization
- Provides documentation of STMR to provincial portal

Triage Process

❑ **On admission/in ER: Identify patients who do not want life-sustaining treatment. DOCUMENT THIS.**

Patient meets (or nearly meets) inclusion criteria

Call to CC team or RRT

Does this patient meet inclusion criteria?

No

ADMIT/TRANSFER/REMAIN ON WARD
- Complete STMR assessment for future triage

Yes

Does this patient meet prioritization criteria at current triage level?
- Assessed by MRP and Second MD- document
- If disagreement, use lower (more optimistic) STMR

No

ADMIT/TRANSFER/REMAIN ON WARD
- Communicate with administrator on call
- Communicate decision to patient/family
- Provide medical therapy as indicated
- Add comfort orders
- Reassess if triage downgraded

Yes

ADMIT FOR TRIAL OF CRITICAL CARE
- Communicate with administrator on call
- Communicate decision to patient/family

Does this patient prefer comfort measures only?

Yes

ADMIT TO PALLIATIVE CARE AREA (if available)

Triage Assessments- Disagreements

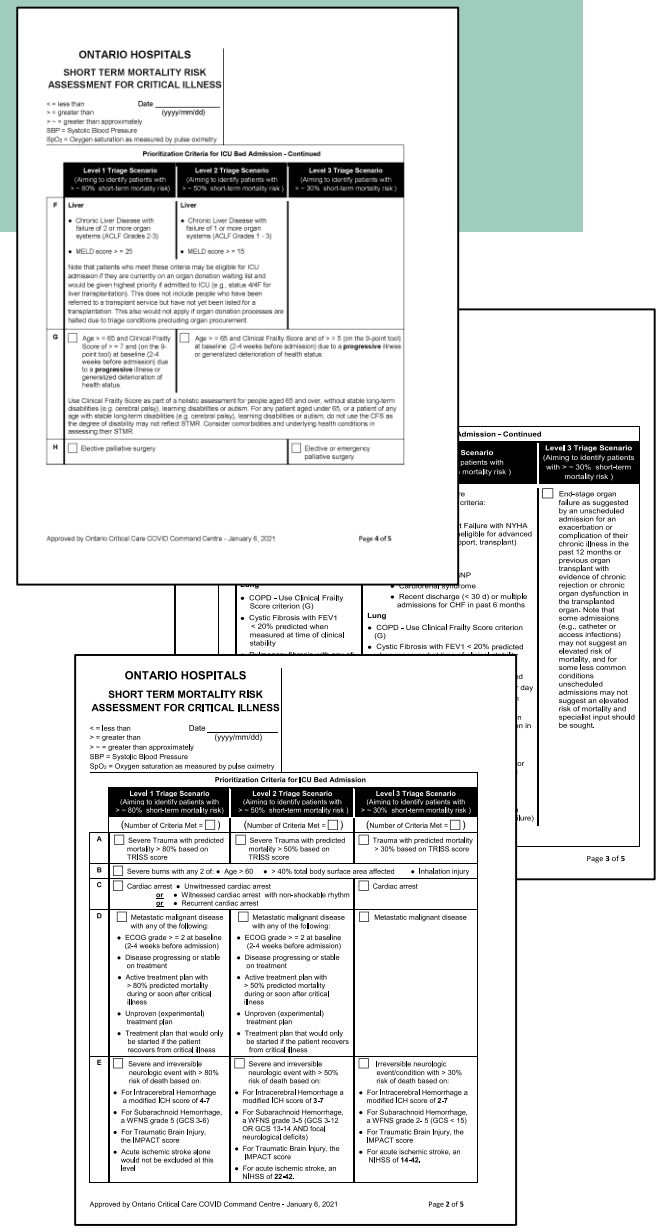
- Disagreements between assessors should be resolved by consensus
  - Default is to offer/continue CC
  - BOTH MDs must agree that pt does not meet prioritization criteria at current level of triage
- Discussion should focus on STMR in the context of critical illness rather than survival duration without critical illness
- Consultation to help with interpretation of clinical tools

Triage Assessments- Uncertainty?

- If either/both assessors feel they have insufficient information:
  - Indicate this in the treatment plan
  - Indicate that the person should be offered critical care pending reassessment
  - Indicate what information is needed to gain sufficient certainty

Documentation - Overview

- Short Term Mortality Risk Assessment Form x 2
  - MRP and Consultant (ideally an ICU-trained MD)
  - Indicates location of patient, current triage level
  - Eligibility criteria
- Summary and Care Plan Form
- Documents are intended to standardize and guide the approach- PLEASE REVIEW THESE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SHORT TERM MORTALITY RISK ASSESSMENT FOR CRITICAL ILLNESS

< = less than
> = greater than
> ~ = greater than approximately
SBP = Systolic Blood Pressure
SpO_2 = Oxygen saturation as measured by pulse oximetry

Date _____ (yyyy/mm/dd)

Prioritization Criteria for ICU Bed Admission

	Level 1 Triage Scenario (Aiming to identify patients with > ~ 80% short-term mortality risk)	Level 2 Triage Scenario (Aiming to identify patients with > ~ 50% short-term mortality risk)	Level 3 Triage Scenario (Aiming to identify patients with > ~ 30% short-term mortality risk)
A	☐ Severe Trauma with predicted mortality > 80% based on TRISS score	☐ Severe Trauma with predicted mortality > 50% based on TRISS score	☐ Trauma with predicted mortality > 30% based on TRISS score
B	☐ Severe burns with any 2 of: • Age > 60 • > 40% total body surface area affected • Inhalation injury		
C	☐ Cardiac arrest • Unwitnessed cardiac arrest or • Witnessed cardiac arrest with non-shockable rhythm or • Recurrent cardiac arrest		☐ Cardiac arrest
D	☐ Metastatic malignant disease with any of the following: • ECOG grade > = 2 at baseline (2-4 weeks before admission) • Disease progressing or stable on treatment • Active treatment plan with > 50% predicted mortality during or soon after critical illness • Unproven (experimental) treatment plan • Treatment plan that would only be started if the patient recovers from critical illness	☐ Metastatic malignant disease with any of the following: • ECOG grade > = 2 at baseline (2-4 weeks before admission) • Disease progressing or stable on treatment • Active treatment plan with > 50% predicted mortality during or soon after critical illness • Unproven (experimental) treatment plan • Treatment plan that would only be started if the patient recovers from critical illness	☐ Metastatic malignant disease
E	☐ Severe and irreversible neurologic event with > 80% risk of death based on: • For Intracerebral Hemorrhage a modified ICH score of **4-7** • For Subarachnoid Hemorrhage, a WFNS grade 5 (GCS 3-6) • For Traumatic Brain Injury, the IMPACT score • Acute ischemic stroke alone would not be excluded at this level	☐ Severe and irreversible neurologic event with > 50% risk of death based on: • For Intracerebral Hemorrhage a modified ICH score of **3-7** • For Subarachnoid Hemorrhage, a WFNS grade 3-5 (GCS 3-12 OR GCS 13-14 AND focal neurological deficits) • For Traumatic Brain Injury, the IMPACT score • For acute ischemic stroke, an NIHSS of **22-42.**	☐ Irreversible neurologic event/condition with > 30% risk of death based on: • For Intracerebral Hemorrhage a modified ICH score of **2-7** • For Subarachnoid Hemorrhage, a WFNS grade 2- 5 (GCS < 15) • For Traumatic Brain Injury, the IMPACT score • For acute ischemic stroke, an NIHSS of **14-42.**

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When to Assess Criteria in Stable Patients?

- Nobody should be deprioritized without undergoing a full assessment
  - Informal assessments may lack rigour and anchor decision-making
- Early assessments (ie. before pt becomes critically ill) allow for…
  - Bed planning
  - Clarification of test results, collateral history, consultation
  - Less time pressure
- Full assessments are time consuming, may compromise therapeutic alliance and cause frustration. Not feasible for all admitted patients.

When to Assess Prioritization Criteria?

- *Prioritize* full assessments in timely manner for…
  - Pts most likely to deteriorate
  - Pts most likely to be deprioritized
- **Initial** assessments to identify those with highest estimated STMR, or those most likely to be deprioritized if triage (or triage escalation) seems imminent.
- **Full** triage assessments are then performed as described, resulting in formal triage decisions.

When to Assess Prioritization Criteria

- All pts have initial assessment of STMR by MRP
- Perform full assessments if patient would not meet prioritization criteria at the *current* level
  - At Level 1, all pts with STMR >80% (red)
  - At Level 2, all pts with STMR >50% (purple and red)
  - At Level 3, all pts with STMR >30% (yellow, purple and red)
  - Above Level 3, everyone should have a full assessment
- Perform full assessments for anyone who seems close to meeting eligibility criteria

Tools for STMR Calculation

CLINICAL ASSESSMENT TOOLS FOR
SHORT TERM MORTALITY RISK ASSESSMENT FOR CRITICAL ILLNESS
Approved by Ontario Critical Care COVID Command Centre – January 6, 2021

TRISS Score Calculator
https://www.mdapp.co/trauma-injury-severity-score-triss-calculator-277/

ECOG
Eastern Cooperative Oncology Group Performance Status
(https://ecog-acrin.org/resources/ecog-performance-status)

GRADE	ECOG PERFORMANCE STATUS
0	Fully active, able to carry on all pre-disease performance without restriction
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work
2	Ambulatory and capable of all selfcare but unable to carry out any work activities; up and about more than 50% of waking hours
3	Capable of only limited selfcare; confined to bed or chair more than 50% of waking hours
4	Completely disabled; cannot carry on any selfcare; totally confined to bed or chair

Modified ICH Score[1]:
One point each for age >80, infratentorial origin, [illegible] anticoagulants, and Glasgow Coma Score of 5-1[illegible] a 30-day mortality rate of >80%. Scores of 3-7 su[illegible]

The World Federation of Neurological Surgeo
A combination of Glasgow Coma Score (GCS) a[illegible] deficits. A WFNS grade 5 (GCS 3-6) is associate[illegible] 3-4 (GCS 7-12 or GCS 13-14 AND focal neurolog[illegible] a poor outcome. Grade 2 (GCS 14 with no neuro[illegible] of a poor outcome.

The IMPACT Score[3] predicts outcome at 6-mont[illegible] radiographical factors using the calculator found [illegible]

National Institute of Health Stroke Scale (NIHS
4.2%; 8-13 with a 30d mortality of 13.9%; 14-21 [illegible] mortality of 53.5%:

ECS/ERS High Risk Criteria for pulmonary hype

- WHO Class 4 symptoms
- 6MWT <165m
- NT pro-BNP >1400 ng/L
- RA area >26 cm^2
- RAP >14 mmHg
- CI <2.0 L/min/m^2
- SvO_2 <60%

Clinical Frailty Scale *

1. Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2. Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.

3. Managing well - People whose medical problems are well controlled, but are not regularly active beyond routine walking.

4. Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up", and/or being tired during the day.

5. Mildly frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6. Moderately frail – People need help with all outside activities and with keeping house. Inside, they often hve problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing

7. Severely frail – Completely dependent for personal care, from whatever cause (physical of cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8. Very severely frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy < 6 months, who are not otherwise evidently frail.

Scoring Frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mile dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same questions/story and social withdrawal.

In **moderate dementia,** recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia,** they cannot do personal care without help.

* 1. Canadian Study on Health & Aging, Revised 2008.
2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people CMAJ 2005;173:489-495.

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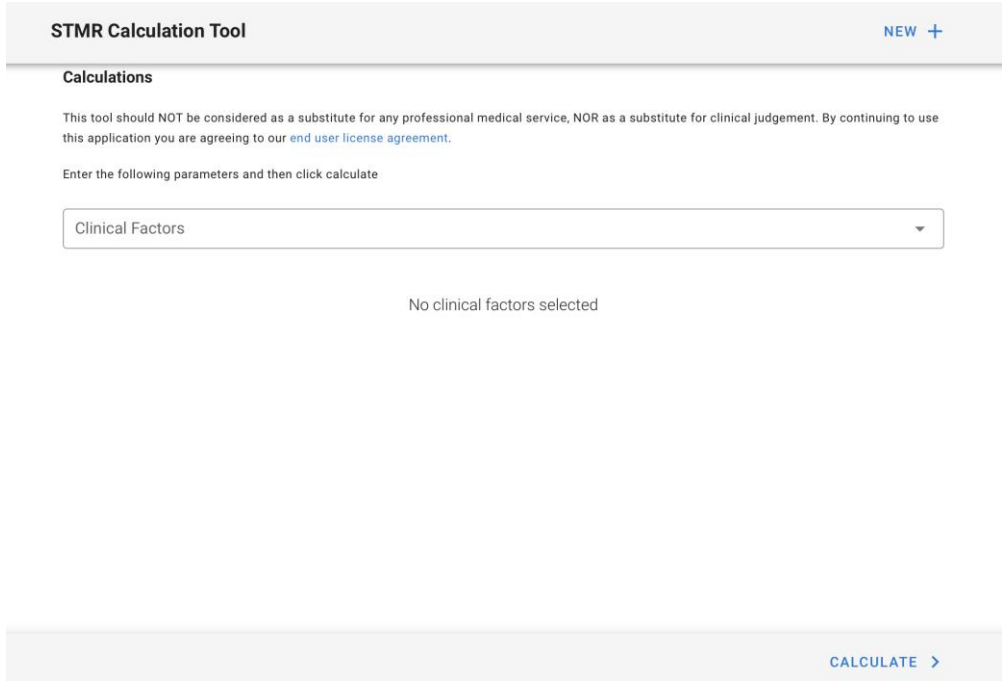
Inspiring Minds

https://stmrcalculator.ca/Calculate



Resources

- CPSO statement supporting CC triage process: https://www.cpso.on.ca/Physicians/Your-Practice/Physician-Advisory-Services/COVID-19-FAQs-for-Physicians#Critical-Care-Triage
- MacDrop folder for up to date resources and tools: https://macdrop.mcmaster.ca/s/cjQtgsqkBdnBcCd?path=%2F

3. When and Where

Dr. Andrew Baker
Incident Commander Ontario Critical Care Command Centre
Critical Care Physician, University of Toronto

Emergency Standard of Care

- Triggers to activate on (and off)
- Communication of the triggering on (and off)
- Regional vs. Provincial activation

When Do You Decide About Triggering it On? (and Off?)

- Go back to the “why are we doing this?”
- Proxies that reflect choosing a different direction at the juncture (next incremental resource)
- Choose triggers in advance to avoid over or under interpreting the current situation

When Do You Decide About Triggering it On? (and Off?)

- Proxy Possibilities

- CCO, CorHealth wait times and Mental Health access
- Sentinel events
- Sudden overwhelming threat to system/site integrity not salvageable in a time relevant manner by transport

When Do You Decide About Triggering it On? (and Off?)

- Triangulate the trigger decision by listening to perspectives that address the impact of incremental resource issue
  - OH Perspective
  - CCO, CorHealth, and Mental Health, and others
  - Hospitals and Physicians – CC and non-CC

- Develop in advance specific indicators
- Integrate at the OCCCCC, and Incident Commander to make final call

How will Everyone Know When it is Triggered?

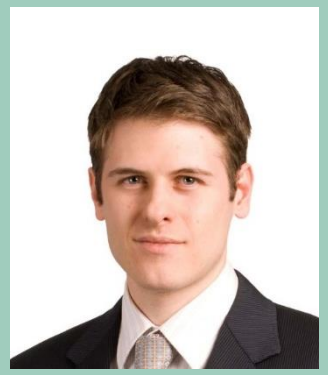
- There will be clear communication broadly:
  - date and time for ON and OFF

- Trigger ON and OFF most likely to be Provincial
  - Based on premise of the strategy of active inter-regional load-balancing
  - Borders between region issues
  - One system approach / confidence and branding in a well-respected and coveted health system

4. Implications of Implementation

Daphne Jarvis
Partner at Borden, Ladner, Gervais. LLP

Dr. Stephen Bellemare
Director, Practice Improvement
CMPA



Martin Lapner
Partner at Gowling WLG

Emergency Standard of Care

- Perspectives on implementation

Ontario Critical Care Clinical Practice Rounds

The Emergency Standard of Care – Implications of Implementation

Daphne G. Jarvis, Partner

January 23, 2021

Borden Ladner Gervais

From a Legal Perspective:

The goal is to provide care that 1) meets a reasonable standard, 2) without breaching the law.

- The law has not changed [yet]

- Any standard of care analysis inherently considers all of the relevant circumstances prevailing at the time that a patient presents.

A surge situation, where ICU resources become overwhelmed, is an emergency circumstance that affects the standard of care analysis. The focus shifts from optimizing individual care to maximizing population health outcomes.

Borden Ladner Gervais

What is This Document?

- A broad professional and expert consensus as to this emergency standard of care

- Provides clinical guidance as to the assessment of a person's STMR, which will determine what intensive interventions will be *offered* or *not offered,* depending on the degree of surge then prevailing

- **There is no legal obligation to *offer* treatment which lies outside the standard of care – ie. consent is not required not to offer non-standard treatment**

Borden Ladner Gervais

What is the Legal Impact of Regional Differences in Surge Capacity and Therefore Stage of Implementation?

- It is the same standard of care recommended in any region where the conditions and criteria for its implementation are met
- If most if not all health care providers would conduct themselves similarly if and when they were in the same circumstance of a surge overtaking available resources, that is a very significant mitigation of legal risk for all
- The legal risks of non-implementation > risks of implementation

Borden Ladner Gervais

Thank You

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Medico-legal considerations for use of the emergency standard of care and triage protocol

Steven Bellemare MD FRCPC CPE

Director, Practice Improvement

Martin Lapner LLB

Partner, Gowling WLG

Standard of care:
What it is, Why it matters

- peer practice
- guidelines
- protocols
- governments

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Advocacy

Medico-legal liability protection

5. Questions & Answers

- To submit a question, please use the Q&A in the menu of your Webinar
- You can “up vote” similar questions that others have already submitted

Thank you for joining us today

Feedback?
Suggestions for
the next topic?

Submit ideas in our evaluation survey (Link in chat)

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Feb 4 2021 at 2PM

Learning from our practice: How clinical studies enrolling critically ill COVID-19 patients from all ICUs can improve care

Questions? **info@ccso.ca**

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