

ARIZONA DEPARTMENT OF HEALTH SERVICES

COVID-19 Addendum: Allocation of Scarce Resources in Acute Care Facilities Updated – March 2021

Development of the COVID-19 Addendum

This addendum was originally created from a proposed COVID-19 triage protocol given to the Arizona Department of Health Services on April 16, 2020. The proposal was the product of a joint collaboration between Chief Medical Officers or their designees: Dr. David Beyda of the University of Arizona College of Medicine - Phoenix, Dr. Hannah Dillon of Tucson Regional Medical Center, Dr. William Ellert of Abrazo Healthcare and Carondelet Healthcare Phoenix, Tucson & Nogales, Dr. Keith Frey of CommonSpirit Arizona Division Dignity Health, Drs. C. Bree Johnston and Patricia Mayer of Banner Health, Dr. Nina Shah of Honor Health, and Dr. Zebulon Timmons of Phoenix Children’s Hospital.

Additionally, attendees of the statewide discussions included Chief Medical Officers or their Designees from the following systems/facilities: Canyon Vista Medical Center, Havasu Regional Medical Center, Indian Health Service, Kingman Regional Medical Center, Northern Arizona HealthCare, Summit Healthcare, Veteran’s Administration, Valleywise Health, Yavapai Regional Medical Center, and Yuma Regional Medical Center.

Upon receipt, the Arizona Department of Health Services reformatted and organized the document in line with the preexisting *Arizona Crisis Standards of Care Plan*, 3rd edition. Clarifications in line with the U.S. Health and Human Services (HHS) bulletins were made, but otherwise no other substantive content changes.

In early 2021, to clarify components of the document and update it to be consistent with emerging national guidance, the document was updated by the Arizona Department of Health Services (ADHS).

Scope of COVID-19 Addendum

This addendum specifies statewide triage protocols for acute care facilities during the COVID-19 pandemic. It corresponds with the *Arizona Crisis Standards of Care Plan*, 3rd edition but offers further guidance to reflect current best practices and recently published evidence on COVID-19.

After describing the Scope and Principles, the structure of this Addendum includes Section A (Stabilization of Patients Awaiting Triage), Section B (COVID-19 Triage Protocols for Scarce Resource Allocation), Section C (Pediatric Considerations) and References.

Principles of COVID-19 Addendum

All lives are precious. If resources are sufficient, all patients who can potentially benefit from therapies will be offered therapies. If resources are insufficient, all patients will be individually assessed according to the best available objective medical evidence. No one will be denied care based on stereotypes, assumptions about any person’s quality of life, or judgement about a person’s “worth” based on the presence or absence of disabilities.

An individual's use of past or future medical or social resources may not be a factor in care decisions. Care decisions should be based upon the likelihood of short-term survival to hospital discharge. Reasonable modifications must be applied where appropriate to any triage scoring criteria to account for individuals with underlying disabilities. Other reasonable modifications needed to ensure equal access to treatment for patients with disabilities may also be required.

All patients, regardless of resource availability, will be treated with respect, care, and compassion. Triage decisions will be made without regard to basis of race, ethnicity, color, national origin, religion, sex, disability, veteran status, age, genetic information, sexual orientation, gender identity, perceived quality of life, resource-intensity/duration, perceived social worth, or any other ethically irrelevant criteria. **To reemphasize, triage decisions should not use categorical exclusion criteria based on the above, but should be determined using an individual assessment based on the best objective medical evidence.** As part of any assessment, reasonable modifications, auxiliary aids and services, and language interpretation services must be provided where necessary to ensure access to medical care.

It is the intention of Arizona health systems to collaborate such that no system reaches a Contingency or Crisis Level unless all do. These triage protocols will go into effect when a facility moves from Conventional (hereafter called Conventional, see page 18 of the *Arizona Crisis Standards of Care Plan*, 3rd edition) to Contingency or Crisis Levels of Care (hereafter called Contingency or Crisis, respectively). If time permits, facilities that have reached Contingency or Crisis Levels and face shortages of resources (hospital beds, ICU beds, ventilators, dialysis machines, etc.) should work with other facilities to see if these resources are available elsewhere. If time does not permit and/or other facilities are short on critical resources, triage protocols as outlined here will go into effect.

Prior to, as well as during, implementation of Crisis Standards of Care, all efforts must be made to determine a patient's goals of care and treatment preferences. It is imperative to know whether aggressive interventions such as hospitalization, ICU admission or mechanical ventilation are consistent with a patient's preferences.

For a patient with decision-making capacity, the individual's informed refusals and informed wishes for life-sustaining treatment should be respected. Patients and their families should not be steered or pressured into agreeing to the withdrawal from, withholding of, or advocating for life-sustaining care. All hospitalized patients should be asked about advance care planning documents, goals of care, and are strongly encouraged to appoint a proxy decision-maker (e.g., medical durable power of attorney (MDPOA) or health care agent) if not previously in place. Providers must be careful not to coerce patients or their families to make advanced care planning decisions due to perceptions of quality of life or relative worth nor require patients to consent to a particular advanced care planning decision to continue to receive services from the facility. Patients in nursing homes, skilled nursing facilities, other long-term care settings, and outpatient care settings should also be asked about their goals of care and advance care planning documents and encouraged to appoint a proxy who is aware of their preferences regarding hospitalization and critical care if not in place. If advance care planning documents are in place and available the healthcare provider should verify the patient's goals of care and treatment preferences remain the same. Medical orders and advance care planning documents should be updated if the patient's treatment wishes have changed.

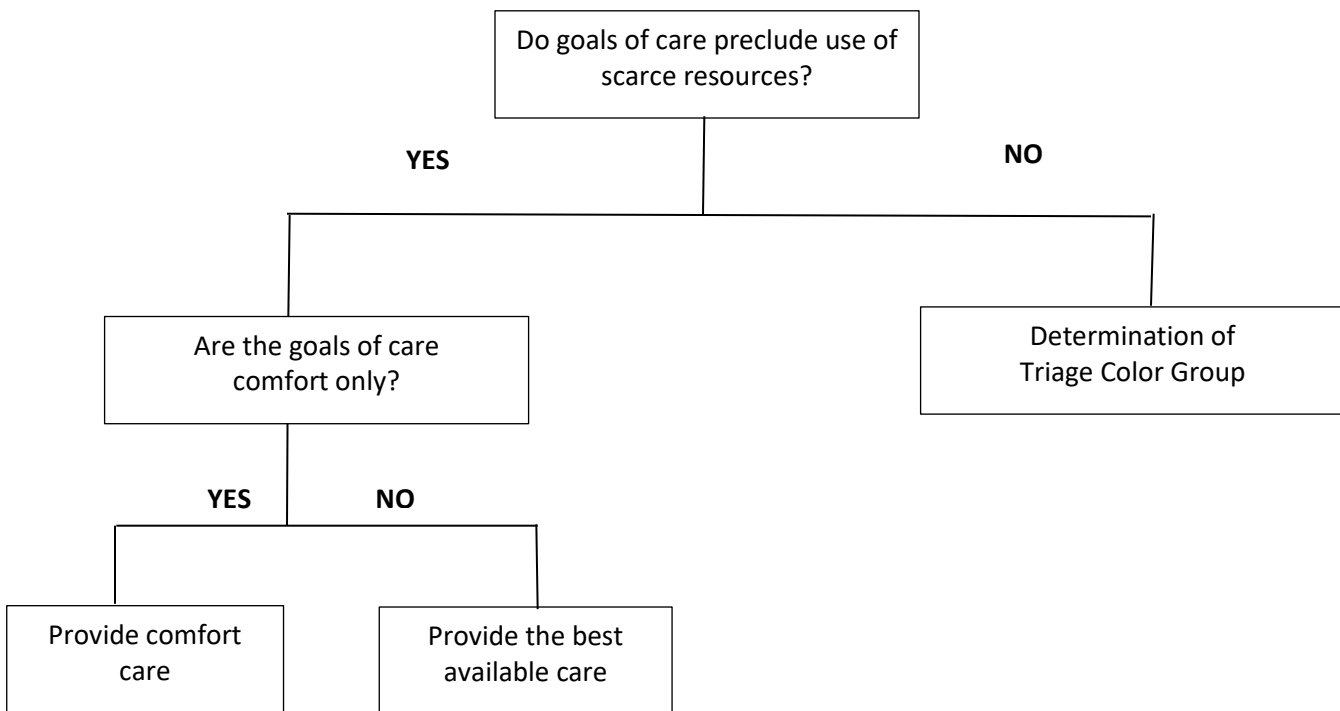
Section A: Stabilization of Patients Awaiting Triage

First responders and treating clinicians should stabilize undifferentiated patients as they would under normal or Conventional circumstances (up to and including intubation for those in respiratory distress).

If a facility or EMS agency is in Contingency or Crisis Levels and critical resources are scarce, consultation with a Triage Officer (facility) or Incident Command in conjunction with Administration Medical Director (EMS Agency) may be done when making critical resource allocation decisions. Temporary support may be offered (e.g., nonrebreather reservoir mask, bag valve mask for ventilation, intravenous fluids, vasopressors) until the Triage Officer/Incident Command can complete their assessment. Every effort should be made to complete the initial triage assessment as soon as possible if critical care resource need is identified.

Diagram 1 represents the flow of patient arrival through receiving triage and the importance of establishing goals of care.

Diagram 1



Section B: COVID-19 Triage Protocols for Critical Care Resource Allocation

As per the *Arizona Crisis Standards of Care Plan*, 3rd edition (pages 16, 70-72) on designating a Clinical Care Committee (CCC) and Triage Officers, those serving as representatives of the CCC and Triage Staff should not be treating providers, unless that is impossible given the staffing capabilities of the facility. Triage staff will recuse themselves from triage determinations for patients they are personally treating unless no other option exists.

These triage protocols would then be applied to both COVID-19 and non-COVID-19 patients.

Initial Process

1. The CCC will maintain situational awareness and report to the facility or system Incident Commander to coordinate Crisis Standards of Care priorities and guidance within the Emergency Operations Center. The CCC will liaise between the Arizona Department of Health Services and the healthcare facility as needed to implement the Crisis Standards of Care at the facility level.
2. Triage Officers will review all cases brought forth for review under the Crisis Standards of Care and will triage patients according to the Crisis Standards of Care priorities and any additional protocols or guidance developed or approved by the Arizona Department of Health Services.
 - a. If Crisis Standards of Care are implemented, treating providers will communicate pertinent clinical details to the representative of the CCC and the Triage Officer(s) as necessary.
 - b. Providers will assign Triage Priority Scores and Triage Color Groups, modeled on several other state protocols. Assessments must be individualized for each patient based on the best available, relevant, and objective medical evidence. When considering prognosis, the relevant consideration concerns the acute episode and restoration to the patient's baseline and should not include considerations of the patient's long-term survival or resource intensity/duration of need.
 - i. STEP 1: Consider the features of patient presentation in Rows 1 and 2 of Summary Table 1. For each row, assign a score using points in the column header. When in doubt, round down: assign lower points in a row when there is less certainty about severity of illness. Percentages in the rows are a guide. When appropriate use *either* SOFA or mSOFA, but not both.
 - ii. STEP 2: Apply total points to determine a level of care triage according to Summary Table 2. Lower scores indicate higher likelihood of benefiting from critical care, and priority is given to those with lower scores.
 - c. In the rare instance in which the Reference Tables may not capture an element important in determining prognosis, providers may consider extra elements in cases where triage color groupings are equal or are unable to be determined due to a lack of clinical data. A reasonable modification of SOFA, mSOFA and PELOD-2 for pediatric patients may be a necessary accommodation for patients with a disability (e.g., deafness, cognitive or mobility limitations).

- d. After presenting relevant clinical information, treating providers will be recused and the Triage Officer(s) will make a triage decision regarding the allocation of scarce resources; for example, the initiation, continuation, or withdrawal of a particular scarce resource. Treating providers will not make decisions to withhold or withdraw life-sustaining interventions in Crisis Standards of Care situations as long as an independent Triage Officer is available.
- e. Treating providers may make decisions to withhold or withdraw life-support based on goals of care conversations through shared decision-making with patient/family. This is consistent with conventional practice.

Explanation of Triage Priority Scores and Triage Color Groups

Triage Priority Scores are calculated using a point system based on the SOFA or mSOFA score and clinical judgment related to likelihood of short term survival to hospital discharge as determined based on the best available objective medical evidence. Reasonable modifications must be made to any assessment instrument when necessary to ensure that the final triage priority score is accurate for use with patients with underlying disabilities, and that disability-related characteristics unrelated to short-term mortality risk do not worsen the patient's score. All patients will be eligible to receive critical care beds and services regardless of their triage priority score, but available critical care resources will be allocated according to priority score, such that the availability of these services will determine how many patients will receive critical care.

Triage Priority Scores can be converted to three color-coded priority groups, called Triage Color Groups, in accordance with the *Arizona Crisis Standards of Care Plan*, 3rd edition: RED, YELLOW and BLUE (pages 30-31). Triage Color Groups, indicating priority for critical care resources, are assigned and modeled on several other state protocols, but remove age as a factor for Triage Priority Scores or Triage Color Groups.

If there are multiple patients that have equal Triage Priority Scores, an Equal Priority Process will be used, which is described below. If there is still not resolution of priority, then a second review will be obtained from another non-treating Triage Officer. Triage or treatment decisions should not include consideration of long-term survival, quality-of-life judgments, past or future use of medical or social resources, resource intensity, or duration of resource need.

Determination of Triage Priority Scores and Triage Color Groups

The following tables and diagrams will assist in determining the Triage Priority Score and Triage Color Groups for an individual patient. Summary Tables 1 and 2 illustrate the crux of the determination. If some of the information normally used to determine the severity of underlying conditions is not immediately available, clinical judgment will be required and/or reasonable modifications made to assessment tools. Depending on the patient's disability characteristics, alternative clinical assessment/prognostic tools may be indicated. The decision to utilize any specific clinical assessment/prognostic tool is at the discretion of the responsible treating physician(s) and may change over time as patient characteristics and/or clinical science changes. Regardless of the clinical criteria utilized, clinical trajectory over time is often more important than any single point in time criteria. If one patient's likelihood of survival is declining more rapidly than another patient needing the same limited resource, the limited resource should be assigned to the patient with the less rapid rate of decline.

Summary Table 1: Acute survival score

Patient presentation	0	5	10	20
Row 1: How severe is the acute injury or illness based on clinical judgment? • See Table 1 for examples of patient presentations demonstrating extremely severe acute illnesses or injuries	<u>Not severe:</u> >90% likelihood of surviving the episode only with higher level of care	<u>Moderately severe:</u> 50-90% likelihood of surviving the episode with higher level of care	<u>Very severe:</u> 10-50% likelihood of surviving the episode with higher level of care	<u>Extremely severe:</u> <10% likelihood of surviving the episode even with higher level of care
				<u>Not severe:</u> >90% likelihood of surviving the episode without higher level of care
Row 2: How severe is the systemic response to acute illness or injury based on initial physiologic scoring? • See Table 3 for mSOFA and SOFA scoring and related tips	mSOFA < 8	mSOFA 8 - 10	mSOFA 11 - 13	mSOFA > 13
	SOFA < 10 or decreasing serial SOFA	SOFA 10 – 12 or not increasing serial SOFA	SOFA 13 – 15 or increasing serial SOFA 1-2	SOFA > 15 or increasing serial SOFA ≥3

Summary Table 2: Determining Triage Color Group for an Individual Patient

Total points Row 1 + Row 2	LEVEL OF CARE TRIAGE: HIGH PRIORITY = LOWER TOTAL SCORE For difficult comparisons: higher priority = higher diagnostic certainty related to short-term survival	
0 = Red	High survival: high priority	
5 - 15 = Orange	Intermediate survival: intermediate priority	
≥20 = Blue or Green	Low survival: low priority	High survival: low priority

Reference Table 1: Examples of patient presentations demonstrating extremely severe illness or injury

Presentation	<10% likelihood of surviving the episode even with higher level care
Bleeding stroke	<ul style="list-style-type: none"> • Presents with ICH score 4 or 5 or • Presents with ICH score 3 and additional intracranial events in ICU
Ischemic stroke	<ul style="list-style-type: none"> • Presents with basilar or large cortical/MCA stroke (e.g. > 100 mL) not amenable to neurosurgical interventions
Cardiac arrest	<ul style="list-style-type: none"> • Cardiac arrest in the field without ROSC OR • ACLS > 20 minutes
AMI	<ul style="list-style-type: none"> • AMI c/b refractory cardiogenic shock (if revascularization not possible OR if associated with mechanical complications such as papillary rupture, VSD, or free wall rupture)
TBI	<ul style="list-style-type: none"> • Present with GCS 3T and either: absent brainstem reflexes, blown pupil, herniation on head CT (If none of these signs on admission, reassess on day 5. If GCS<8 and new intracranial events, then unlikely to survive)
Burn	<ul style="list-style-type: none"> • Total Body Surface area >85% (2nd and 3rd degree)
Respiratory failure	<ul style="list-style-type: none"> • Persistent PaO₂/FiO₂ ratio <100 despite modern, conventional ICU respiratory management
COVID respiratory failure	<ul style="list-style-type: none"> • See latest evidence-based guidelines: cardiac failure, acute dysrhythmias, mechanical intubation, ARDS, and failure to respond to standard ICU respiratory management are considered high-risk features
Trauma	<ul style="list-style-type: none"> • Revised Trauma Score < 2 • See Revised Trauma Score table
Sepsis	<ul style="list-style-type: none"> • SOFA > 15 • mSOFA > 13 (consider when unable to determine SOFA)
Liver failure	<ul style="list-style-type: none"> • MELD-Na > 40
Vascular	<ul style="list-style-type: none"> • Acute Type A aortic dissection with rupture or cardiac arrest • Ruptured abdominal aortic aneurysm with free rupture and/or significant hemorrhagic shock • Aortoenteric fistula with hemorrhagic and/or septic shock

Reference Table 2: Sequential Organ Failure Assessment (SOFA) Score

Sequential Organ Failure Assessment (SOFA) Score ¹⁻²

Organ System	0	1	2	3	4
Respiratory PaO ₂ /FiO ₂ , mmHg	>400	≤400	≤300	≤200	≤100
Coagulation Platelets x10 ³ /μL	>150	≤150	≤100	≤50	≤20
Liver Bilirubin, mg/dL	<1.2	1.2-1.9	2.0-5.9	6.0-11.9	>12.0
Cardiovascular, hypotension	No hypo- tension	MAP <70 mm Hg	dopamine≤5 or dobutamine any dose	dopamine>5 epinephrine≤0.1 norepinephrine≤0.1	dopamine>15 epinephrine>0.1 norepinephrine>0.1
CNS, Glasgow Coma Score	15	13-14	10-12	6-9	<6
Renal, Creatinine mg/dL urine output mL/d	<1.2	1.2-1.9	2.0-3.4	3.5-4.9 or urine <500 mL/d	>5.0 or urine <200 mL/d

Reference Table 3: Modified Sequential Organ Failure Assessment (mSOFA) Score

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

SpO₂ = % saturation of hemoglobin with O₂ as measured by a pulse oximeter and expressed as % (e.g. 95%); FIO₂ = Fraction of Inspired O₂; e.g., ambient air is 0.21

Example: if SpO₂ = 95% and FIO₂ = 0.21, the SpO₂/FIO₂ ratio is calculated as 95/0.21 = 452

*A reasonable modification of the SOFA, mSOFA, PELOD-2 or similar clinical instruments may be a necessary accommodation for patients with a disability. For example, the Glasgow Coma Scale, a tool for measuring acute brain injury severity in the SOFA and PELOD-2, adds points to the SOFA and PELOD-2 score when a patient cannot articulate intelligible words or has difficulty with purposeful movement. For patients with pre-existing speech disabilities or disabilities that effect motor movement, this may result in a higher SOFA or PELOD-2 score even in instances where the patient's disability is not relevant to short-term mortality risk. **Under such circumstances, reasonable modifications to the SOFA, PELOD-2 or similar clinical instruments must be made to such tools to ensure that disability-related characteristics unrelated to short-term mortality risk do not worsen the patient's score.**

Equal Priority Resolution Process

Before proceeding with this process, it is important to be aware there are some persons who are likely to experience immediate or near-immediate death despite aggressive therapy, such that during conventional care clinicians do not provide critical care services (e.g., massive intracranial bleeds not amenable to surgical intervention, intractable shock despite treatment). During a public health emergency, clinicians must still make those same judgments about the medical appropriateness of critical care services using the criteria they use during conventional care.

Once patients have been classified according to their Triage Priority Scores and Triage Color Groups, a situation could still arise where limited resources are needed by two or more patients with the same Triage Priority Scores.

If two or more patients require a single resource, additional factors *may* be considered as priorities, including:

1. Pediatric patients < 18 years of age
2. First responders or frontline healthcare workers (HCWs). This prioritization reflects the instrumental

value HCWs serve in the community during a pandemic, as well as an acknowledgement of the increased risk they are assuming in caring for high-risk patients. They specifically do not receive priority because of an estimation of worth.

3. Single caretakers for minors or dependent adults
4. Pregnant patients
5. Short term survival to hospital discharge based on clinical judgement, provided this judgement is made without regard to basis of race, ethnicity, color, national origin, religion, sex, disability, veteran status, age, genetic information, sexual orientation, gender identity, perceived quality of life, resource-intensity/duration, perceived social worth, or any other ethically irrelevant criteria

If patients requiring the same scarce resource cannot be effectively prioritized with any of the above, allocation should proceed randomly.

Ongoing Triage

At regular intervals (daily for hospitalized patients) Triage Priority Scores will be recalculated. This does not mean patient care will necessarily change; this is to allow treating physicians and Triage Officers to remain aware of each patient's status and for Incident Command awareness of local resources in relationship to demand.

1. If an individual patient receiving scarce resources develops a condition that would drastically affect their Triage Priority Score, that individual patient could have their triage color group reassigned.
2. A patient will not be reassigned a lower Triage Color Score simply because they continue to require a scarce resource such as a ventilator. As long as the clinical course is not dramatically worse (e.g., the development of a devastating complication) and the attending physician feels continued use of the scarce resource is medically indicated, the resource will not be reassigned. The attending cannot overrule the Triage Officer. Emerging clinical information on COVID-19 infections indicates some patients require prolonged ventilation; we also expect new information might change treatments or current therapies for this new and incompletely characterized infection. This document is not meant to interfere with that need or with clinical judgment concerning ongoing treatment.
3. Withdrawing and withholding of life sustaining resources differ in triage whereas they are considered ethically equivalent in non-triage circumstances. We therefore expect the withdrawal of a scarce resource from one patient to require a more stringent justification than the withholding of a scarce resource from another.
4. At regular intervals, cases will be systematically reviewed by Leadership and the Triage Officer(s) other than those making the original decision to ensure consistency, fairness, and adherence to the process.

Appeals Process

1. Appeals will be allowed if there is concern regarding whether an individual patient's Triage Priority Score or Triage Color Grouping is accurate; appeals based on rejection of the criteria will not be allowed.
 - a) If a *clinician* elects to appeal a decision, another appointed Triage Officer(s) not involved in the original decision, if available, will be asked to review the case.

- b) If the *family or decision maker* elects to appeal the decision, another appointed Triage Officer(s) not involved in the original triage decision, if available, will be asked to review the case. At a minimum, hospital appeals processes for triage decisions should include the following:
- Notice to the family or decision maker of the right to appeal a triage decision
 - Instructions for how to file an appeal
 - Timeline for filing an appeal
2. An appeal could be denied if there is a time-critical situation and insufficient time to conduct the appeal.

Note on Chronically Ventilated Patients

When a chronically ventilated patient with their own (non-hospital) ventilator is admitted, they will continue to be ventilated using that ventilator which is considered to be their personal property. While ventilated by their personal ventilator, patients will be exempt from the triage process. Under no circumstances will a patient's personal ventilator be "reallocated" to another patient. This is likewise true of other durable medical equipment that the patient is using that does not belong to the hospital.

However, if a chronically ventilated patient's respiratory status changes and they need to be ventilated with a new ventilator provided by the hospital, the patient will be included for assessment and resource allocation if a triage protocol is in place for crisis standards of care. If this occurs, that patient's personal ventilator remains personal property and will not be subject to involuntary reallocation.

Section C: Pediatric Considerations

Similarities to adult triage protocols: Triage strategies

Prioritization of scarce resources is a similar process to adults. In the event life-ending or life-limiting decisions are being made, they should be made (when possible) in concert with the attending provider, a peer provider, clinical leadership (CMO/CQO), and clinical ethics. A reasonable modification of the PELOD-2 or similar clinical instruments may be a necessary accommodation for pediatric patients with a disability. For patients with pre-existing speech disabilities or disabilities that effect motor movement, this may result in a higher PELOD-2 score even in instances where the patient's disability is not relevant to short-term mortality risk. Under such circumstances, reasonable modifications to the PELOD-2 or similar clinical instruments must be made to such tools to ensure that disability-related characteristics unrelated to short-term mortality risk do not worsen the patient's score.

The triage process, ongoing triage, review and appeals are similar to adults. Once a patient is in the ICU, they should be reassessed (like adults) once daily for continued need for ICU care and development of that could change their priority score.

Differences from the adult triage protocols: ECMO, Equal priority resolution process

The decision to use ECMO should be on a case-by-case basis, if ECMO is available.

If pediatric patients require the same resource and have the same Triage Priority Score, allocation should proceed randomly.

Reference Table 1-P: Pediatric Logistic Organ Dysfunction Score (PELOD-2)

Table I - Pediatric Logistic Organ Dysfunction Score - (PELOD-2)⁶

Organ dysfunctions and variables	Points by severity level						
	0	1	2	3	4	5	6
Neurologic							
• Glasgow coma score	≥11	5-10			3-4		
• Pupillary reaction	Both reactive					Both fixed	
Cardiovascular							
• Lactatemia (mmol/L)	<5.0	5.0-10.9			≥11.0		
• Mean arterial pressure (mmHg) (months)							
0-<1	≥ 46		31-45	17-30			≤ 16
1-11	≥ 55		39-54	25-28			≤ 24
12-23	≥ 60		44-59	31-43			≤ 30
24-59	≥ 62		46-61	32-44			≤ 31
60-143	≥ 65		49-64	36-48			≤ 35
≥144	≥ 67		52-66	38-51			≤ 37
Renal							
• Creatinine (μmol/L) (months)							
0-<1	≥ 69		≥ 70				
1-11	≥ 22		≥ 23				
12-23	≥ 34		≥ 35				
24-59	≥ 50		≥ 51				
60-143	≥ 58		≥ 59				
≥144	≥ 92		≥ 93				
Respiratory							
• PaO ₂ (mmHg)/FiO ₂	≥ 61		≤ 60				
• PacO ₂ (mmHg)	≥ 58	59-94		≥ 95			
• Invasive ventilation	No			Yes			
Hematologic							
• WBC Count (x10 ⁹ /L)	>2		≤ 2				
• Platelet (x10 ⁹ /L)	≥142	77-141	≤ 76				

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