



## **HFHS Guidelines for Patient Care Decisions in Allocation of Life Saving or Critical Resources in COVID 19 Pandemic**

This document was compiled by the HFHS System Ethics Leaders in affiliation with Palliative Care utilizing the Guidelines for Allocation of Life Saving Or Critical Resources in a Pandemic by University of Michigan Health System Emergency Management Operations Committee Ethics Team (2014), Proposed South Dakota Healthcare Community Pandemic Influenza Hospital ICU Triage Guidelines by the Sioux Falls Bioethics Network (2009) based on the prior Utah Guidelines, Christus Health Crisis Response Guidelines for Hospital and ICU Triage (2020), and the translated version of Clinical Ethics Recommendations for Admission to Intensive Treatments and for the Suspension in Exceptional conditions of Imbalance Between Needs and Available Resources from the Italian Working Group (2020; Marco Vergano, Guido Bertolini, Alberto Giannini, Guiseppe Gristina, Sergio Livigni, Giovanni Mistraletti, Flavia Petrini).

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# SECTION 1

## Foreword:

It is the intention that these guidelines can readily be implemented to provide an ethical and clinical framework for decision-making guiding the allocation of patient care resources during a pandemic outbreak or other public health emergency, when demand for services dramatically exceeds supply.

Application of these guidelines will require clinical judgment at the point of patient care. Key ethical principles guiding this process included:

- The clinician's duty to provide care during an influenza, pandemic or comparable public health emergency (beneficence)
- Stewardship of scarce resources including access to treatment (justice)
- Institutional obligations to provide guidance to staff and protection in lieu of binding legal regulations

As the situation develops, it may become necessary to invoke these guidelines for Critical Care Resource Allocation in order to ensure that limited resources such as critical care beds, staffing, ventilators, certain medications, blood, medical supplies or other resources are being used where they will make the most difference. These altered standards of care are contrary to the provision of healthcare as we know it. In a public health crisis, stakeholders may perceive public health measures as a betrayal of trust (e.g. when access to treatment is denied) or as abandonment at a time of greatest need. Our hospitals, clinics, and facilities and their affiliated systems may be confronted with the challenge of maintaining stakeholders' trust while at the same time stemming a pandemic through various control measures. It is imperative to have an ethical framework established in advance and present it in a transparent manner.

Critical Care Resource Allocations that will challenge accepted practice include:

- Limiting individual's access to resources for the greater good
- Rationing critical care resources

The methods described here follow the principles of "triage" in the classic sense by prioritizing critical care resources for patients who, if not treated, face significant risk of death and yet, if treated, have significant prospects for recovery. We will treat patients based on medically-appropriate algorithms not morally arbitrary characteristics such as race, religion or gender. These guidelines remain untested in actual circumstances and may need to be adjusted to meet the changing clinical situation. In the criteria that follows, an effort has been made to balance clarity and flexibility, while keeping the guidelines simple. This is not meant to imply that triage decisions themselves are simple or easy. Even a clinically clear decision may be, from a human perspective, a tragic decision whose burden is felt by patients, family, clinicians, and the community. It is also vitally important to remember that triage is not about which patients will receive care—*all patients will be cared for*—but about which treatments and technologies are most appropriate for a given patient's situation. Exclusion criteria and scores on objective measures (e.g., MSOFA) are not a measure of whether patients are "worth saving." Every patient is worth our best effort. But in a situation where there are not enough critical care resources for all critically ill patients, it is practically and morally necessary to deploy those resources where they can make the most difference.

## Purpose:

These guidelines were adapted by the HFHS Ethics and Palliative Care teams. The purpose is to guide the allocation of patient care resources during an COVID19 pandemic or other public health emergency, when

demand for services dramatically exceeds supply. Application of these guidelines will require clinician judgment at the point of patient care.

#### Basic premises:

- **Graded guidelines** should be used to control resources more tightly as the severity of a pandemic or other public health emergency increases.
- **Priority should be given** to patients for whom treatment would most likely be lifesaving and whose functional outcome would most likely improve with treatment. Such patients should be given priority over those who would likely die even with treatment and those who would likely survive without treatment.
- **Pre-hospital settings requiring screening/evaluation, (other than by a healthcare provider), may allow the screening provider to offer discretionary advice** depending of various factors. Such factors may include: type of event, changes in an event, availability of resources (human & materiel) as well as directives given by facility/system clinicians or other authority to a non-healthcare provider. Depending on the various event factors and directives, the intent will be for the best interest of the community due to the altered standard of care/practice necessary.

#### Scope:

- **These triage guidelines apply to all HFHS healthcare professionals, hospitals, clinics, and facilities. The guidelines apply to all adult patients.** Pediatric patients in facilities without routine ability to provide pediatric care will be stabilized and transferred to appropriate pediatric care hospitals when possible.

#### When activated:

- **Guidelines should be activated** in the event of pandemic COVID19 or other public health emergency declared by a federal, state, or local authority.
- **Each healthcare facility should** enact a decision-making structure consistent with their emergency plan and/or any other applicable community response. HFHS Coronavirus Disease Preparation and Response Incident Action Plan will provide overall HFHS System direction.

#### Hospital and medical staff planning:

*Each hospital should:*

- **Institute a Patient Facility Action Team** – to provide counseling and care coordination and to work with the families who have been impacted by altered standards of care. Assist in supporting those who will need palliative and comfort focused care.
- **Establish a Peer-Based Review Team structure for Patient Triage Decisions**
  - **Peer Based Review Team (PBRT)** for the review of hospital admission, ICU admission, and termination of care. Consider a team of at least 3 individuals (2 or more individuals recommended from the following: Intensivist, ER physician, department medical director a nursing supervisor, an ethicist or designated member of ethics committee, a pastoral care representative, one or more independent physicians or stakeholders) as identified by the organization.
- **Triage Officers** – to determine accurate ongoing patient movements into and out of units and hospital institutions during an ongoing crisis situation.
- **Clinical Review Committee** – to allow review of required decisions to withhold or withdraw critical life support in level 3 Triage, and to allow additional expert review when there are provider or family disputes regarding this decision.
- **Establish a method of providing peer support** and expert consultation for clinicians making these decisions. A work group from Physician Wellness, Health Psychology, and Spiritual Care are developing

situation-specific supports and resources available for health care professionals and some on-site availability. The EAP counseling is available for employee and family use. They can be reached at 888-EAP-HFHS.

### **TEAM Responsibilities:**

The following teams will be required to efficiently provide the ability to carry out these guidelines in the case that they are enacted in a pandemic situation. They are meant as a guide and may be flexible to your specific operational unit needs but ought to be developed in each institution.

- A. **Patient and Facility Action Team (PFT)** - to provide counseling and care coordination and to work with the families of loved ones who have been denied an available resource or triaged as **BLUE** patients. A PFT should include Spiritual Care staff.
  
- B. **Establish a Peer-Based Review Team (PBRT)** – to review hospital admission, ICU admission, and transition to comfort care. A team of two physicians will make admission decisions based on the criteria and protocols below. If they disagree, the facility’s Chief Medical Officer (CMO), will facilitate discussion among the physicians to make a joint decision.
  1. The local Ethicist (where available), Ethics Consult Team, and Ethics Committee are available to assist as needed.
  2. The local Ethicist or Ethics Committee should receive after-action reports on admission decisions in order to identify trends and any ethical concerns and to develop a plan for addressing them in future decisions without hindering the rapid provision of health care services. In Triage Level 3, these decisions should be reviewed daily, with input from the Critical Review Committee.
  3. All decisions made by the PBRT should be documented, including the rationale for those decisions. (This documentation and agreement for decisions made may be done in the EHR.) During a mild pandemic, the PBRT may only need to meet intermittently and some decisions on specific resource allocation may be left to specialty groups.

### **Triage Officers:**

During a severe pandemic that leads to multiple scarce resources, a Triage Officer will be assigned to oversee an entire inpatient floor or unit. Triage Officers will be selected from available Hospitalists, ICU specialists, Emergency Medicine physicians, Anesthesiologists, and others as assigned by the Chief Medical Officer. Triage Officers will be selected by the Chairs and/or Service Chiefs. Potential Triage Officers will be identified by the Department Chairs based on the individual’s leadership capabilities and clinical skills to meet the needs of the role. Pre-identification of Triage Officers is recommended. Selected *Triage Officers will be responsible for reading this document in its entirety and familiarizing him or herself with the Triage Protocols.*

*The Triage Officer will have the responsibility to assure that a patient assessment for triage purposes occurs at 48 and 120 hours after admission and daily thereafter using the Triage Protocols by the clinical team, and that these assessments are accurate.* Day-to-day clinical care decisions for individual patients will continue to be made by the primary clinician caring for the patient with the supervision of the Triage Officer.

If Triage Protocols need to be implemented to manage a scarce resource (i.e. ICU care or ventilators), the Triage Officer will notify the clinicians within their assigned units to report Triage Protocol assessments daily. The Triage Officers will communicate daily with the Clinical Review Committee (CRC)

to assess the needs of all patients within the institution. Using the Triage Protocols, the CRC and the Triage Officers will determine which patients no longer meet criteria for the use of a scarce resource. When a patient no longer meets criteria for a particular resource, the Triage Officer will advise the primary clinician to discontinue its use. The primary clinician will notify the patient and/or patient's family, if available, of the decision. Decisions to discontinue *any* intervention based on resource conservation will only occur after the PBRT has determined that conservation of that particular resource is necessary.

If Staffing permits – it is optimal to have:

Triage IN officers for who gets ADMITTED

Triage OUT officers for who gets D/C or Changed to LEVEL BLUE

### **Clinical Review Committee (CRC):**

The Clinical Review Committee (Chart 1) will be involved in all decisions to discontinue a life-saving therapy. The CRC will have real-time information on all currently available life- saving scarce resources in the hospital system. The CRC will also have a list of all patients who, based on MSOFA scores, have the lowest chance of survival. The CRC will discontinue a life-saving resource in a patient only when:

- The life-saving resource has been depleted throughout the HFHS, and cannot be obtained from any outside source, AND
- Another person with a greater chance of survival, based on MSOFA score, requires the same life-saving resource.

Once a decision to discontinue a resource has been made for a particular patient by the CRC, the Triage Officer will be responsible for assuring the resource is withdrawn in a timely manner (to be defined by Triage Level of the health system). The CRC team may meet remotely if needed.

These particular groups have been recommended because they represent expertise in relevant areas in order to make final clinical resource decisions. All decisions will be reported to the Incident Commander and documented in the patient's medical record. Additionally, the committee shall maintain a confidential record of all patient names, registration numbers, and the particular decision rendered by the CRC.

## Chart 1: Clinical Review Committee

<b>Statement of Purpose</b>	To act as an advisory body for requested consults from the Triage Officer and act as a final decision-making body for all decisions to discontinue life-saving treatment
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Actively monitor an inventory of needed scarce resources in the hospital system</li> <li>• Maintain an updated list of all patients utilizing life-saving scarce resources with the lowest chance of survival based on MSOFA scores.</li> <li>• Make all decisions to discontinue a life-saving resource</li> <li>• Instruct Triage Officers to remove a life-saving resource when a majority decision has been made to discontinue use of the resource in a particular patient</li> </ul>
<b>Scope</b>	Any resource allocation decisions that require decision or resolution.
<b>Membership</b>	<p>The CRC will consist 3 members at least, of appropriate clinicians including the following as approved by administration:</p> <ul style="list-style-type: none"> <li>• Medical Care Director, e.g. Chief of Staff or designee</li> <li>• Triage Officer for that unit (non-voting)</li> <li>• Triage Officer from another unit</li> <li>• Infection Control designee /ID staff</li> <li>• Risk designee</li> <li>• Respiratory Therapy Medical Director or designee</li> <li>• Emergency Medicine Medical Director or designee</li> <li>• Nursing Director or designee</li> <li>• Social Work Director or designee (patient advocate role)</li> <li>• Ethicist, ad hoc advisor (non-voting)</li> <li>• Office of the General Counsel, ad hoc advisor (non-voting)</li> <li>• Spiritual Care</li> <li>• Palliative Medicine</li> <li>• Health Psychology Staff</li> </ul> <p>Each position on the CRC will be filled by three people who will rotate shifts on the committee.</p>
<b>Adhoc members</b>	Adhoc advisors may be invited by CRC members to provide expertise as needed. Ad hoc advisors will not be permitted to vote in matters to be decided by the CRC.
<b>Timeline</b>	Ad hoc activation by hospital Incident command dependent upon Triage Levels
<b>Voting</b>	If consensus cannot be reached, a majority vote shall occur between the Chief Medical Officer, Triage Officer, Respiratory Therapy Medical Director, Emergency Medicine Medical Director, Nursing Director, Health Psychology Staff, and Social Work. A simple majority vote will be required. Voting abstentions are not permitted; anyone who feels they must recuse themselves will be replaced for that vote with a designee.
<b>Progress Reports</b>	All decisions will be documented in the patient's medical record. Additionally, the CRC will maintain a list of all patient names, registration numbers, and rendered decision.

# Clinical Care Resource Allocation Guidelines:

## Clinical Evaluation:

When implementation of a scarce resource allocation plan is required, equipment such as ventilators and supplemental oxygen will require a consistent and predictable approach to utilization. Part of the concern will be to have established criteria to determine how implementation of these resources can minimize morbidity and mortality in a population that requires them. Evaluation criteria to predict this potential morbidity and mortality should be discussed, vetted, and adopted prior to their needed utilization and should use simple and straightforward criteria that will not have to place profound additional demands on other scarce resources to calculate.

This tool is meant to be a starting place for further clinical decision-making tools as conditions evolve in any mass casualty or pandemic event.

In the event of a severe shortage of ventilators or ICU beds, not all patients will be eligible for mechanical ventilation or ICU care. The following inclusion and exclusion criteria are recommended (Chart 1). These criteria have been informed by both the Toronto triage tool and the New York tool. Initiation of ventilatory support should be determined by the following the inclusion and exclusion criteria (Chart 1).

Allocation of scarce resources will not only need to have a clear determination of criteria for initiation, but also clear criteria to determine if patients currently using resources are obtaining the needed benefit to insure the lowest morbidity and mortality for the population at risk. When patients are not progressing to the desired outcomes, these resources may need to be reallocated to insure the stated goal.

Periodic reassessment of the patient's risk for mortality is recommended at specific time points during the course of care to determine if reallocation of resources is the most appropriate available option. Patients will be evaluated for worsening potential for mortality at 48 hours and 120 hours by the following adult criteria.

These decisions will be both difficult and necessary, and to ensure their fairness there will be a monitoring and appeals process along with these standardized criteria to best insure a cautious and moderated approach to these decisions.

## Guideline on Code Status are in Appendix pg. 25

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<sup>12</sup> Hick, J.L. and D.T. O'Laughlin, *Concept of operations for triage of mechanical ventilation in an epidemic*. Acad Emerg Med, 2006. **13**(2): p. 223-9.

<sup>13</sup> Christian, M.D., et al., *Development of a triage protocol for critical care during an influenza pandemic*. CMAJ, 2006. **175**(11): p. 1377-81.

<sup>14</sup> Talmor, D., et al., *Simple triage scoring system predicting death and the need for critical care resources for use during epidemics*. Crit Care Med, 2007. **35**(5): p. 1251-6.

<sup>15</sup> Benson, M., K.L. Koenig, and C.H. Schultz, *Disaster triage: START, then SAVE--a new method of dynamic triage for victims of a catastrophic earthquake*. Prehosp Disaster Med, 1996. **11**(2): p. 117-24

<sup>16</sup> Romig, L.E., *Pediatric triage. A system to JumpSTART your triage of young patients at MCIs*. JEMS, 2002.

<sup>27</sup>(7): p. 52-8, 60-3.

<sup>17</sup> SALT reference

<sup>18</sup> Christian, M.D., et al., *Development of a triage protocol for critical care during an influenza pandemic*. CMAJ, 2006. **175**(11): p. 1377-81.

<sup>19</sup> Is this the New York reference? Powell, T., K.C. Christ, and G.S. Birkhead, *Allocation of Ventilators in a Public Health Disaster*. Disaster Med Public Health

## Hospital Administrative Roles — General

Triage Level 1	Triage Level 2	Triage Level 3
<p>1) <b>Preserve bed capacity</b> by:</p> <ul style="list-style-type: none"><li>▪ Consider canceling all Category 2 and 3 elective surgeries, and advise all Category 1 elective surgery patients of the risk of infection.</li><li>▪ Canceling any elective surgery that would require postoperative hospitalization.</li></ul> <p><i>Note:</i> Use standard operation and triage decision for admission to ICU since there are still adequate resources to accommodate the most critically ill patients.</p> <p>2) <b>Preserve oxygen capacity</b> by:</p> <ul style="list-style-type: none"><li>▪ Phasing out all hyperbaric medicine treatments, evaluating the use of portable oxygen therapy, or utilizing concentrators.</li><li>▪ Ensuring that all liquid oxygen tanks are full.</li></ul> <p>3) <b>Improve patient care capacity</b> by transitioning space in ICUs to accommodate more patients with respiratory failure.</p> <p>4) <b>Control infection</b> by limiting visitation (follow hospital infection control plan).</p>	<p><i>Continue all Level 1 activities</i></p> <p>1) <b>Preserve bed capacity</b> by:</p> <ul style="list-style-type: none"><li>▪ Canceling all inpatient or outpatient elective surgeries or procedures unless necessary to facilitate hospital discharge.</li><li>▪ Evaluating hospitalized Category 1 elective surgery patients for discharge using same criteria as medical patients.</li></ul> <p>2) <b>Preserve oxygen capacity</b> by stopping all hyperbaric, evaluating the use of portable oxygen therapy, or utilizing concentrators.</p> <p>3) <b>Improve patient care capacity</b> by implementing altered standards of care regarding caregiver/patient ratios and expanding capacity (i.e. by adding patients to already occupied hospital rooms).</p> <p>4) <b>Provide emotional support</b> by initiating pre-established action team to provide counseling and care coordination and to work with the families who've been impacted by altered standards of care.</p>	<p><i>Continue all Level 1 and 2 activities</i></p> <p>1) Continue to use <b>HOSPITAL AND ICU/VENTILATOR TRIAGE</b> algorithm (page 11) to determine priority for ICU, intubation, and/or mechanical ventilation.</p> <p>2) <b>Triage more yellow patients</b> to floor on oxygen or CPAP.</p> <p>3) <b>Triage more red patients</b> who are intubated and on CPAP to floor.</p> <p><b>Elective Surgery Categories</b></p> <p>Elective surgery:</p> <ul style="list-style-type: none"><li>▪ <b>Category 1:</b> Urgent patients who require surgery within 30 days.</li><li>▪ <b>Category 2:</b> Semi-urgent patients who require surgery within 90 days.</li><li>▪ <b>Category 3:</b> Non-urgent patients who need surgery at some time in the future.</li></ul>

**\*Triage levels will be determined by each facility's Incident Command.**

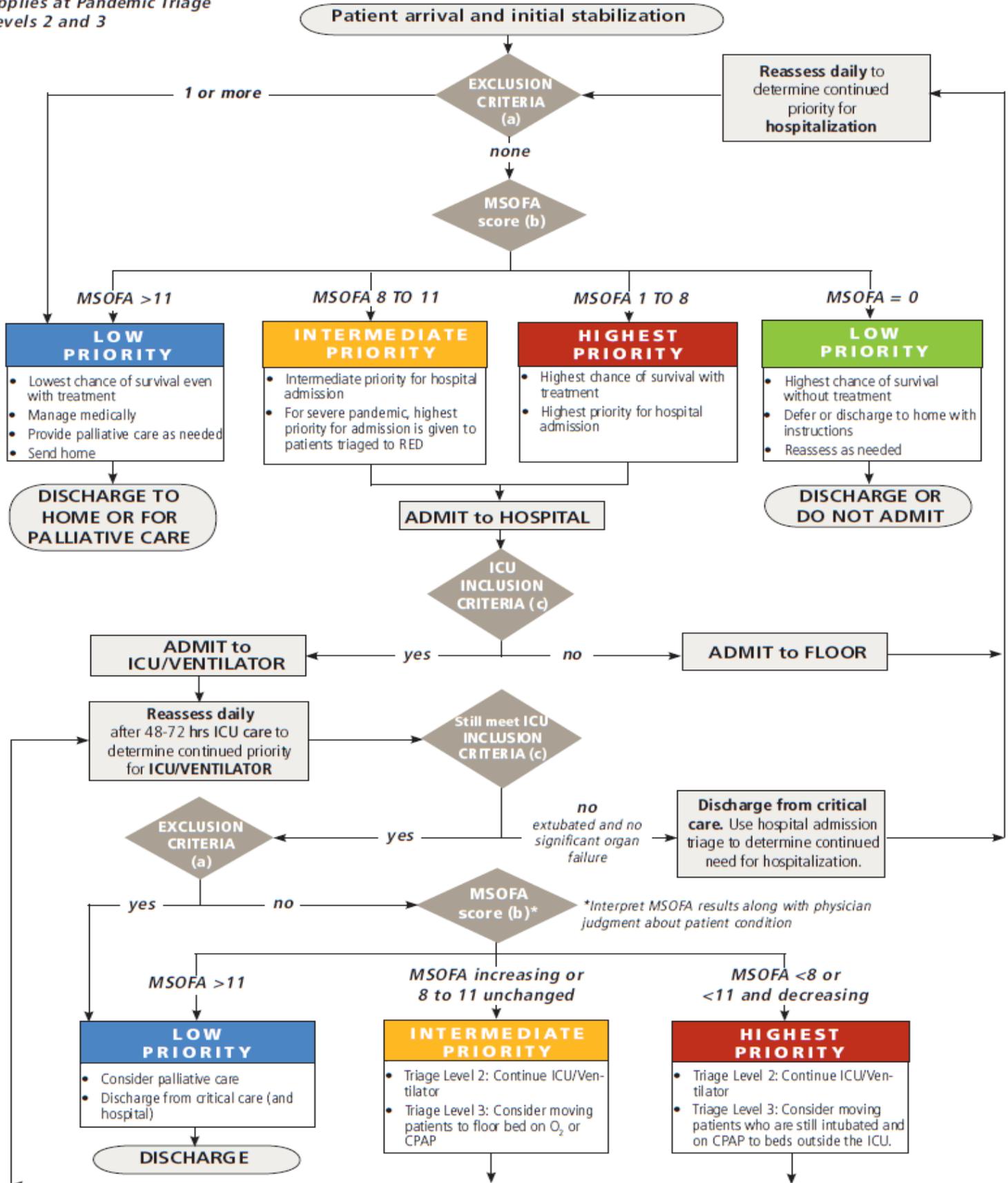
Use **HOSPITAL AND ICU/VENTILATOR ADMISSION TRIAGE** algorithm and tools (page 11) to determine which patients to send home for comfort/hospice care or medical management and which patients to admit or keep in hospital or ICU. Note that the lowest priority for admission is given to patients with the lowest chance of survival with or without treatment, and to patients with the highest chance of survival without treatment. *Clinician judgment should be used in applying these guidelines.*

## Overview of Pandemic Triage Levels

Triage Level 1	Triage Level 2	Triage Level 3
<p><b>Early in the pandemic</b></p> <ul style="list-style-type: none"> <li>Hospitals recognize the need to surge bed capacities.</li> <li>Emergency departments (EDs) are experiencing increased numbers.</li> <li><i>Note:</i> In the event of a severe and rapidly progressing pandemic, start with Triage Level 2.</li> </ul>	<p><b>Worsening pandemic</b></p> <ul style="list-style-type: none"> <li>Hospitals have surged to maximum bed capacity, and emergency departments (EDs) are overwhelmed.</li> <li>There are not enough beds to accommodate all patients needing hospital admission, and not enough ventilators to accommodate all patients with respiratory failure.</li> <li>Hospital staff absenteeism is 20% to 30%.</li> <li>Initiate <b>HOSPITAL AND ICU/VENTILATOR TRIAGE</b> algorithm (page11) to determine priority for ICU admission, intubation, and/or mechanical ventilation.</li> <li>Reassess need for ICU/Ventilator treatment daily after 48-72 hours of ICU care.</li> </ul>	<p><b>Worst-case scenario</b></p> <ul style="list-style-type: none"> <li>Hospitals have already implemented altered standards of care regarding caregiver/patient ratios and have already exceeded surge capacity by adding patients to already occupied hospital rooms.</li> <li>Hospital staff absenteeism is &gt; 30%.</li> <li>Continue to use <b>HOSPITAL AND ICU/VENTILATOR TRIAGE</b> algorithm (page11) to determine priority for ICU, intubation, and/or mechanical ventilation.</li> <li>Triage more <b>yellow</b> patients to floor on oxygen or CPAP.</li> <li>Triage more <b>red</b> patients who are intubated and on CPAP to floor.</li> </ul>

# ALGORITHM: HOSPITAL AND ICU/VENTILATOR ADMISSION TRIAGE

Applies at Pandemic Triage Levels 2 and 3



## EXCLUSION Criteria for Hospitalization Blue Level Patients (Triage Level $\geq 2$ ):

The patient is excluded from hospital admission or transfer to critical care if ANY of the following is present:

- (1) Arrives in Cardiac Arrest.
- (2) Known out-of-hospital DNR, medical DNAR, current or prior hospice enrollment.
- (3) **Severe and chronic neurologic condition with highly expected mortality** (e.g. persistent coma or vegetative state; severe and profound intellectual or developmental disability.)
- (4) **Acute severe neurologic event with minimal chance of functional neurologic recovery** (physician judgment). Includes traumatic brain injury, severe hemorrhagic stroke, hypoxic ischemic brain injury, and intracranial hemorrhage.
- (5) **Severe Trauma**
- (6) **Severe burns** with any 2 of the following
  - Age >60 yr
  - >40% of total body surface area affected
  - Inhalation injury
- (7) Cardiac arrest not responsive to ACLS interventions within 10-15 minutes.
- (8) **Known severe dementia** medically treated and requiring assistance with activities of daily living.
- (9) **Advanced untreatable neuromuscular disease** (such as ALS, end-stage MS, or SMA) requiring assistance with activities of daily living or requiring chronic ventilatory support.
- (10) **Incurable metastatic malignant disease.**
- (11) **End-stage organ failure** meeting the following criteria:
  - Heart:** Severe diastolic or systolic heart failure (EF <25%), includes LVAD
  - Lung:** (any of the following):
    - Chronic Lung Disease (COPD, ILD, IPF, etc.) on home oxygen
    - Pulmonary Hypertension on IV vasodilatory agents
  - Advanced Liver Disease, not a candidate for transplant**
  - Renal:** Age >40 on hemodialysis (Triage level 2), Any ESRD (Triage level 3)

## ICU/Ventilator **INCLUSION/INCLUSION** CRITERIA

Patient must have **NO EXCLUSION CRITERIA (a)** *and* at least **one of the following INCLUSION CRITERIA:**

**(1) Requirement for invasive ventilatory support**

- Refractory hypoxemia ( $SpO_2 < 90\%$  on non-rebreather mask or  $FIO_2 > 0.85$ )
- Respiratory acidosis ( $pH < 7.2$ )
- Clinical evidence of impending respiratory failure
- Inability to protect or maintain airway

**(2) Hypotension\* with clinical evidence of shock\*\* refractory to volume resuscitation and requiring vasopressor or inotrope support that cannot be managed in a ward setting.**

**\*Hypotension** = Systolic BP  $< 90$  mm Hg for patients age  $> 10$  years old,

or  $< 70 + (2 \times \text{age in years})$  for patients ages 1 to 10, or relative hypotension;

**\*\*Clinical evidence of shock** = altered level of consciousness, decreased urine output, or other evidence of end-stage organ failure

# Modified Sequential Organ Failure Assessment (MSOFA)

The MSOFA requires only one lab value, which can be obtained using bedside point-of-care testing (creatinine obtained through ISTAT).

MSOFA scoring guidelines						
Variable	Score 0	Score 1	Score 2	Score 3	Score 4	Score for each row
<b>SpO<sub>2</sub>/FIO<sub>2</sub> ratio*</b> <i>or</i> nasal cannula or mask O <sub>2</sub> required to keep SpO <sub>2</sub> >90%	SpO <sub>2</sub> /FIO <sub>2</sub> >400 <i>or</i> room air SpO <sub>2</sub> >90%	SpO <sub>2</sub> /FIO <sub>2</sub> 316-400 <i>or</i> SpO <sub>2</sub> >90% at 1-3 L/min	SpO <sub>2</sub> /FIO <sub>2</sub> 231-315 <i>or</i> SpO <sub>2</sub> >90% at 4-6 L/min	SpO <sub>2</sub> /FIO <sub>2</sub> 151-230 <i>or</i> SpO <sub>2</sub> >90% at 7-10 L/min	SpO <sub>2</sub> /FIO <sub>2</sub> ≤150 <i>or</i> SpO <sub>2</sub> >90% at >10 L/min	_____
<b>Jaundice</b>	no scleral icterus			clinical jaundice/ scleral icterus		_____
<b>Hypotension†</b>	None	MABP <70	dop <5	dop 5-15 <i>or</i> epi ≤0.1 <i>or</i> norepi ≤0.1	dop >15 <i>or</i> epi >0.1 <i>or</i> norepi >0.1	_____
<b>Glasgow Coma Score</b>	15	13-14	10-12	6-9	<6	_____
<b>Creatinine level, mg/dL</b> (use ISTAT)	<1.2	1.2-1.9	2.0-3.4	3.5-4.9 <i>or</i> urine output <500 mL in 24 hours	>5 <i>or</i> urine output <200 mL in 24 hours	_____
<b>MSOFA score = total scores from all rows:</b>						_____

\* SpO<sub>2</sub>/FIO<sub>2</sub> ratio:

SpO<sub>2</sub> = Percent saturation of hemoglobin with oxygen as measured by a pulse oximeter and expressed as % (e.g., 95%); FIO<sub>2</sub> = Fraction of inspired oxygen; e.g., ambient air is 0.21 Example: if SpO<sub>2</sub>=95% and FIO<sub>2</sub>=0.21, the SpO<sub>2</sub>/FIO<sub>2</sub> ratio is calculated as 95/0.21=452

† Hypotension:

MABP = mean arterial blood pressure in mm Hg (diastolic + 1/3(systolic - diastolic)) dop= dopamine in micrograms/kg/min

epe = epinephrine in micrograms/kg/min  
norepi = norepinephrine in micrograms/kg/min

## GLASGOW COMA SCORE (GCS)

Glasgow Coma Scoring Criteria				
Criteria	Adults and Children	Infants and Young Toddlers	Score	Criteria Score
<b>Best Eye Response</b> (4 possible points)	No eye opening	No eye opening	<b>1</b>	_____
	Eye opens to pain	Eye opens to pain	<b>2</b>	
	Eye opens to verbal	Eye opens to speech	<b>3</b>	
	Eyes open spontaneously	Eyes open spontaneously	<b>4</b>	
<b>Best Verbal Response</b> (5 possible points)	No verbal	No verbal response	<b>1</b>	_____
	Incomprehensible sounds	Infant moans to pain	<b>2</b>	
	Inappropriate	Infant cries to pain	<b>3</b>	
	Confused	Infant is irritable and continually	<b>4</b>	
	Oriented	Infant coos or babbles (normal	<b>5</b>	
<b>Best Motor Response</b> (6 possible points)	No motor	No motor response	<b>1</b>	_____
	Extension to pain	Extension to pain	<b>2</b>	
	Flexion to pain	Abnormal flexion to pain	<b>3</b>	
	Withdraws from pain	Withdraws from pain	<b>4</b>	
	Localizes to pain	Withdraws from touch	<b>5</b>	
	Obeys commands	Moves spontaneously or	<b>6</b>	
<b>Total Score</b> (add 3 sub scores; range 3 to 15):				_____

## TRIAGE LEVEL 1 RESOURCE ALLOCATION

### TRANSFER

- Patients that meet exclusion criteria for hospital admission as outlined on page 11, 12 will not be accepted for transfer to Henry Ford Facilities unless accepted by a HFHS provider and upon review by the Triage Team Leads.
- Due to transmission risk and exposure, patients that are COVID-19 positive will not be transferred to a Henry Ford facility unless a HFHS provider has advanced therapies that can be offered and has agreed to accept the case.

### CARDIO PULMONARY RESUSITATION

- **BLUE:** NO CPR
- **YELLOW:** CPR only if resources and staff remain available
- **RED:** FULL CODE
- **GREEN:** FULL CODE

### BLOOD CONSERVATION

- Blood products will not be made available to patients that meet exclusion criteria on page 11 of the triage protocol.
- Blood conservation will already be in use and continued including: no PRBC transfusions for patients with a hgb > 7 unless actively bleeding and pt product usage is expected to be less than 2 units. No platelet transfusion for pts with a platelet level > 20.
- Products will not be transfused for pts with chronic low levels of hgb or platelets even if below the above levels.
- Appropriated blood products that are not spiked or utilized should be returned to the blood bank for review and possible reuse and further allocation.
- Blood product requests outside of these parameters may be reviewed by the blood bank triage officer for alternative or special considerations.

### RESOURCE WITHDRAWAL

- Patients may be compassionately removed from support with guidance from our ER, ICU, Palliative Care, Hospice and/or Pastoral care teams. ([Please see policy on Withdrawal of Ventilatory Support](#))
- Patients may be subsequently moved out of the ER/ICU to the general medical floor or another designated space as resources allow.
- If a patient dies, efforts will be made to provide time for the family to remain with the patient as resources allow.

### PERSONAL PROTECTION EQUIPMENT (PPE)

- Visitors allowed at bedside may be given PPE if deemed appropriate by the designated triage managers.
- Visitors will be asked to remain with the patient they are visiting and not travel throughout the building.
- PPE will not be provided for patients and families that are discharged

## TRIAGE LEVEL 2 RESOURCE ALLOCATION

### TRANSFER

- Cases will only be accepted for transfer to a Henry Ford Facility if approved and accepted by a HFHs provider and the Triage Team Leads.
- Ethics and Administration may assist with determining appropriateness of transfer if there is a dispute, special consideration or exception to established protocol.

### CARDIO PULMONARY RESUSITATION

- **BLUE:** NO CPR
- **YELLOW:** NO CPR
- **RED:** CPR only if resources and staff remain available
- **GREEN:** FULL CODE

### RESOURCE WITHDRAWAL

- Patients may be compassionately removed from support and transitioned to comfort with all resources available based upon our guidelines. ([Please see policy on Withdrawal of Ventilatory Support](#))
- Patients will be moved to a location based upon available resources and space. These locations may not be private and require co-habitation with one or more other patients and families present.
- If a patient dies, family members may remain with the patient as resources allow, but it will be time-limited based upon the need for the room/resources for another patient.

### BLOOD CONSERVATION

- Blood products will be distributed as available after specific review by the blood bank triage officer.
- No blood products will be released without review and appropriate request.
- Ethics may assist with determining appropriateness of a specific transfusion request if there is a special consideration or exception to established protocol.

### PERSONAL PROTECTION EQUIPMENT (PPE)

- Visitors will not receive PPE unless deemed appropriate by a designated triage manager.
- Visitation to the bedside will be time limited based upon the location of the patient and as determined by the triage managers.
- Visitor movement will be restricted to the specific location of the patient until the visitor exits the building.

## TRIAGE LEVEL 3 RESOURCE ALLOCATION

### TRANSFER

- No Transfers will be accepted to HFHS from outside facilities.

### CARDIO PULMONARY RESUSITATION

- **BLUE:** NO CPR
- **YELLOW:** NO CPR
- **RED:** NO CPR
- **GREEN:** CPR only if resources and staff remain available

### RESOURCE WITHDRAWAL

- Resource allocation and support will be provided based upon our guidelines and remaining resources available. ([Please see policy on Withdrawal of Ventilatory Support](#))
- Visitation will be severely limited and may even be via video only. The patient's family will not be able to remain with the patient after death.
- Patients will be moved to a location or space deemed appropriate by our designated triage managers and administration.

### PERSONAL PROTECTION EQUIPMENT (PPE)

- All patient visitation may be restricted and by video only.
- Administration and triage officers may allow time-limited visitation under specific and approved circumstances.
- PPE will not be provided unless deemed absolutely necessary by a triage officer and remains subject to availability for healthcare workers as a priority.

### BLOOD CONSERVATION

- Available blood products will be distributed in the same manner as Triage Level 2 until there are no further products available.

## Section 2

### **Ethical Framework and Justification:**

An ethical framework that proposes to allocate scarce resources fairly includes attention to justice as well as to professionals' ethical obligations to patients. A just rationing plan cannot evolve from technical considerations alone, such as survival probabilities and resource estimates<sup>4</sup>. In day-to-day health care in the U.S., the preferences of capable patients generally determine whether recommended treatments will or will not be initiated. However, patient preference is not and cannot be the primary factor in devising a rationing system for scarce resources in a pandemic. A public health disaster, such as a pandemic, with severe resource scarcity, will impose harsh limits on decision-making autonomy for patients and providers. Allocation guidelines must reflect those limits. The clinical parameters of a pandemic, including predictors of infection or survival, duration and severity of symptoms, and duration of the pandemic are uncertain. Competent planning requires guidelines for allocating scarce resources that can operate within a range of predicted circumstances for this foreseeable public health emergency.

The following ethical framework supports this specific effort to allocate scarce resources in the event of a pandemic:

#### **Ethical Framework for Allocating Scarce Resources**

*Listed in no particular order*

- Professional obligations to individual patients
- Professional and institutional obligations of competence
- Professional and institutional obligations of honesty and transparency
- Distributive justice, including equal treatment, utility
- Fair procedures, including in planning and implementation
- Accountability and legitimacy

### **Professional obligations to individual patients:**

An ethical scarce allocation scheme must respect the fundamental obligation of health care professionals to care for patients, sustaining rather than eroding relationships between patient and provider. Physicians and nurses must not abandon patients, and patients should not fear abandonment.

Even under everyday circumstances, healthcare providers judge whether the estimated benefit of an intervention merits the use of scarce resources. Clinicians will need to balance obligations to save the greatest possible number of lives against obligations to care for each single patient. As the number of affected patients increase, accommodating these two goals will require more and more difficult decisions.

Professional obligations to individual patients, however important, must not undermine a just distribution of scarce resources, for instance, by overly zealous advocacy. Rather,

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<sup>4</sup> University of Toronto Joint Centre for Bioethics Pandemic Influenza Working Group, "Stand on Guard for Thee: Ethical considerations in preparedness planning for pandemic influenza," November 2005. See also L. Rubinson, et al. "Augmentation of hospital critical care capacity after bioterrorist attacks or epidemics: Recommendations of the Working Group on Emergency Mass Critical Care," *Critical Care Medicine*, 2005, 33(10):E1-13. See also J. D. Arras, "Ethical Issues in the Distribution of Influenza Vaccines," *Hastings Center Report*, In Press.

professionalism serves to constrain misrepresentation of clinical condition or circumstances that would lead to systematically unfair treatment. Even more important, health care professionals must not seek priority for friends, family or colleagues. Likewise, organizations have obligations to individuals based on established relationships, traditions, ownership (e.g. state or community) and or contracts.

**Professional and institutional obligations of competence:**

Competent planning and institutional and professional obligations motivate prospective design of an allocation system. An absence of guidelines leaves challenging allocation decisions to exhausted, over-taxed, health care professionals, who already bear a disproportionate burden in a disaster. A failure to plan for a foreseeable crisis amounts to a failure of responsibility and administrative competence, and could lead to unequal or unfair treatment. Planning for a pandemic identifies actions (e.g. workforce training) that need to occur prior to the disaster. Guidelines for rationing developed before they are needed allow time for reflection and public deliberation, and should minimize arbitrary decisions that could inevitably lead to perceptions of unfair and unequal treatment.

**Professional and institutional obligations of honesty, transparency and public discourse:**

During planning and implementation, it is imperative that health care professionals and administrators honestly communicate information to patients, their families, and the public. Clear and honest communication about the expected level of scarcity of resources can prepare the community for altered standards of care during a pandemic. *Transparent, public and explicit assumptions and reasoning about rationing decisions will give members of the community the opportunity to understand how and why difficult decisions are made and help engender trust in the institution.*

During planning, organizations should promote public dialog on allocation of scarce resources. While engaging the public in difficult decision-making will add complexity, public engagement also adds an important element of legitimacy to the decision-making process and ultimately, allocation decisions.

**Distributive justice:**

A fair distribution of potentially life-saving treatment requires that persons and communities be treated equally when they are equal in morally relevant ways. Hence, severity of illness and likelihood of benefit (e.g. prognosis with or without ventilator assistance) can be considered morally relevant features, while social or economic standing would not.

Just distribution of scarce resources must be applied broadly, both within and among communities. Allocation schemes and criteria that differ substantially from hospital to hospital, for instance, could allow for more expansive access for wealthier communities<sup>5</sup> and more restrictive access for poorer facilities or poorer communities. Substantially different policies could also encourage informed residents to “shop around” for greater access to scarce resources, as has occurred for scarce solid organs. Cooperation, not competition, led by healthcare institutions and professionals, must prevail during a public disaster. The allocation of scarce resources from state and federal stockpiles must take into account the ratio of local populations to available resources, the severity of the pandemic (e.g., infection rate) and supplement local resources according to such indicators of need.

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<sup>5</sup> Silveira MJ. Restrictive hospice operating practices in Michigan. in preparation.

The principle of utility (maximizing benefit) increases in importance during conditions of extreme scarcity, when optimal treatment for all is impossible. The framework proposed primarily aims to maximize the benefit achieved using dramatically limited resources. To some degree, maximal utility is achieved through assuring essential functioning of society<sup>6</sup>. Benefits include lives saved, life years saved, and relief of suffering<sup>7</sup>. Although the framework proposed emphasizes utility, other ethical foundations, including fidelity to patients, equity, and fair procedures, for instance, balances the principle of utility.

Any guidelines a healthcare institution devises will be imperfect, both ethically and medically. Ethically sound responses to disaster must not exacerbate, and should help ameliorate, disparities in access to care even if they cannot repair prior inequities. Use of a “first come, first served” policy, for instance, favors those who are better informed and more mobile, and would exacerbate existing disparities. Planners must designate appropriate resources for the most vulnerable who will suffer the greatest impact in any disaster. For example, some public health departments incorporate training of neighborhood health workers and improving baseline health in disadvantaged populations in their disaster preparations.

#### **Fair procedures:**

An ethical framework must clarify not only the principles underlying decisions but also delineate fair processes for such decisions. Processes for allocating scarce resources must provide explicit, publicly available rationales, incorporate public input, include a mechanism for resolving disputes, remain transparent during implementation, and include enforcement to assure consistency in implementation.

#### **Accountability and Legitimacy:**

Transparency in the process of allocating scarce resources will be essential, that is, making public and explicit assumptions, justifications and reasoning, and will contribute to establishing accountability which is essential to engender the public’s trust. Oversight and enforcement of a predetermined triage system will enable trust in the system should it need to be implemented.

Even the most deliberative, thoughtful, and transparent allocation schemes will encounter disputes when implemented. Resolving disputes needs to balance respect for diverse points of view and openness to criticism with the need for consistent application and the need to avoid using valuable human resources in reviewing decisions. *Hence, we propose that reviews of allocation decisions only occur when: a) review is requested by a patient, family member, or clinician; b) at least one clinician (not necessarily a clinician involved in the patient’s current care) agrees that a review is reasonable; and c) the decision, if implemented, will likely result in death.* Those requesting a review must provide justifications for an exception to usual decisions. Since it is likely that criteria b and c would be easier for well-off patients to meet, clinicians and the Critical Review Committee should ensure that disadvantaged patients and families (e.g. those with limited English-speaking proficiency or low literacy) are equally able to request reviews as those without such disadvantages.

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<sup>6</sup> Kass NE, Otto J, O'Brien D, Minson M. Ethics and severe pandemic influenza: maintaining essential functions through a fair and considered response. *Biosecur Bioterror*. 2008 Sep;6(3):227-36

<sup>7</sup> White, DB, Katz, MH, Luce, JM and Jo, B. 2009. Who should receive life support during a public health emergency? Using ethical principles to improve allocation decisions. *Ann Internal Med* Vol. 150(2): 132-138.

**Pitfalls:**

In building an ethical framework, there are pitfalls that an allocation system must avoid. A rationing system does not alleviate the need to plan for and provide adequate resources; the problem of scarcity should always prompt an examination of the possible means to alleviate the scarcity as well as apportion the current resources. A just system will seek to avoid unnecessary rationing by first implementing less drastic means of limiting and deferring the use of scarce resources. Examples of appropriate steps include the prior purchase of supplemental ventilators, cancellation of elective surgeries, and staff training. Triage should not be lightly implemented, but must be reserved for situations of true scarcity.

Guidelines for scarce resource allocation in a pandemic must avoid covert or social value judgments about those patients with pre-existing mental or physical impairments.

Guidelines must reflect our common duty to protect the rights of the disabled and marginalized populations, using ethically sound justification that will withstand public scrutiny.

Taking into account this ethical framework, parameters for an allocation system for scarce resources emerges. Patients with the highest probability of mortality may be denied scarce resources in order to benefit patients with a higher likelihood of survival.

The issues of social utility and expected longevity<sup>8</sup> are generally to be avoided in scarce resources allocation as they may be highly subjective. An important exception to this remains the prioritization of resources to persons who are needed to respond to the pandemic and ensure the continued basic functioning of society<sup>9</sup>. While some health care providers fall into this group, other personnel also serve vital functions. Examples include utility and communications workers, those working on vaccine development and manufacturing, those providing supplies and support to health care institutions (e.g., food delivery, sanitation), and those providing other basic goods (e.g., food production, delivery and sales, fuel delivery and sales). This is an area for ongoing community and professional discussion and research.

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<sup>8</sup> Doug White/length of life expect

<sup>9</sup> Kass NE, Otto J, O'Brien D, Minson M., Ethics and severe pandemic influenza: maintaining essential functions through a fair and considered response. *Biosecur Bioterror*. 2008 Sep;6(3):227-36

## References

This document was developed following review and partial adaptation of the following articles:

- Christian MD, Hawryluck L, Wax RS, et al. Development of a triage protocol for critical care during an influenza pandemic. *CMAJ*. 2006;175(11):1377-1381.
- Centers for Disease Control and Prevention. <http://www.cdc.gov/H1N1FLU/>. Accessed September 28, 2009.
- Commentary: Melnychuk RM, Kenny NP. Pandemic triage: the ethical challenge. *CMAJ*. 2006;175(11):1393.
- Hick JL, O'Laughlin DT. Concept of operations for triage of mechanical ventilation in an epidemic. *Acad Emerg Med*. 2006;13(2):223-229.
- Grissom CK, Orme JF, Jensen RL, Jephson AR. A modified sequential organ failure assessment (MSOFA) score to predict mortality in critically-ill patients (abstract). *Crit Care Med* 2007;35(12):A9.
- Champion HR, Sacco WJ, Carnazzo AJ, Copes W, Fouty WJ. Trauma score. *Crit Care Med*. 1981;9(9):672-676.
- Champion HR, Sacco WJ, Copes WS, Gann DS, Gennarelli TA, Flanagan ME. A revision of the Trauma Score. *J Trauma*. 1989;29(5):623-629.
- New York Heart Association. The stages of heart failure – NYHA classification. Heart Failure Society of America Web site. [http://www.abouthf.org/questions\\_stages.htm](http://www.abouthf.org/questions_stages.htm). Published 2002. Updated September 28, 2006. Accessed December 5, 2007.
- NYS Workgroup on Ventilator Allocation in an Influenza Pandemic NYS DOH/ NYS Task Force on Life & the Law. Allocation of Ventilators in an Influenza Pandemic: Planning Document. [http://www.health.state.ny.us/diseases/communicable/influenza/pandemic/ventilators/docs/ventilator\\_guidance.pdf](http://www.health.state.ny.us/diseases/communicable/influenza/pandemic/ventilators/docs/ventilator_guidance.pdf). Published 2007. Accessed September 16, 2009.
- Ontario Health Plan for an Influenza Pandemic (OHPIP). Critical Care During a Pandemic: Final Report of the Ontario Health Plan for an Influenza Pandemic. [http://www.health.gov.on.ca/english/providers/program/emu/pan\\_flu/pan\\_flu\\_plan.html](http://www.health.gov.on.ca/english/providers/program/emu/pan_flu/pan_flu_plan.html). Published April 2006. Updated August 2008. Accessed September 16, 2009.
- Pugh RNH, Murray-Lyon M, Dawson JL, Pietroni MC, Williams R. Transection of the oesophagus for bleeding oesophageal varices. *Br J Surg*. 1973;60(8):646-649.
- Rosoff PM. A central role for palliative care in an influenza pandemic. *J Palliat Med*. 2006 Oct;9(5):1051-3.
- Teasdale G, Jennett B. Assessment of coma and impaired consciousness. A practical scale. *Lancet*. 1974;2(7872):81-84
- Thompson AK, Faith K, Gibson JL, Upshur RE. Pandemic influenza preparedness: an ethical framework to guide decision-making. *BMC Med Ethics*. 2006 Dec 4;7:E12.
- South Dakota Department of Health. <http://doh.sd.gov/>. Accessed September 28, 2009.
- U.S. Department of Health and Human Services. <http://www.flu.gov/> Accessed September 28, 2009.
- U.S. Department of Health and Human Services. Caring for a Sick Person in Your Home. <http://flu.gov/individualfamily/caregivers/index.html>. Accessed September 28, 2009.
- University of Toronto Joint Centre for Bioethical Pandemic Influenza Working Group. STAND ON GUARD FOR THEE Ethical considerations in preparedness planning for pandemic influenza Report of the University of Toronto Joint Centre for Bioethics. [http://www.jointcentreforbioethics.ca/people/documents/upshur\\_stand\\_guard.pdf#search=%22pandemic](http://www.jointcentreforbioethics.ca/people/documents/upshur_stand_guard.pdf#search=%22pandemic). Published 2005. Accessed September 16, 2009.
- Victoria Hospice Society. Palliative Performance Scale (PPSv2). <http://web.his.uvic.ca/Research/NET/tools/PrognosticTools/PalliativePerformanceScale/PPSInstrument.php>. Published 2001. Accessed September 16, 2009

## Appendix

1. **CODE STATUS**
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## **CODE STATUS:**

**Generally, health care providers have a duty to provide potentially life-saving treatments to patient such as CPR unless it is impossible to adequately mitigate risk to staff.** Codes of ethics of all health care professionals include a duty to provide care for patients even at some risk to themselves. This is a primary ethical duty of the health care professional, but it is not absolute and there are ethically justifiable exceptions. Those exceptions occur when there is disproportionate risk to the health care professionals providing the care.

In considering the risks related to providing CPR to a patient positive for coronavirus disease (COVID-19) who has a cardiopulmonary arrest, we begin with the ethical assumption that patients are entitled to clinically indicated care for which they have provided informed consent. The determination of disproportionate risk must be based on the best available, if rapidly evolving, evidence about the treatment of patients with COVID-19. Potentially life-saving treatments such as CPR should be provided to patients unless it is impossible to adequately mitigate risk to staff. As of the time of this writing, the CDC has provided interim guidance for risk assessment of health care personnel with potential health care-related exposures to patients with COVID-19. CDC considers it a medium-risk exposure when providers who are wearing appropriate personal protective equipment (PPE) have exposure to procedures that generate aerosols or during which respiratory secretions are likely to be poorly controlled (e.g., cardiopulmonary resuscitation, intubation, extubation, bronchoscopy, nebulizer therapy, sputum induction) on patients with COVID-19.

Based on the best available evidence, decision-makers should weigh the potential benefit to the patient of CPR, with the risk that the treatment poses to the health care providers and staff providing it. *Treatment should only be limited when the risks to health care providers and staff are far greater than the potential benefits that the treatment is expected to offer the patient. i.e., very high risk and virtually no benefit.* Even in an emergency situation, such as a cardiopulmonary arrest, health care professionals and staff should *never* compromise safety protocols because doing so results in more overall harm than benefit given the high risk of infection without PPE. Staff should always don appropriate personal protective equipment (PPE) before performing a code for a patient with COVID-19, even if it means delaying the code.

The ethical principle of truth-telling supports informing patients and/or surrogates that in the event of a cardiopulmonary arrest there may be a delay in responding while the code team or other first-responders don the required PPE. However, neither patients nor surrogates have the right to request that any health care professional administer CPR without PPE as this would expose the staff to a disproportionate risk.

Finally, unilateral decisions to limit certain interventions like CPR to all patients with COVID-19 based solely on their diagnosis are ethically problematic because it fails to individualize care based on the relative risks and benefits to the patient and the health care providers and staff involved in the patient's care. Evaluation of each individual patient is necessary to determine whether CPR is likely to achieve its intended goal of restoring circulatory function

and can be provided safely. Although it is ethically justifiable to factor in concerns about staff safety when making decisions about the care that will be offered to patients with COVID-19, as a general rule, the care should be provided unless it is impossible to adequately mitigate risk to staff.

### **CARDIO PULMONARY RESUSITATION:**

CPR will be considered and commiserate with the established triage level of the system as determined by HFHS administration and based upon our available staff and resources. All patients will be color coded based on the Henry Ford COVID 19 Allocation Guidelines upon arrival to our system whether it be via transfer or direct presentation. Under each triage level, color coding will determine if the patient will be considered for CPR. This applies to ALL patients and not their COVID status. Even in an emergency situation, such as a cardiopulmonary arrest, health care professionals and staff should *never* compromise safety protocols because doing so results in more overall harm than benefit given the high risk of infection without PPE. Staff should always don appropriate personal protective equipment (PPE) before performing a code for a patient with COVID-19, even if it means delaying the code. All Level **GREEN** patients are not to be admitted and considered as Full Code.

#### **Early in the pandemic (Triage Level 1)**

Hospitals recognize the need to surge bed capacities.

Emergency departments (EDs) are experiencing increased numbers.

**BLUE: NO CPR**

**YELLOW: CPR if only if resources and staff remain available**

**RED: FULL CODE**

**GREEN: FULL CODE**

#### **Worsening pandemic (Triage Level 2)**

Hospitals have surged to maximum bed capacity, and emergency departments (EDs) are overwhelmed. There are not enough beds to accommodate all patients needing hospital admission, and not enough ventilators to accommodate all patients with respiratory failure.

Hospital staff absenteeism is 20% to 30%.

**BLUE: NO CPR**

**YELLOW: NO CPR**

**RED: CPR if only if resources and staff remain available**

**GREEN: FULL CODE**

#### **Worst-case scenario (Triage Level 3)**

Hospitals have already implemented altered standards of care regarding caregiver/patient ratios and have already exceeded surge capacity by adding patients to already occupied hospital rooms. Hospital staff absenteeism is > 30%.

**BLUE: NO CPR**

**YELLOW: NO CPR**

**RED: NO CPR**

**GREEN: CPR if only if resources and staff remain available**

## **EM DIVISION OF CRITICAL CARE: RECOMMENDATIONS FOR EMERGENT AND COMPASSIONATE USE OF INVASIVE VENTILATION:**

SARS- CoV-2, the novel coronavirus that was first detected in China, and CoVID-19, the disease it causes, was declared a public health emergency of international concern on January 30, 2020 and characterized as a global pandemic by the World Health Organization on March 11, 2020. The United States reported it's first cases of confirmed CoVID-19 on January 20, 2020 in a man who had recently returned from Wuhan. By March 11, 2020 there were over 1000 cases confirmed, many of which spread via community contact.

As a health system, we have a unique opportunity to look to other affected countries to assist in our preparedness activities and should be using the lessons learnt from other countries to guide our response. Most notably, the Italian health system is reporting that it is currently operating at 200% capacity and are facing equipment and physical space shortages that are unparalleled in modern times. The Italian College of Anesthesia, Analgesia, Resuscitation and Intensive Care (SIAARTI) has recently published guidelines to assist physicians at the front lines in the management of these resources. In this document, Italian physicians are recommended to practice catastrophe medicine and utilize treatment selection criteria that “guarantee(s) that those patients with the highest chance of therapeutic success will retain access to intensive care.”<sup>1</sup>

The United States is now involved in this global pandemic. In all reality we will soon be forced to make similar ethical and morally challenging decisions that currently face Italian doctors. As Emergency Medicine (EM) physicians in a system already overburdened with long boarding times and ICU's at capacity with a high case mix index, our Emergency Department (ED) will likely be making decisions with long term, hospital wide implications. It is with this in mind that the EM/CCM division respectfully recommends the following clinical guidance to our EM colleagues.

Recommendation by EM/CCM Group for Conservative Ventilator use:

- **Maximize use of High Flow Nasal Canula (HFNC) in NON-COVID suspected illnesses,** this may require the use of HFNC in patient populations whom we would normally opt for intubation or Bilevel Positive Airway Pressure.
  - o Consider HFNC in mild hypercapnic respiratory failure for non-COVID suspected respiratory failure
  - o Consider HFNC in patients with patients with known terminal illness presenting with AMS, as opposed to intubation and mechanical ventilation
    - End stage liver disease not a candidate for transplant
    - Cancer on palliative chemotherapy

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<sup>1</sup> Raccomandazioni Di Etica Clinica Per L'ammissione A Trattamenti Intensivi E Per La Loro Sospensione, In Condizioni Eccezionali Di Squilibrio Tra Necessità E Risorse Disponibili. SIAARTI

- Advanced Heart Failure (EF <25%) and not a candidate for VAD or transplant
    - Advanced Dementia with Functional Assessment Staging Test 7C or greater
    - Severe Chronic Lung Disease requiring home oxygen
    - Chronic mechanical ventilation- this does not include the use of nighttime CPAP or BiPAP
    - Neuromuscular Disease symptoms on mechanical ventilation
    - End Stage Renal Disease patients with other chronic organ failure.
  - Favor switching to 30LPM maximum HFNC in patients brought in on CPAP via EMS.<sup>2</sup>
  - Favor utilization of continuous bronchodilators and treatment of underlying cause of respiratory failure in those patients presenting with increased work of breathing
- **Goals of Care Conversations:** Among more than 44,000 confirmed cases of COVID-19 in China as of Feb 11, 2020, most occurred among patients aged 30–69 years (77.8%), and approximately 19% were severely or critically ill. Case-fatality proportion among cases aged ≥60 years was: 60-69 years: 3.6%; 70-79 years: 8%; ≥80 years: 14.8%. Case fatality was higher for patients with comorbidities: 10.5% for those with cardiovascular disease, 7% for diabetes, and 6% each for chronic respiratory disease, hypertension, and cancer. **Case fatality for patients who developed respiratory failure, septic shock, or multiple organ dysfunction was 49%.<sup>3</sup>**
- All COVID and NONCOVID suspected patients with respiratory failure or shock should have documented goals of care discussions in Epic, when clinically possible.
  - **COVID Suspected Positive or Positive Patients:**
    - Presenting with or developing advanced respiratory failure or septic shock in the ED: ED physicians should have goals of care conversations with family members prior to intubation, if possible.
    - With both ARDS and Septic shock who are started on vasopressors in the ED must have Code Status discussions documented in Epic. If vasopressor requirements continue to rise, consider advising families that DNAR is recommended due to extremely poor clinical outcomes in these scenarios.

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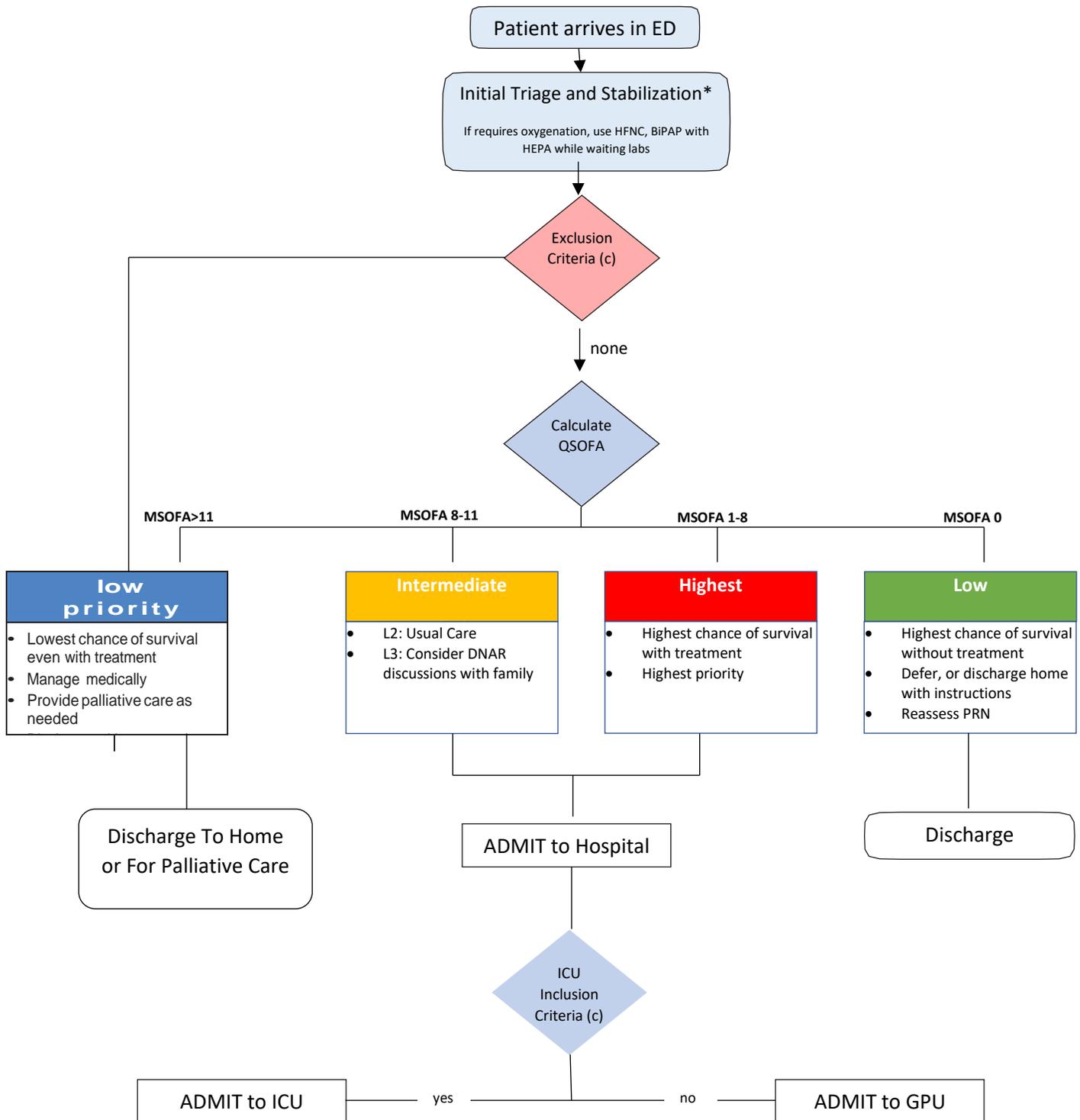
<sup>2</sup> Exhaled air dispersion during high-flow nasal cannula therapy *versus* CPAP *via* different masks David S. Hui, Benny K. Chow, Thomas Lo, Owen T.Y. Tsang, Fanny W. Ko, Susanna S. Ng, Tony Gin, Matthew T.V. Chan *European Respiratory Journal* Apr 2019, 53 (4) 1802339; DOI: 10.1183/13993003.02339-2018

<sup>3</sup> [Novel Coronavirus Pneumonia Emergency Response Epidemiology Team](#) [external icon](#) [external icon](#). [The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19) in China]. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2020;41(2):145–151. DOI:10.3760/cma.j.issn.0254-6450.2020.02.003

- Patients who are suspected COVID-19 positive who arrest in the ED and obtain ROSC should be considered for DNAR against surrogate consent at physicians' discretion.
  
- **Compassionate Care for Patients in Whom Limited Care is Being Provided:** Based on the Italian and Chinese literature, there will be cases in which intubation and advanced resuscitation is futile and patients will likely be transitioned to comfort care or limited care while in the Emergency Department. The EM/CCM group recommends that these patients are transitioned to an area of the inpatient hospital in which they can still receive appropriate comfort care and relative privacy and where family members are able to be present at the bedside for limited and monitored periods of time. If these patients are unable to be moved due to hospital capacity, we recommend cohorting them in an area of ED with similar capabilities.
  - Either a closed room, or a large room with multiple beds and a closed door
  
- **Emotional Support Services for EM Providers:** The choices that ED providers are facing are harrowing and are expected to be extremely emotionally burdensome. Physicians will be asked to practice under conditions that may require them to directly contradict their medical and ethical training. As such, we ask that psychosocial services be lined up for ALL health care workers in the department of Emergency Medicine, including the potential development of a support hotline for those in crisis. This is currently being built specific to recent developments and the current models of support continue to exist (i.e., We Care Physician Wellness Program, TRUST Peer Support Program, ENHANCE Employee Assistance Program, crisis line: 313-468-2000, National Suicide Prevention Help Line: 1-800-273-8255(TALK))

# EMERGENCY DEPARTMENT ICU/VENTILATOR TRIAGE

*Applies at Pandemic Level 2 and 3 (L2, L3)*



## **ICU GUIDELINES ON MANAGEMENT OF CARDIAC ARREST IN A PATIENT WITH SUSPECT COVID:**

The situation surrounding COVID-19 is rapidly changing and affected by availability of resources, discovery of new cases and availability of new information coming from areas already under strain from the disease. CPR is considered an aerosol generating procedure and HCPs should wear N95 masks, with face shield, gloves and gown. We recommend the following procedure for HCP's during Code Blue/Cardiac Arrest:

1. **Limit providers in the room to ONLY those necessary.** This recommendation is for both minimization of exposure and limitation of PPE usage.
  - a. Code Leader (one of the following Fellow/APP/Senior staff)
  - b. Bedside Nurse
  - c. Anesthesia (for intubation)
  - d. Respiratory therapy
  - e. If CPR in progress, 1 additional provider can assist. The bedside nurse and additional provider should trade compressions
  - f. Pharmacy should stand outside the room with available medications to pass through when needed
  - g. Recorder should stand outside the room communicating via writing, or speakerphone.
2. **Follow equipment procedures for airborne plus precautions. DO NOT TAKE ENTIRE CRASH CART IN THE ROOM**
3. Respiratory Therapy and Anesthesia should be notified that this is a COVID rule out when called.
4. **Avoid bagging-** During the apneic period, a BVM with a HEPA filter and PEEP valve **could be passively** held on the patient's face to maintain positive pressure in the airway and thereby prevent de-recruitment
  - a. **Patients who are already intubated when they suffer a cardiac arrest should be left on the vent to minimize circuit breakage and healthcare worker exposure.**
5. Hold compressions for intubation to both improve chance for first pass success and minimize risk of exposure of HCP's to bodily fluids.
6. Follow anesthesia recommendations for procedure during intubation and respiratory therapy should be aware of guidelines for HEPA filters on ventilator circuit.

**We acknowledge that the recommendations and guidelines around the management of a patient with COVID are rapidly changing, and thus this document will be updated and recirculated when new information is available.**

## **BLOOD CONSERVATION DURING PANDEMIC**

All blood products will be in limited supply as our donor pool is less available, the risks of donating with potential COVID-19 infections may expose our blood supply harming compromised individuals and the current supply is already strained. All blood products and transfusions will be distributed in accordance to the availability below.

### **Early in the pandemic (Triage Level 1)**

Hospitals recognize the need to surge bed capacities.

Emergency departments (EDs) are experiencing increased numbers.

- Blood products will not be made available to patients that meet exclusion criteria on page 25 of the triage protocol.
- Blood conservation will already be in use and continued including: no PRBC transfusions for patients with a hgb > 7 unless actively bleeding and pt product usage is expected to be less than 2 units. No platelet transfusion for pts with a platelet level > 20.
- Products will not be transfused for pts with chronic low levels of hgb or platelets even if below the above levels.
- Appropriated blood products that are not spiked or utilized should be returned to the blood bank for review and possible reuse and further allocation.
- Blood product requests outside of these parameters may be reviewed by the blood bank triage officer for alternative or special considerations.

### **Worsening pandemic (Triage Level 2)**

Hospitals have surged to maximum bed capacity, and emergency departments (EDs) are overwhelmed.

There are not enough beds to accommodate all patients needing hospital admission, and not enough ventilators to accommodate all patients with respiratory failure.

Hospital staff absenteeism is 20% to 30%.

- Blood products will be distributed as available after specific review by the blood bank triage officer.
- No blood products will be released without review and appropriate request.
- Ethics may assist with determining appropriateness of a specific transfusion request if there is a special consideration or exception to established protocol.

### **Worst-case scenario (Triage Level 3)**

Hospitals have already implemented altered standards of care regarding caregiver/patient ratios and have already exceeded surge capacity by adding patients to already occupied hospital rooms.

Hospital staff absenteeism is > 30%.

- Available blood products will be distributed in the same manner as Triage Level 2 until there are no further products available.

## **TRANSFERS to HFHS:**

Transfer to Henry Ford Facilities will be considered and commiserate with the established Triage level of the system as determined by HFHS administration and based upon our available staff and resources. A Triage officer will review cases presented for proposed transfer to HFHS and based on our protocols for COVID-19 crisis management, determine if the patient could be benefitted by transfer to a Henry Ford Health System Facility. This can and may affect ALL patient transfers to Henry Ford Facilities, not just patients with COVID-19. Patient acceptance to one of our facilities may change fluidly with changes in the Triage level of our system. Please see the below Triage levels and corresponding patient acceptance guidelines for our facility.

All Pediatric patients will be diverted to hospitals with dedicated appropriate level of care in-patient pediatric units. Transfers for pediatric patients requested based on resource allocation of other overloaded health systems will be considered on a case by case basis and subject to our available resources with Triage Team Lead, Administration and Ethical review prior to acceptance. Pediatric patients arriving to the ED with nowhere to divert to will be treated otherwise according to the algorithm.

### **Early in the pandemic (Triage Level 1)**

Hospitals recognize the need to surge bed capacities.

Emergency departments (EDs) are experiencing increased numbers.

- Patients that meet exclusion criteria for hospital admission as outlaid on page 11 will not be accepted for transfer to Henry Ford Facilities unless accepted by a HFHS provider and upon review by the Triage Team Leads.
- Due to transmission risk and exposure, patients that are COVID-19 positive will not be transferred to HFHS unless a HFHS provider has advanced therapies that can be offered and has agreed to accept the case.

### **Worsening pandemic (Triage Level 2)**

Hospitals have surged to maximum bed capacity, and emergency departments (EDs) are overwhelmed.

There are not enough beds to accommodate all patients needing hospital admission, and not enough ventilators to accommodate all patients with respiratory failure.

Hospital staff absenteeism is 20% to 30%.

- Cases will only be accepted for transfer to a Henry Ford Facility if approved and accepted by a HFHS provider and the Triage Team Leads.
- Ethics and Administration may assist with determining appropriateness of transfer if there is a dispute, special consideration or exception to established protocol.

**Worst-case scenario (Triage Level 3)**

Hospitals have already implemented altered standards of care regarding caregiver/patient ratios and have already exceeded surge capacity by adding patients to already occupied hospital rooms.

Hospital staff absenteeism is > 30%.

- No Transfers will be accepted to HFHS from outside facilities.

## **COVID- 19 RESOURCE WITHDRAWAL**

If it is determined based on these guidelines that resources for a patient may be limited or withdrawn, support for the patient and family will still be provided as follows:

### **Early in the pandemic (Triage Level 1)**

- Patients may be compassionately removed from support with guidance from our ER, ICU, Palliative Care, Hospice and/or Pastoral care teams.
- Patients may be subsequently moved out of the ER/ICU to the general medical floor or another designated space as resources allow.
- If a patient dies, efforts will be made to provide time for the family to remain with the patient as resources allow.

### **Worsening pandemic (Triage Level 2)**

- Patients may be compassionately removed from support and transitioned to comfort with all resources available based upon our guidelines.
- Patients will be moved to a location based upon available resources and space. These locations may not be private and require co-habitation with one or more other patients and families present.
- If a patient dies, family members may remain with the patient as resources allow, but it will be time-limited based upon the need for the room/resources for another patient.

### **Worst-case scenario (Triage Level 3)**

- Resource allocation and support will be provided based upon our guidelines and remaining resources available.
- Visitation will be severely limited and may even be via video only. The patient's family will not be able to remain with the patient after death.
- Patients will be moved to a location or space deemed appropriate by our designated triage managers and administration.

### **For all cases of ventilator withdrawal please refer to the HFHS policy on Withdrawal of Mechanical Ventilation**

- [https://pstat-live-media.s3.amazonaws.com/pdf\\_cache/policy/6595986/13d6dcf3-56a9-4e4a-a807-6ba41ff5a871/Tier%201-%20Withdrawal%20of%20Mechanical%20Ventilation.pdf](https://pstat-live-media.s3.amazonaws.com/pdf_cache/policy/6595986/13d6dcf3-56a9-4e4a-a807-6ba41ff5a871/Tier%201-%20Withdrawal%20of%20Mechanical%20Ventilation.pdf)

## **RECOMMENDATIONS FOR PALLIATIVE SUPPORT AND COMFORT MEASURES DURING THE COVID-19 EPIDEMIC:**

Palliative Medicine and Hospice services are prepared to help as much as possible with symptom management, emotional support, and communication. Patient need may exceed specialty service capacity. Appropriate palliative care should never be delayed while awaiting specialty services. All providers can provide palliative care and institute comfort measures. The following recommendations can help guide management.

### **For patients who are intubated and undergoing withdrawal of mechanical ventilation:**

- Follow policy for withdrawal of mechanical ventilation.

### **For patients with respiratory distress who are receiving comfort measures:**

- Provide oxygen and other medical treatments designed for comfort.
- Give morphine 4mg IV and lorazepam 1mg IV immediately (Hydromorphone 1mg IV or Fentanyl 50mcg IV are alternatives if morphine not available) \*
- Give morphine 4mg IV q10 minutes PRN respiratory distress (Respiratory Distress Observation Scale score > 3 can be used a tool to determine if a patient is in distress objectively)
- Increase morphine to 8mg IV if first 4mg dose does not provide at least 50% improvement. Continue to increase subsequent morphine doses by 50-100% if needed for refractory distress.
- Additional 1mg IV lorazepam can be used if needed for refractory respiratory distress or agitation

\*Higher starting doses may be needed for patients on high dose chronic opioids or chronic benzodiazepines. Use clinical judgement. Morphine can be given subcutaneously and lorazepam can be given intramuscularly if needed.

### **For patients with uncontrolled pain who are receiving comfort measures:**

- For opioid naïve patients, give morphine 4mg IV q10 minutes PRN pain (Hydromorphone 1mg IV or Fentanyl 50mcg IV are alternatives if morphine not available)
- Increase morphine to 8mg IV if first 4mg dose does not provide at least 50% relief
- For opioid tolerant patients, convert their normal opioid breakthrough dose to IV and double it. Give this dose q10 minutes PRN pain. Increase dose by 50-100% if not providing adequate relief.

### **Once comfort is achieved, write the following orders to maintain comfort if patient is remaining in hospital setting:**

- If available, start morphine infusion with hourly rate at 50% of the total needed to achieve comfort. This needs to be ordered as a PCA on general floors
- Patients without symptoms do not need an infusion

- If patient requires > 9mg/hr. IV morphine, convert to IV hydromorphone and order as high dose hydromorphone PCA (5mg IV morphine = 1mg IV hydromorphone)
- If infusion not available, give total morphine needed to achieve comfort every 2 hours scheduled IV.
  - If IV morphine supply running low, then calculate total IV dose patient would receive in 24-hour period, convert to oral morphine, and give morphine concentrate (Roxanol) divided into every 4-hour dosing by mouth or sub-lingual scheduled)
- Start morphine 4mg IV q1h PRN respiratory distress or pain (or higher dose if patient required it)
  - If IV morphine supply running low, then give morphine concentrate 10mg by mouth or sub-lingual every hour as needed for respiratory distress or pain
- Start Ativan 0.5-1mg IV q4h PRN agitation or anxiety
  - If IV and IM supplies running low, then give oral tablet 0.5-1 mg sub-lingual every 4 hours as needed for agitation or anxiety
- Glycopyrrolate 0.4mg IV q6h PRN terminal congestion
  - If IV supply running low, then give hyoscyamine 0.125 mg sub-lingual every 4 hours as needed for terminal congestion
- Ketorolac 30mg IV q6h PRN fever
  - If IV supply running low, then give rectal acetaminophen 650 mg every 6 hours as needed for fever
- **Once comfort is achieved (or for dying patients without symptoms), provide the following scripts if patient needs to be discharged home:**

**Essential:**

- Morphine concentrate 20 mg/mL; give 6-20 mg (0.3-1 mL) by mouth every 2 hours as needed for pain or shortness of breath # 30 mL (*adjust dose based on patient requirement and instruct family to give every 2 hours if patient had distress*)
- Lorazepam 0.5 mg tablets; give 0.5 – 1 mg (1 – 2 tabs) by mouth or sublingual every 4 hours as needed for anxiety or agitation # 15 tabs

**If possible:**

- Haloperidol oral solution (2 mg/mL); give 1 mg (0.5 mL) by mouth every 4 hours as needed for nausea or agitation # 30 mL
- Hyoscyamine 0.125 mg tablets; place 0.125 mg (1 tab) sub-lingual every 4 hours as needed for excessive secretions # 20 tabs
- Bisacodyl 10 mg suppositories; insert one suppository rectally every 72 hours as needed for constipation # 6 suppositories
- Acetaminophen suppositories; insert one suppository rectally every 6 hours as needed for fever

**For all patients and families:**

- Provide emotional support
  - Offer spiritual support if available
  - Place hospice referral if consistent with patient goals (but do not delay symptom treatment)
  - Provide education material to families for end-of-life symptom management, bereavement resources, and triage number for phone advice
- 
- Call palliative medicine team at 313-916-7181 with questions or send halo message to Inpatient palliative medicine consults. Place epic palliative medicine consult referral if needed.

## **PATIENT HANDOUT:**

### **To our patients, families and community:**

Please know that we care deeply about you and your family's health and are doing our best to protect and serve you and our community. We currently have a public health emergency that is making our supply of some medical resources hard to find. Because of shortages, we will need to be careful with resources. Patients who have the best chance of getting better are our first priority. Patients will be evaluated for the best plan for care and dying patients will be provided comfort care.

### **What this means for you and your family:**

1. Alert staff during triage of any current medical conditions or if you have a Do Not Resuscitate (DNR)/Do Not Attempt Resuscitation (***DNAR***), or other important medical information.
2. If you (or a family member) becomes ill and your medical doctor believes that you need extra care in an Intensive Care Unit (ICU) or Mechanical Ventilation (breathing machine) you will be assessed for eligibility based only on your specific condition.
3. Some patients will be extremely sick and very unlikely to survive their illness even with critical treatment. Treating these patients would take away resources for patients who might survive.
4. Patients who are not eligible for ICU or ventilator care will receive treatment for pain control and comfort measures. Some conditions that are likely to may make you not eligible include:
  - severe heart, lung, kidney or liver failure
  - Terminal cancers
  - Severe trauma or burns
5. **Patients who have ventilator or ICU care withdrawn will receive pain control and comfort measures.**
6. Patients who are treated with a ventilator or ICU care may have these treatments stopped if they do not improve over time. If they do not improve this means that the patient has a poor chance of surviving the illness – even if the care was continued. **This decision will be based on medical condition and likelihood of getting better.** It will not be based on other reasons such as race, gender, health insurance status, ability to pay for care, sexual orientation, employment status or immigration status. All patients are evaluated for survival using the same measures.
7. If the treatment team has determined that you or your family members does not meet criteria to receive critical care or that ICU treatments will be stopped, talk to your doctor. Your doctor can ask for a review by a team of medical experts (a Clinical Review Committee evaluation.)

## **PATIENT AND FAMILY COMMUNICATION STRATEGIES:**

<b>Giving Serious News: ASK - TELL - ASK</b>	
<b>1st ASK</b>	<p><i>“What do you understand so far about your [your loved one’s] illness?”</i></p> <p><i>“Would it be okay if I shared what I am seeing?”</i></p>
<b>TELL</b>	<ul style="list-style-type: none"> <li>• warning statement</li> <li>• big picture headline</li> <li>• then PAUSE</li> <li>• then respond to emotion (see NURSE)</li> </ul> <p><i>“We’re in a different place now. With the current public health emergency, we have a shortage of life-saving resources including breathing machines.”</i></p> <p><i>“Your loved one is so sick that they are at very high risk of dying no matter what treatments are given. Because of how sick they are, we are not able to provide a breathing machine or other life support treatments for your loved one.”</i></p> <p><i>“We have given a trial of life support and they are not improving as we had hoped. They are at very high risk of dying no matter what treatments are given. Because of how sick they are, we are not able to continue to provide the breathing machine or other life support.”</i></p>
<b>2nd ASK</b>	<p><i>“What questions do you have so far?”</i></p>
<b>Responding to Emotion with Empathy: use a single NURSE statement, then Pause</b>	
<b><u>N</u>AME</b>	<p><i>“This is a ...situation/experience.”</i></p> <p><i>...shocking, devastating, etc.</i></p>
<b><u>U</u>NDERSTAND</b>	<p><i>“I can only imagine...”</i></p> <p><i>...how incredibly hard this is.</i></p>
<b><u>R</u>ESPECT</b>	<p><i>“I’m impressed that...”</i></p> <p><i>...you have done everything you could to help your loved one.</i></p>
<b><u>S</u>UPPORT</b>	<p><i>“I [Our team] will be available...”</i></p> <p><i>...to ensure that your loved one is comfortable and that your family is supported.</i></p>
<b><u>E</u>XPLORE</b>	<p><i>“It would help me to know more about what you mean when you say that.”</i></p>
<b>I wish...</b>	<p><i>“I wish we could provide a treatment that would make him better.”</i></p>

## **PRIMER FOR STARTING DIFFICULT CONVERSATIONS**

Thanks to VitalTalk for sharing their primer on starting these difficult conversations.

### ***Screening***

*When someone is worried they might be infected*

<b><i>What they say</i></b>	<b><i>What you say</i></b>
Why aren't they testing everybody?	We don't have enough test kits. <b><i>I wish it were different.</i></b>
Why do the tests take so long?	The lab is doing them as fast as they can. <b><i>I know it's hard to wait.</i></b>
How come the basketball players got tested?	I don't know the details, but what I can tell you is that was a different time. <b><i>The situation is changing so fast that what we did a week ago is not what we are doing today.</i></b>

### ***Triaging***

*When you're deciding where a patient should go*

<b><i>What they say</i></b>	<b><i>What you say</i></b>
Why shouldn't I just go to the hospital?	Our primary concern is your safety. We are trying to organize how people come in. Please fill out the questions online. <b><i>You can help speed up the process for yourself and everyone else.</i></b>
Why are you keeping me out of the hospital?	<b><i>I imagine you are worried and want the best possible care.</i></b> Right now, the hospital has become a dangerous place unless you really, really need it. <b><i>The safest thing for you</i></b> is to ____.

# Admitting

When your patient needs the hospital, or the ICU

What they say	What you say
Does this mean I have COVID19?	We will need to test you with a nasal swab, and we will know the result by tomorrow. <b>It is normal to feel stressed when you are waiting for results</b> , so do things that help you keep your balance.
How bad is this?	From the information I have now and from my exam, your situation is serious enough that you should be in the hospital. <b>We will know more in the next day</b> , and we will update you.
Is my grandfather going to make it?	<b>I imagine you are scared</b> . Here's what I can say: because he is 90, and is already dealing with other illnesses, <b>it is quite possible that he will not make it out of the hospital</b> . <b>Honestly, it is too soon to say for certain</b> .
Are you saying that no one can visit me?	<b>I know it is hard to not have visitors</b> . The risk of spreading the virus is so high that I am sorry to say we cannot allow visitors. <b>They will be in more danger if they come into the hospital</b> . I wish things were different.
How can you not let me in for a visit?	The risk of spreading the virus is so high that I am sorry to say we cannot allow visitors. We can help you be in contact electronically. <b>I wish I could let you visit, because I know it's important, but it is not possible now</b> .

# Counseling

When coping needs a boost, or emotions are running high

What they say	What you say
I'm scared.	This is such a tough situation. <b><i>I think anyone would be scared.</i></b> Could you share more with me?
I need some hope.	Tell me about the things you are hoping for? <b><i>I want to understand more.</i></b>
You people are incompetent!	I can see why you are not happy with things. <b><i>I am willing to do what is in my power to improve things for you.</i></b> What could I do that would help?
I want to talk to your boss.	I can see you are frustrated. <b><i>I will ask my boss to come by as soon as they can. Please realize that they are juggling many things right now.</i></b>
Do I need to say my goodbyes?	I'm hoping that's not the case. And I worry time could indeed be short. What most pressing on your mind?

## Deciding

*When things aren't going well, goals of care, code status*

What they say	What you say
I want everything possible. I want to live.	We are doing everything we can. This is a tough situation. Could we step back for a moment so I can learn more about you? <b>What do I need to know about you to do a better job taking care of you?</b>
I don't think my grandfather would have wanted this.	Well, let's pause and talk about what he would have wanted. Can you tell me what he considered most important in his life? <b>What meant the most to him, gave his life meaning?</b>
I don't want to end up being a vegetable or on a machine.	Thank you, it is very important for me to know that. <b>Can you say more about what you mean?</b>
I am not sure what my grandfather wanted—we never spoke about it.	You know, many people find themselves in the same boat. This is a hard situation. To be honest, given his overall condition now, if we need to put him on a breathing machine or do CPR, he will not make it. The odds are just against him. <b>My recommendation is that we accept that he will not live much longer and allow him to pass on peacefully.</b> I know that is hard to hear. What do you think?

## Resourcing

*When limitations force you to choose, and even ration*

What they say	What you say, and why
Why can't my 90 year old grandmother go to the ICU?	<b><i>This is an extraordinary time. We are trying to use resources in a way that is fair for everyone.</i></b> Your grandmother's situation does not meet the criteria for the ICU today. I wish things were different.
Shouldn't I be in an intensive care unit?	Your situation does not meet criteria for the ICU right now. The hospital is using special rules about the ICU because we are trying to use our resources in a way that is fair for everyone. <b><i>If this were a year ago, we might be making a different decision. This is an extraordinary time.</i></b> I wish I had more resources.
My grandmother needs the ICU! Or she is going to die!	I know this is a scary situation, and I am worried for your grandmother myself. <b><i>This virus is so deadly that even if we could transfer her to the ICU, I am not sure she would make it.</i></b> So we need to be prepared that she could die. We will do everything we can for her.
Are you just discriminating against her because she is old?	No. <b><i>We are using guidelines that were developed by people in this community to prepare for an event like this</i></b> —clinicians, policymakers, and regular people— <b><i>so that no one is singled out.</i></b> These guidelines have been developed over years--they weren't done yesterday. I know it is hard to hear this.
You're treating us differently because of the color of our skin.	<b><i>I can imagine that you may have had negative experiences in the past with health care simply because of who you are.</i></b> That is not fair, and I wish things had been different. The situation today is that our medical resources are stretched so thin that we are using guidelines that were developed by people in this community, including people of color, so that we can be fair. I do not want people to be treated by the color of their skin either.
It sounds like you are rationing.	What we are doing is trying to spread out our resources in the best way possible. <b><i>This is a time where I wish we had more for every single person in this hospital.</i></b>

<p>You're playing God. You can't do that.</p>	<p>I am sorry. I did not mean to give you that feeling. I am just a clinician doing the best I can. <b><i>Across the city, every hospital is working together to try to use resources in a way that is fair for everyone. I realize that we don't have enough.</i></b> I wish we had more. Please understand that we are all working as hard as possible.</p>
<p>Can't you get 15 more ventilators from somewhere else?</p>	<p>Right now the hospital is operating over capacity. It is not possible for us to increase our capacity like that overnight. And <b><i>I realize that is disappointing to hear.</i></b></p>

# Anticipating

When you're worrying about what might happen

What you fear	What you can do
That patient's son is going to be very angry.	Before you go in the room, take a moment for one deep breath. <b>What's the anger about?</b> Love, responsibility, fear?
I don't know how to tell this adorable grandmother that I can't put her in the ICU and that she is going to die.	<b>Remember what you can do:</b> you can hear what she's concerned about, you can explain what's happening, you can help her prepare, you can be present. These are gifts.
I have been working all day with infected people and I am worried I could be passing this on to the people who matter most.	Talk to them about what you are worried about. You can decide together about what is best. There are no simple answers. But <b>worries are easier to bear when you share them.</b>
I am afraid of burnout, and of losing my heart.	Can you look for moments every day where you connect with someone, share something, enjoy something? <b>It is possible to find little pockets of peace even in the middle of a maelstrom.</b>
I'm worried that I will be overwhelmed and that I won't be able to do what is really the best for my patients.	Check your own state of being, even if you only have a moment. If one extreme is wiped out, and the other is feeling strong, where am I now? <b>Remember that whatever your own state, that these feelings are inextricable to our human condition.</b> Can you accept them, not try to push them away, and then decide what you need

# Grieving

When you've lost someone

What I'm thinking	What you can do
I should have been able to save that person.	Notice: <b>am I grading myself?</b> Could I step back and just feel? Maybe it's sadness, or frustration, or just fatigue. Those feelings are normal. And these times are distinctly abnormal.
OMG I cannot believe we don't have the right equipment / how mean that person was to me / how everything I do seems like its blowing up	Notice: <b>am I catastrophizing?</b> Is all this analyzing really about something else? Like how sad this is, how powerless I feel, how puny our efforts look? Under these conditions, such thoughts are to be expected. But we don't have to let them suck us under. Can we notice them, and feel them, maybe share them?  And then ask ourselves: <b>can I step into a less reactive, more balanced place even as I move into the next thing?</b>

## **PROFESSIONAL COPING WITH COVID-19 STRESSORS:**

The outbreak of *coronavirus disease 2019 (COVID-19)*, caused by the novel (new) coronavirus strain is causing concern for people worldwide. The public are encouraged to follow the advice of their local, state and federal governments, public health authorities, and health care providers. The following news outlets and health organization websites are updated regularly:

- The State of Michigan link provides resources for residents, communities, employers and workers: <https://www.michigan.gov/Coronavirus>
- Henry Ford Health System website provides information and resources: <https://www.henryford.com>
- The U.S. Centers for Disease Control and Prevention (CDC) has a robust hub monitoring the outbreak: <https://www.cdc.gov/coronavirus/index.html>
- The World Health Organization (WHO) has a page on the novel coronavirus here: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

In order to help support you during this time, Henry Ford ENHANCE has developed a list of links to documents / information and a customized online seminar. The links / documents are designed to help you stay informed and cope with stress / anxiety that you or loved ones may experience related to Coronavirus (COVID-19). The customized online seminar, "Build Psychological Immunity During the Coronavirus Outbreak," has been created to help you identify and acknowledge the emotions you may be experiencing and offer practical suggestions for coping: [Building Psychological Immunity During the Coronavirus Outbreak](#).

Links to Resources:

- [Click this link to download a PDF of online resources with information on the outbreak and prevention of coronavirus disease 2019.](#)
- [Coping with Stress During Infectious Disease Outbreaks](#)
- [Before and During a Pandemic](#)
- The WHO (World Health Organization) has published this advisory for the public: [www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public](http://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public)
- [Coronavirus Disease 2019 \(COVID-19\)](#)
- [What You Need to Know About Coronavirus Disease 2019 \(COVID-19\)](#)
- [If You Are Sick with Coronavirus Disease 2019 \(COVID-19\)](#)
- [Keeping Work, Home, Schools, and Public Places Safe from Coronavirus](#)
- The CDC has published this "Interim Guidance for Preventing the Spread of Coronavirus Disease 2019 (COVID-19) in Homes and Residential Communities": [www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html](http://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html)
- [Coping with Crisis in the Media \(Part 1\)](#)
- [Coping with Crisis in the Media \(Part 2\)](#)
- University of Denver resources on coping [www1.ucdenver.edu/docs/librariesprovider45/covid-19-support/health-care-provider-well-being.pdf](http://www1.ucdenver.edu/docs/librariesprovider45/covid-19-support/health-care-provider-well-being.pdf)

- United Kingdom Intensive Care Society COVID-19 resources  
[ics.ac.uk/ICS/Education/Wellbeing/ICS/Wellbeing.aspx?hkey=92348f51-a875-4d87-8ae4-245707878a5c](https://ics.ac.uk/ICS/Education/Wellbeing/ICS/Wellbeing.aspx?hkey=92348f51-a875-4d87-8ae4-245707878a5c)
- Headspace App – made free for anyone with NPI# - [www.headspace.com/health-covid-19](https://www.headspace.com/health-covid-19)
- Henry Ford Health System ENHANCE can help with: Stress/Anxiety Related to the Coronavirus, Family/Parenting Concerns, Marital/Relationship Tension, Personal/Job Stress, Work/Life Balance, Alcohol/Drug Misuse, Emotional Struggles, Legal/Financial Issues and more
  - EAP services are FREE and CONFIDENTIAL
  - Call Toll Free 888-EAP-HFHS (888-327-4347) for more information.

## **LIABILITY ISSUES IN PANDEMIC MANAGEMENT:**

### **EMTALA:**

EMTALA provisions may be waived by the Secretary of Health and Human Services during a declared public emergency and under the Stafford act. The Secretary can issue the Section 1135 Waiver to waive sanctions for the "transfer of an individual who has not stabilized for both transfer and re-direction for a medical screening examination." Waivers are generally limited to a 72-hour period beginning upon implementation of a hospital disaster protocol, unless the Waiver arises out of a public health emergency involving a pandemic. If related to a pandemic, the Waiver terminates upon the first to occur of either: the termination of the underlying declaration of a public health emergency or 60 days after being first published. If the waiver terminates because of the latter, the Secretary may extend it for subsequent 60-day periods.

The applicable standard of care in a pandemic (the triage process, in particular) likely would rely heavily upon the protocols developed for pandemic management. If the protocols are medically appropriate and are followed, the standard of care arguably has been met and there should be no liability.

Showing that a protocol was followed necessarily will rely upon the memory of the participants or the charting that is done to document the medical situation, decisions and actions. The more complete the memory or the charting, the more likely it will be that the HFHS can demonstrate that the standard of care was met. It is important that the medical chart for a person seeking treatment during a pandemic follows the person as he or she may be moved from one treatment location to another. All employees of the HFHS, while acting within the scope of their employment, following HFHS policies and protocols are provided with liability protection under the HFHS professional and general liability insurance program.