

**Bioethics Committee Crisis Care Continuum Guidelines**  
*Addressing Challenges and Resource Allocation in the Setting of a Health Care Crisis*

**Community Hospital of the Monterey Peninsula**  
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**Introduction**

- A. As physicians, nurses, and other health care providers we trained to care for individuals. Having to also take into account public health considerations in the setting of a health care crisis is unfamiliar territory. It may lead to uncertainty, conflict, and create significant tensions, ethical and otherwise. The Hastings Center, in their March 2020 guideline statement, summarize as follows:

*“An ethically sound framework for health care organizations during public health emergencies acknowledges two competing sources of moral authority that must be held in balance.”*

*- The duty of care that is foundational to health care. This duty requires fidelity to the patient (non-abandonment as an ethical and legal obligation), the relief of suffering, and respect for the rights and preferences of patients.*

*- Duties to promote moral equality of persons and equity in the distribution of risks and benefits in society...to promote public safety, protect community health, and fairly allocate limited resources.”*

- B. The responsibilities of leadership – CHOMP hospital administrators, medical staff leaders, and the Bioethics Committee – include, to the best of our abilities: a) planning and preparing, including staffing, equipment, space considerations, triage protocols, etc.; b) safeguarding the most vulnerable patient populations; c) safeguarding our health care workers; d) communicating consistently and clearly; and e) providing ongoing guidance and support.
- C. CHOMP leadership recognizes that physicians are on the front lines. Physicians are often necessarily the decision-makers, and must take into account both the needs of the individual and the reality of limited resources. In addition, there are circumstances where there may be little time for discussion, debate, or reflection. As such, physicians are entrusted with the responsibility to use their best medical judgment at all times, recognizing difficult and rapid decision making is inherently part of their scope of practice.
- D. Critical in the setting of a health care crisis is a clear understanding of the institutional policies with regard to non-beneficial care. In the delivery of health care, physicians and other healthcare providers are not legally or ethically obligated to administer tests or treatments that are medically non-beneficial, otherwise inappropriate, and not indicated or unavailable due to limited resources and triage protocols.

As has been the case at our institution for many years, the decision to declare a particular intervention as non-beneficial and hence “futile” requires clear and concise documentation in the medical record by two physicians/providers. In the case of resource limitations physicians will document their rationale for limiting interventions. Unresolved conflicts may require the intervention of a third physician, hospital administration, or the Bioethics Committee.

- E. To provide necessary ongoing support for physicians, other health care providers, the institution, and patients and their families during the health care crisis, the Bioethics Committee is prepared to:

1. Support physicians and other providers in their decision-making, in accordance with the principles outlined above.
  2. Encourage real time reflection and provide guidance for clinicians experiencing uncertainty and distress.
  3. Be available for telephone support 24/7.
  4. Be available in an ad hoc fashion for more formal bioethics' evaluations, and to provide these in as timely a fashion as possible – optimally within 24 hours.
  5. Review ethical standards, processes and practices to accommodate resource limitations, infection control restrictions, and limited visitor access to patients.
  6. Assist physicians, practitioners and clinicians to identify and use existing resources, policies and position statements that may provide guidance and support:
    - a. Code Status Policy and the Non-Beneficial Care Position Statement
    - b. Health Care Surrogate Policies, including the situation where a patient has neither capacity nor a surrogate
    - c. Use of the Palliative Medicine Service for support of patients, families, staff and clinicians
    - d. VitalTalk's "COVID ready communication"
- F. With regard to resource allocation, the following pertains:
1. Under ordinary circumstances, resource allocation, including ventilator support in the setting of respiratory failure, or dialysis in the setting of renal failure, is handled on a "first come, first served" basis (excluding patients who opt against intubation or renal replacement therapy, and those for whom it is deemed medically futile).
  2. In the setting of a public health crisis, however, it is generally agreed upon that this should be supplanted by broader, ethically informed principles, perhaps best summarized as the need to provide "the greatest good for the greatest number," and should not be "disease-specific" (i.e., not limited to patients with a particular illness or affliction).
  3. How to provide "the greatest good for the greatest number" is complex, subject to debate, and not universally agreed upon. However, simply using criteria such as "maximizing the number of people who survive to hospital discharge" is insufficient, focusing excessively on the short term, and leaves out critical socially and ethically relevant factors. We believe the aim should be to weigh *both* the likelihood of survival during the period of ventilator and critical care support, as well as the potential for long term survival. This is, arguably, the fairest and most judicious approach in a time of health crisis and necessarily limited resources.
  4. This protocol aims to ensure maximum benefit for all populations of patients with determination based on individualized assessment, without regard to disability, race, gender, age, sexual orientation, gender identity, ethnicity, ability to pay, weight/size, socioeconomic status, insurance status, incarceration status, homelessness, or past or future resources, or exercise of conscience and religion.
  5. This document therefore approaches these decisions, with the focus on intubation, mechanical ventilation, and renal replacement therapy in four steps: Eligibility, Allocation, Implementation, and Reassessment.

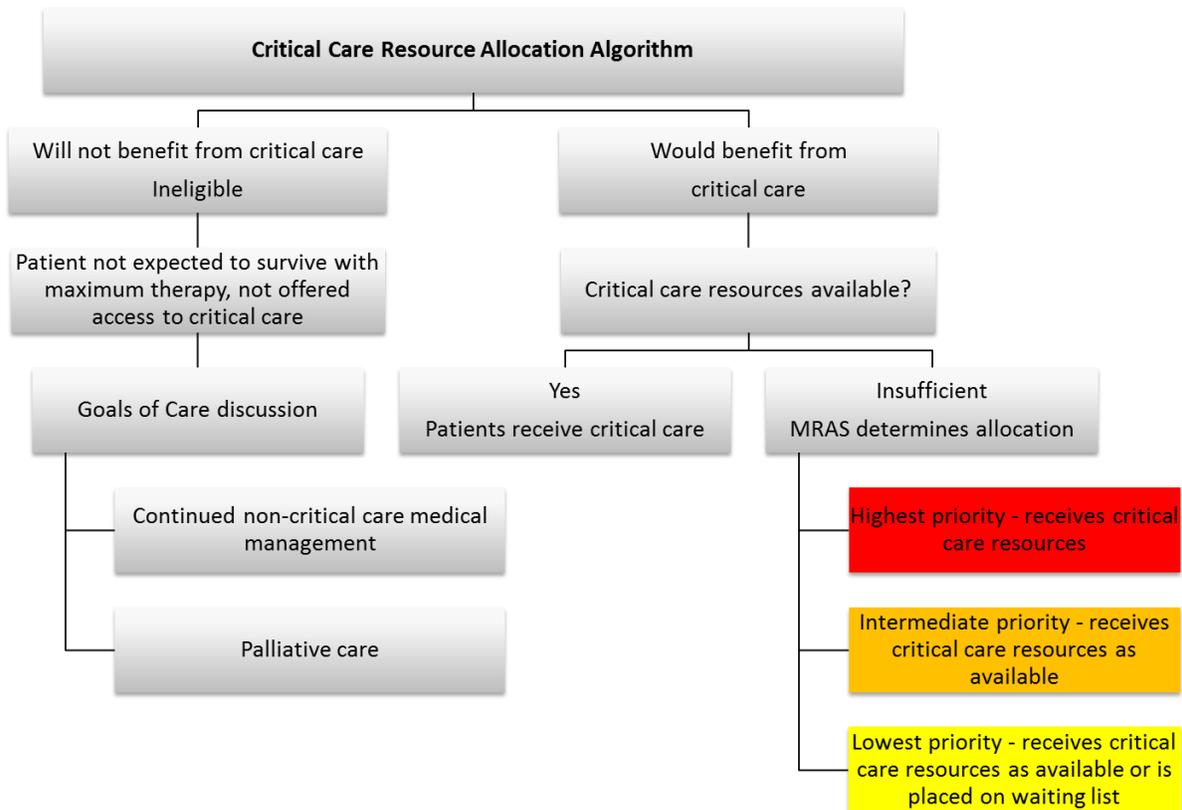
## Eligibility

- A. This should be broad and minimally restrictive. Simply put, all patients are “eligible” *who would be appropriate to receive mechanical ventilation, and/or renal replacement therapy during routine clinical circumstances otherwise*. Hence, those patients who would not be considered for intubation or renal replacement therapy would include:
1. Patients who have previously decided against intubation (e.g., established as DNAR/DNI), either verbally or via POLST completion. Such patients may change their mind, if able to do so, but as is the case under ordinary circumstances, designated powers of attorney, family, and friends are NOT considered to be in a legitimate position to override a POLST previously completed by the patient. Aggressive symptom management, with particular attention to dyspnea, is paramount.
  2. Patients (without a POLST) who make it clear at the time of impending respiratory failure that they do not wish to be intubated, and recognize this will likely lead to the need for aggressive symptom management and very possibly death within a short time.
  3. Those for whom intubation and mechanical ventilator support is deemed by at least two physicians to be non-beneficial with virtually no chance of meaningful survival (often termed “futile care” in the medical literature). This necessarily falls into the realm of medical judgment. Importantly, if two physicians are *not* clearly in agreement in the case of a specific patient, that patient will be included in the allocation procedure outlined later in this document.
- B. Patients for whom there is little or no chance of meaningful survival, if they were to develop respiratory failure due to COVID-19 infection, and therefore should be directed to non-critical care services (and not to be intubated), include the following:
1. Cardiac arrest: Unwitnessed arrest, recurrent arrest without hemodynamic stability, arrest unresponsive to standard interventions and measures; trauma-related arrest
  2. Irreversible hypotension unresponsive to fluid resuscitation and vasopressor therapy NYHA Class IV heart failure (dyspneic at rest)
  3. Severe burns in patients with both of the following:
    - a. Age >60
    - b. 50% of total body surface area affected
  4. Advanced lung disease with FEV1 less than 25% predicted, total lung capacity less than 60% predicted, or baseline PaO2 less than 55
  5. Primary pulmonary hypertension with NYHA class III or IV heart failure
  6. Chronic liver disease with Child-Pugh score >7, or MELD >20
  7. Severe trauma with little chance of recovery
  8. Metastatic malignant disease with anticipated prognosis less than six months
  9. High-grade unresectable primary brain tumors (e.g. glioblastoma multiforme)
  10. Advanced or irreversible neurologic or neuromuscular conditions
  11. Dementia with at least two of the following:
    - a. Nonverbal
    - b. Marked behavioral disturbances
    - c. Requiring 24 hour care
    - d. Non-ambulatory

However, if there is any uncertainty or discomfort with regard to the above listing of serious morbidities, patients should be included in the allocation protocol.

## Allocation

- A. Several fundamental bioethical principles are utilized to creating a simple “point system. These principles, balanced against each other, translate clinically as follows:
1. Short term survival probability using an established prognostic tool – Sequential Organ Failure Assessment (“SOFA”)
  2. Long term survival with regard to co-morbidity assessment
  3. Long term survival with regard to age
  4. Additional factors (i.e., the pediatric and pregnant populations)
- B. When a choice must be made, patients receive points based on the short term criterion (SOFA) and the two long term criteria (co-morbid conditions and age) using the Mortality Risk Assessment Scale (MRAS). See MRAS and SOFA scoring worksheets.
- C. Patients with the *lowest* cumulative point total receive the *highest* priority for intubation. Scores are placed into a category, indicating the Level of Priority *for resource use* and a Color Code. See Critical Care Resource Allocation Algorithm.
- D. In the event, it is necessary, feasible and appropriate for two patients to share one ventilator; the Bioethics Committee is fully supportive.



SOFA	Points	Score
<b>Cardiovascular:</b>		
No hypotension	0	
MAP < 70	1	
Dopamine < 5 mcg/kg/min or any dobutamine	2	
Dopamine 5-14 mcg/kg/min or Epi < 0.1 mcg/kg/min or Norepi < 0.1 mcg/kg/min	3	
Dopamine > 15 mcg/kg/min or Epi > 0.1 mcg/kg/min or Norepi > 0.1 mcg/kg/min	4	
<b>Respiratory:*</b>		
PaO <sub>2</sub> /FiO <sub>2</sub> > 400	0	
PaO <sub>2</sub> /FiO <sub>2</sub> 301-400	1	
PaO <sub>2</sub> /FiO <sub>2</sub> 201-300	2	
PaO <sub>2</sub> /FiO <sub>2</sub> 101-200 with vent	3	
PaO <sub>2</sub> /FiO <sub>2</sub> < 100 with vent	4	
<b>Hepatic function:</b>		
Bilirubin < 1.2	0	
Bilirubin 1.2-1.9	1	
Bilirubin 2.0-5.9	2	
Bilirubin 6-11.9	3	
Bilirubin >12	4	
<b>Renal function:</b>		
Creatinine < 1.2	0	
Creatinine 1.2-1.9	1	
Creatinine 2.0-3.4	2	
Creatinine 3.5-4.9 or urine output 200-500 cc/day	3	
Creatinine 5+ or urine output <200 cc/day	4	
<b>Glasgow Coma Score:</b>		
15	0	
13-14	1	
10-12	2	
6-9	3	
< 6	4	
<b>Thrombocytopenia:</b>		
Platelets > 150,000	0	
Platelets 101-150,000	1	
Platelets 51-100,000	2	
Platelets 21-50,000	3	
Platelets < 20,000	4	
TOTAL SOFA SCORE		

\*PaO<sub>2</sub> divided by the FiO<sub>2</sub>. Hence, PaO<sub>2</sub> of 80 divided by room air (FiO<sub>2</sub> 21%) = 80/.21 = 380 = 1 point PaO<sub>2</sub> of 80 on a vent with FiO<sub>2</sub> of 40% = 80/.40 = 200 = 3 points

<b>Mortality Risk Assessment Scale</b>		
<b>SOFA</b>	<b>Points</b>	<b>Score</b>
SOFA <6	1	
SOFA 6-9	2	
SOFA 10-12	3	
SOFA >12	4	
<b>Comorbidities (resolving ties with SOFA)</b>	<b>Points</b>	<b>Score</b>
<b>Severe:</b> Severe Alzheimer’s disease or related dementia; malignancy treated with palliative interventions (chemotherapy or radiation); New York Heart Association Class IV heart failure; severe chronic lung disease; cirrhosis with MELD score ≥20, ineligible for transplant; end-stage renal disease in patients older than 75.	4	
<b>Major:</b> Moderate Alzheimer’s disease or related dementia; malignancy with a < 10 year expected survival; New York Heart Association Class III heart failure; moderately severe chronic lung disease; end-stage renal disease in patients < 75; severe multi-vessel CAD; hepatic cirrhosis with history of decompensation.	3	
<b>Minor</b>	2	
<b>None</b>	1	
<b>Total Mortality Risk Assessment Score</b> <i>SOFA + Comorbidities</i>		
<b>Age (resolving ties with SOFA + comorbidities)</b>	<b>Points</b>	<b>Score</b>
0-17	-2	
Viable Pregnancy (>24wks)	-1	
18-60	1	
61-70	2	
71-80	3	
81+	4	
<b>Total Mortality Risk Assessment Score</b> <i>SOFA + CoMorbidities + Age</i>		
<b>Category</b>	<b>Scoring System</b>	
Level of Priority <i>for resource use</i> and Color Code	Score	
<b>RED - Highest Priority</b>	<b>0-4</b>	
<b>Orange - Intermediate priority (reassess as needed)</b>	<b>5-8</b>	
<b>Yellow - Lowest priority (reassess as needed)</b>	<b>9-12</b>	

## Implementation

### Definitions:

**Triage Officer:** Physicians and clinicians with established expertise in acute care management with leadership ability, effective communication and conflict resolution skills. Their role is to review the MRAS and place patients into Level of Priority and Color Code categories.

- CHOMP physician leadership
- Nursing leadership
- Respiratory Therapy leadership

**Triage Team:** Their role is to complete the MRAS and provide information to the Triage Officer, to help facilitate and support their decision making process, to assist in identification of patients receiving critical care who need to be re-assessed.

- On-duty Intubation Team member
- Registered Nurse
- Admin staff for record keeping – Nursing Admin

**Supportive Teams:** They are to provide psychosocial support and/or intensive symptom management for patients and families in situations where critical resources cannot be offered.

- Palliative Medicine team
- Social Work
- Chaplaincy

**Triage Review Committee:** Their role is to hear appeals, review triage processes to ensure they are being conducted fairly and to adjudicate disputes or controversies that may arise, including the breaking of ties.

- CMO or designee
- CNO or designee
- Legal counsel
- Bioethics Committee Leadership
- Off-duty Triage Officer member

## **Activation**

Activation of this allocation protocol is triggered when there are seriously limited ventilators, or dialysis capability available; capability includes either equipment or personnel resources.

- A. When activated, the Triage Team will complete the Mortality Risk Assessment Scale (MRAS) on all ventilator and/or dialysis patients, and declining patients that may require critical care in the next 24-48 hours.
- B. The completed MRAS will be submitted to Nursing Administration for the Administrative Staff to place in a spreadsheet, sorted by score, high to low. This work will be double checked by a second person to ensure transcription accuracy. Dates and time for the next assessment will be noted.
- C. The spreadsheet will go to the Triage Officer for review, consisting of three members. The Triage Officer will assign each patient a Level of Priority and Color Code group. This priority group will be noted clearly in their chart/EHR.

## **Reassessment**

- A. Patients who have already been intubated and are receiving ventilator support or receiving renal replacement therapy will be assessed at a minimum of every 48 hours by the Triage Team.
- B. For patients who are on a ventilator or renal replacement therapy but doing poorly, and for whom continuing aggressive critical care support may no longer be appropriate, will be assessed every 12 hours or more frequently. In the setting of a true health care crisis, such patients need to be identified promptly, and actions taken expeditiously if there is no reasonable hope for a meaningful recovery.
- C. The Level of Priority and Color Code system will continually be updated to add in new cases.

## **Communication of triage decisions**

The Triage Officer will inform the patient's attending physician about the triage decision. These two physicians will collaborate to determine the best approach to inform the individual patient and family.

In addition to physician communication, the patient, family and/or surrogate will be provided a written explanation of the triage and appeals process.

## **Other Considerations**

### *Patients with the same allocation score*

In the event there are ties between patients ("tie" is defined at the discretion of the organization as either two patients in the same priority group, or two patients with the exact numerical priority score), age should be used as a tiebreaker, with priority going to younger patients. The moral argument in favor of life-cycle-based allocation has been aptly stated as follows: "It is always a misfortune to die . . . it is both a misfortune and a tragedy [for life] to be cut off prematurely."

If there are still ties after applying priority based on age, a lottery (i.e., random allocation) should be used to break the tie.

While age may break ties between an adult and pediatric patient, age should not serve as a tiebreaker between two patients under the age of 18.

### Rapid reassessment of patients unable to be appropriately triaged initially

Those patients who receive critical care services (e.g., intubation and mechanical ventilation) emergently before there is time to allow for initial triage by a Triage Officer, but who are subsequently determined to be “unable” to continue receiving critical care based on Level of Priority and Color Code assignment, will continue to receive medical care including intensive symptom management and psychosocial support, but will *not* remain on mechanical ventilator support. This might include patients intubated in the field, patients intubated urgently in the emergency department, patients with severe trauma stabilized in the emergency department and brought to the ICU, and patients resuscitated on a medical floor in a code situation. The appeals process for withdrawal of critical care described below will not apply to these patients.

### Reconsideration of cardiopulmonary resuscitation and intubation

A patient evaluated by the Triage Officer and determined to be unable to receive scarce critical care resources under the allocation framework will not undergo cardiopulmonary resuscitative attempts or intubation. However, if circumstances materially change and the patient subsequently is assigned a Level of Priority and Color Code that would allow receipt of critical care, the clinical management can and should be reconsidered.

### **Appeals process for individual triage decisions.**

It is possible that patients, families, or clinicians will challenge individual triage decisions. Procedural fairness requires the availability of an appeals mechanism to resolve such disputes.

#### *--Initial triage decisions*

By necessity, many initial triage decisions will be made in highly time-pressured circumstances. As such, for initial triage decisions, the only appeals that will be entertained are those based on a claim that an error was made by the Triage Officer in the calculation of the priority score. In the event of such an appeal, the Triage Officer will verify the accuracy of the priority score by recalculating it.

#### *--Decisions to withdraw scarce resources*

Decisions to withdraw scarce resources (including mechanical ventilation) from a patient who is already receiving critical care may cause heightened moral concern and may also depend more on clinical judgment than initial allocation decisions. Clinicians, patients and surrogates will be informed of their right to appeal any such decisions. If a clinician, patient or surrogate would like to appeal such a decision, the following process will take place.

- The appeal will be immediately brought to the Triage Review Committee.
- The individuals who are appealing to the triage decision should explain the grounds for their disagreement with the triage decision. An appeal may not be brought based on an objection to the overall allocation framework.
- The Triage Officer should explain the grounds for the triage decision that was made.
- The appeals process must occur quickly enough that the appeals process does not harm patients who are in the queue for scarce resources.
- Three committee members will be needed for a quorum to render a decision, using a simple majority vote. The process can happen by telephone or in person.
- The decision of the Triage Review Committee will be final.

The decision of the Triage Review Committee will be documented in sufficient detail to reflect the fact that the outcome is the logical and reasonable result of serious consideration of the concern.

## References

- Berlinger N, Wynia M, Powell T et al. “Ethical framework for health care institutions responding to novel coronavirus SARS-CoV-2 (COVID-19): Guidelines for institutional ethics services responding to COVID-19. *The Hastings Center*, March 16<sup>th</sup>, 2020
- Emanuel E, Persad G, Upsur R, et al. “Fair allocation of scarce medical resources in the time of COVID-19” *NEJM* 2020, March 23 (epub)
- Goskin L, Friedman E, Wetter S. “Responding to COVID-19: How to navigate a public health emergency legally and ethically” *Hastings Center Report*, March-April 2020
- Truog R, Mitchell C, Daley G. “The toughest triage – allocating ventilators in a pandemic” *NEJM* 2020; March 23
- White D, Katz M, Luca J, Lo B. “Who should receive life support during a public health emergency? Using ethical principles to improve allocation decisions” *Annals Internal Medicine* 2009, January 20;150(2):132-138
- White D, Katz M, Luca J, Lo B. “Allocation of Scarce Critical Care Resources During a Public Health Emergency” University of Pittsburgh, Department of Critical Care Medicine. March 23, 2020
- Vincent J, de Mendonca A, Cantraine F et al. “Use of the SOFA score to assess the incidence of organ dysfunction/failure in intensive care units” *Crit Care Medicine* 1998;26(11):1793
- The Commonwealth of Massachusetts, Executive Office of Health and Human Services, Department of Public Health, “Crisis Standards of Care Planning Guidance for the COVID-19 Pandemic” April 7, 2020