Tuolumne-Calaveras
Health Care and Safety Coalition (HCSC)
Crisis Standards of Care Plan

Initial Plan: February/2023 Revised:5/2/23

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1. Introduction

This document is a framework designed to help health care facilities within the Tuolumne-Calaveras Health Care & Safety Coalition (HCSC) plan for any event which may cause overwhelming medical surge. This guidance assumes incident management and incident command practices are implemented and key personnel are familiar with healthcare emergency management planning and processes that underlie scarce resource decision-making.

During a catastrophic public health event that results in medical surge, each health care facility or health care system should use this guidance as a framework to determine the most appropriate steps and actions for their entity based on their environment, hazards, and resources. Since pre-planned actions are always preferred to impromptu decisions, pre-event emergency management planning and training is recommended. This document addresses common categories of health care delivery, triage, staff and space that could arise when available resources are limited or insufficient to meet the medical needs of patients.

This document provides an overview of surge capacity and crisis care operational considerations for health care facilities with an emphasis on hospitals. In addition to this framework, hospitals and health care systems are encouraged to review state and federal guidance.

This document is meant to provide information to support regional or county health entities, including health departments as well as individual health care facility operations, as they develop and implement their operational plans. It is the responsibility of the regional entity or the facility to work with their management team and medical staff to ensure operational plans are in place. This document does not replace the judgment of the regional health care facilities' operational management, medical directors, their legal advisors or clinical staff and consideration of other relevant variables and options during an event.

1.1 Purpose

This plan is intended to supplement the Tuolumne/Calaveras Healthcare & Safety Coalition Health Emergency Preparedness and Response Plan (HEPReP) and any facility's existing Crisis Standards of Care plan, which may be activated during an incident in which the number and severity of patients in the Tuolumne/Calaveras area has severely challenged the coalition's member organizations. Other attachments or annexes to the HEPReP may be utilized in conjunction with this document. As with any component of the HEPReP, this tool is intended to provide guidance only and does not substitute for the experience of the personnel responsible for making decisions at the time of the incident.

1.2 Scope

This plan does not supersede the plans or authorities of HCSC member entities. Rather, the intent of this plan is to increase the preparedness of the coalition to respond to a medical surge/crisis event, in addition to documenting processes and procedures.

1.3 Acknowledgments

This plan was finalized during the 2022-2023 grant year to fulfill a requirement of the Hospital Preparedness Program (HPP). All core coalition partners were invited to participate in the development of this plan. Participating agencies included:

- Tuolumne County Public Health
- Calaveras County Public Health
- Tuolumne County EMS Agency / Manteca District Ambulance
- Adventist Health Sonora
- Mark Twain Medical Center

We would like to acknowledge and thank the Sierra-Sacramento Valley EMS Agency, the Santa Clara Valley Health and Hospital Services, CommonSpirit Health, Institute of Medicine of the National Academies and the California Department of Public Health for their assorted Crisis Standards of Care plans, policies and guides, which have been heavily referenced throughout the development of this plan.

1.4 Overview of Situation

Most health care facilities are familiar with the concepts of surge capacity – the ability to manage a sudden influx of patients, and surge capability – the ability to manage patients requiring very specialized medical care. During conventional care, customary routine services are provided through standard operating procedures. During contingency care, care provided is functionally equivalent to routine care but equipment, medications, and even staff may be used for a different purpose or in a different manner than typical daily use (e.g. substituting one antibiotic for another that covers the same classification). The demands of most incidents can be met with conventional and contingency care. Crisis care falls at the far end of the spectrum when resources are scarce and the focus changes from delivering individual patient care to delivering the best care for the patient population.

The goal during a medical surge event is to maximize surge capacity strategies that mitigate the crisis while minimizing the risks associated with deviations from conventional care. Choosing the strategies that are most appropriate to the situation and pose the least risk to the patient and provider first, and then proceeding to riskier strategies as demand increases and options decrease, is the preferred path.

Surge capacity is described across a spectrum of three categories (see Appendix 1: Examples of Changes in Health Delivery):

- **Conventional:** Usual resources and level of care provided. For example, during a surge in patients, maximizing bed occupancy and calling in additional staff to assist.
- **Contingency:** Provision of functionally equivalent care that may incur a small risk to patients. Care provided is adapted from usual practices. For example, boarding critical care patients in post-anesthesia care areas using less traditional, but appropriate resources.
- **Crisis:** Disaster strategies used when demand forces choices that pose a significant risk to patients but is the best that can be offered under the circumstances. For example, cot-based care, severe staffing restrictions, or restrictions on use of certain medications or other resources.

1.4.1 Key Points About Crisis Care

- Crisis care is not a separate triage plan. These strategies are extensions of surge-capacity plans.
- Crisis care may occur during long-term events such as pandemics when resource constraints are likely to persist for long periods of time, or during short-term, no-notice events where help will arrive, but too late to solve an acute resource shortfall.
- Health care facilities will not have an option to defer caring for patients in a crisis. Demand, guided by ethics, will drive the choices that have to be made.
- Healthcare decisions, including allocation of scarce resources, cannot be based on age, race, disability (including weight-related disabilities and chronic medical conditions), gender, sexual orientation, gender identity, ethnicity (including national origin and language spoken), ability to pay, weight/size, socioeconomic status, insurance status, perceived self-worth, perceived quality of life, immigration status, incarceration status, homelessness, or past or future use of resources.
- If strategies are not planned for ahead of time, they might not be considered and/or will be difficult to implement.
- Strategies should be proportional to the resources available. As more resources arrive, you should move back toward strategies that are less demand driven (and therefore, back toward contingency and eventually conventional status)

1.5 Assumptions

- Incident Command has been activated, Emergency Operations Plan has been reviewed and implemented;
  - Response plans, contingencies and strategies are reviewed each operational period or as the situation changes
- Leadership at each facility, in collaboration with regional and system leaders, have taken steps to:
  - Anticipate and monitor shortfalls in resources, and duration and severity of the crisis,
  - Address specific shortages in resources (e.g., personnel, equipment, supplies, space)
- Mutual-aid resources are scarce or unavailable.
- Appropriate waivers, proclamations, and/or declarations required to implement specific medical/health system have been identified and secured.
- During a crisis, the ethical framework shifts from "patient-centered practice" under normal conditions to "public-focused practice" to ensure fair allocation of resources during crisis conditions, sometimes prioritizing the community above the individual. The focus shifts from the individual to providing the best possible outcomes for the population.
- Balancing professional standards and crisis standards of care will be based on the situation at hand, including the presence/absence of equipment, medications, or other colleagues and clinicians.
  - **Sacrifices in desired care must be shared fairly**. These sacrifices must not disproportionately burden those already suffering social injustice or health disparities.

1.6 Definitions

A. **Operational Area (OA):** An intermediate level of the State of California emergency organization, consisting of a county and all political subdivisions within the geographical boundaries of the county.
B. **Medical Health Operational Area Coordinator (MHOAC**): Established by Health and Safety Code §1797.153 the public health officer and/or the local EMS agency administrator or a designee appointed by the previous, who is responsible for obtaining and coordinating services and allocation of resources within the OA in the event of a disaster or major incident where mutual aid is requested.
C. **Regional Disaster Medical/Health Coordinator (RDMHC):** An appointed position in each of the six Mutual Aid Regions established by Health and Safety Code §1797.152. The RDMHC coordinates disaster information and medical and health mutual aid and assistance within the Mutual Aid Region or in support of other affected Mutual Aid Region(s).
D. **Regional Disaster Medical/Health Specialist (RDMHS):** A component of the RDMHC Program who directly supports regional preparedness, response, mitigation and recovery activities.
E. **OA EOC**: The OA (county) Emergency Operations Center
F. **Crisis Standards of Care**: A level of medical care delivered to individuals under conditions of duress (disaster, pandemic, etc.), or when medical/health resources are insufficient for demand.
G. **Quick Response Vehicle (QRV)**: A non-transport vehicle staffed with at least one Paramedic and equipped with appropriate medical equipment/supplies.
H. **Field Treatment Site:** A site activated to manage casualties/medical evacuees when the local area capacity to rapidly treat/place these individuals at an established medical facility is overwhelmed. A FTS is used for the assembly, triage, medical stabilization and subsequent evacuation of casualties to an established medical facility if and when necessary/available. A FTS provides medical care for a period of up to 72 hours, or until patients are no longer arriving at the site. FTS activation, coordination, and support is managed from the Medical/Health Branch of the OA EOC, and supported by the public health department and OA EMS agency.
I. **Alternate Care Site (ACS):** A location that is not currently providing healthcare services and will be converted to enable the provision of healthcare services to support inpatient and/or outpatient care required after a declared catastrophic emergency. These specific sites are not part of the expansion of an existing healthcare facility, but rather are designated under the authority of the local government. ACSs are established by the public health department with support from the OA EOC and OA EMS agency. Activation of an ACS usually

requires a minimum of 72 hours. ACSs may also be activated to provide on-going treatment to injured patients when a FTS is demobilized and hospital capacity is still overwhelmed.

J. **Disaster Healthcare Volunteers (DHV)**: A program that registers and credentials health professionals who may wish to volunteer during disaster including doctors, nurses, paramedics, pharmacists, dentists, mental health practitioners, etc. DHV may be used by local officials to support a variety of local needs, including augmenting medical staff at healthcare facilities or supporting mass vaccination clinics.

K. **Medical Reserve Corps (MRC):** A national network similar to the DHV system. The MRC was established to provide a way to recruit, train, and activate medical and public health professionals and other volunteers to respond to community health needs during disasters and other public health emergencies.

L. **Hospital Incident Command System (HICS):** An incident management system based on principles of the Incident Command System (ICS), which assists hospitals and healthcare organizations in improving their emergency management planning, response, and recovery capabilities for unplanned and planned events. HICS is consistent with ICS and the National Incident Management System (NIMS) principles.

2. Concept of Operations

2.1 Activation

Prior to implementing crisis standards, facilities should make every possible effort to remain in conventional or contingency standards. In widespread events, the State may step in to coordinate load leveling of patients in an attempt to minimize the time any one facility is in crisis standards. If despite these efforts a facility still needs to enter crisis standards, they will do so with as little delay as possible, to minimize the impact on patient care.

2.2 Notifications

Prior to entering crisis standards, all affected facilities should have regular communications with the MHOAC regarding current status and needs. The MHOAC will be relaying this information to the RDMHS for situational awareness. Upon entering crisis standards, the facility will notify all relevant governing bodies as dictated by their internal policies/oversight agencies; in addition, the facility will notify the MHOAC, who will notify the RDMHS and local EOC.

2.3 Roles and Responsibilities

The primary focus of this document is on the operational strategies for health care facilities during crisis. Health care facilities should be supported by the HCSC; their MHOAC; RDMHS; CDPH; local EMSA and public safety partners; state and local government agencies.

2.4 Logistics

2.4.1 Medical Supplies

Healthcare facilities are expected to anticipate supply needs and make every effort to procure in advance supplies through usual supply chains and standing vendor contracts. In addition, when resources are scarce, facilities must continue aggressive measures to acquire needed equipment. Such measures can include coordination with healthcare coalition partners and local reserves that may provide a source of supplies otherwise in shortage. When usual supply chain sources are exhausted, supply resource requests can be made through the local MHOAC, who in turn will attempt to fill these requests through regional and state level stores of supplies and various procurement capability.

During declared disasters CDPH and the state EMS authorities track health care resources including hospital med/surge and ICU surge capacity and ventilators and will help coordinate the allocation and distribution or re-distribution of those scarce resources when available.

Healthcare facilities are also encouraged in times of scarce resources to explore alternatives to single-use invasive ventilation by gathering data on the utility and safety of non-invasive ventilation and to investigate the efficacy and safety of splitting ventilators.

2.4.2 Additional Personnel Resources

The MHOAC may, depending on incident parameters, initiate the process for requests for additional personnel through the MHOAC system. This may include:

- Local DHV/MRC volunteers: These volunteers would be activated by the local public health department.
- Region IV assets: DHV/MRC volunteers from regional partners may be activated at the request of the RDMHC
- State level assets: EMSA can activate either/both of the EMSA Disaster Medical Response Programs:
  - California Health Corps (CAHC) deploys licensed and trained medical personnel, typically for 7-14 days.
  - California Medical Assistance Team (CAL-MAT) deploys medical and non-medical professionals for up to 14 days.
- ASPR/National Disaster Medical System (NDMS) assets: Disaster Medical Assistance Teams (DMATs) deploy medical and non-medical professionals, and are self-sustaining for the first 72 hours of deployment.

2.5 EMS/Pre-Hospital Operational Changes

2.5.1 MHOAC and EMS Collaboration:

- During a significant incident, prior to a locally declared emergency, the local EMS medical director should collaborate with the affected county public health officer, Office of Emergency Services (OES), and other appropriate agencies to modify the EMS delivery system in order to meet increased demand. *(In Tuolumne County the EMS medical director & public health officer is currently the same individual).*
- During a locally declared emergency, the MHOAC or Medical/Health Branch Director of the OA EOC should collaborate with the EMS medical director, and other appropriate agencies, to modify the EMS delivery system in order to meet increased demand.

2.5.2 System Access

- The MHOAC and local EMS agency should collaborate to establish priorities for 911 medical-aid response based upon available system resources.
- The MHOAC and local EMS agency should collaborate to complete the Crisis Standard Of Care EMS System Orders (Attachment #1) and inform all applicable public safety answering points (PSAPs), ambulance dispatch centers, control facilities (CFs), hospitals, and EMS providers of these orders to maintain the stability of the EMS system.
- The MHOAC and local EMS agency should collaborate to ensure notification of all medical/health system providers when a public access telephone number (e.g. 211) and/or website for individuals seeking minor medical care, social services and/or other non-emergent needs has been established.
- The OA EOC, in cooperation with the MHOAC and local EMS agency, should consider establishing FTSs for rapid triage, treatment and referral as staffing allows.
- The MHOAC and local EMS agency should collaborate to authorize altered triage and response protocols for the 911 system, including consideration of the following:
  - Suspension of emergency medical dispatch (EMD) pre-arrival instructions.
  - Implementation of symptom-specific triage (i.e., specialized EMD specific to a pandemic outbreak).
  - Implementation of the Altered 911/EMD Triage Algorithm (Appendix #2).
- The OA EOC, in cooperation with the MHOAC and local EMS agency, should consider establishing a transport center for medical transport requests from all system access points (public access numbers, PSAPs, EMS providers, FTSs, ACSs, hospitals, other healthcare facilities), including consideration of the following:
  - Augmenting medical transportation with alternative vehicles (buses, taxis, etc.).
  - Developing and implementing a medical transportation scheduling process.
  - Working with designated CFs to direct destinations of transport resources (including ACSs, clinics, etc.).

2.5.3 EMS Response

- The OA EOC, in cooperation with the MHOAC and local EMS agency, should consider:
  - Establishing EMS muster stations to consolidate personnel, equipment, supplies, and emergency response/transport vehicles.
  - Expanding available EMS resources by converting all ambulances to BLS transport units (EMR/EMT staffing) and implementing QRVs with available Paramedic personnel.
    - QRVs may consist of supervisor vehicles, other company vehicles, shared resources from other emergency response agencies, private vehicles, etc.
    - QRVs will be equipped with appropriate communications equipment, LALS/ALS equipment and supplies, etc.
      - *All conversions and implementations will be contingent upon staffing capabilities.*
  - Implementation of Crisis Standard Of Care Prehospital Treatment Orders (Attachment #2) to establish alternative treatment and transport of patients in the prehospital setting.
  - Developing additional disaster caches to augment EMS supplies (i.e., flu cache of electrolyte replacement fluids, ibuprofen, Pepcid, etc.).
  - Developing, equipping and deploying a specialty response team to respond to specific types of patients.
- The OA EOC should work collaboratively with the MHOAC and local EMS agency to develop a family/patient brochure for distribution by EMS personnel to the public, which may include the following:
  - Explanation of the current healthcare situation and the crisis standard of care directions currently being implemented.
  - Preventive measures to avoid exposure to the applicable health threat(s).
  - Available community resources (public access telephone number, website, etc.).

2.5.4 Just-In-Time Training

EMS provider agencies, in cooperation with the OA EOC, MHOAC and local EMS agency should develop just-in-time training for prehospital personnel to include:

- Altered 911/EMD Triage Algorithm (Appendix #2)
- Crisis Standard Of Care EMS System Orders (Attachment #1).
- Crisis Standard Of Care Prehospital Treatment Orders (Attachment #2).
- Family/patient brochure.
- Consideration of other appropriate just-in-time training (grief support, etc.).

2.6 Acute Care Hospitals

The HCSC's approach to crisis standards of care is that such tragically difficult decisions must be based on criteria that ensure that every patient has equitable access to any care from which they might benefit. **Allocation criteria must be as clear, transparent, and objective as possible, and must be based on biological factors related only to the likelihood and magnitude of benefit from a scarce resource.** A system of allocation during crisis must be applied consistently and broadly, to maximize the opportunity for fairness and to minimize the influence of biases such as ageism, sexism, racism, or ableism. Allocation decisions should seek to support access to care for all, regardless of their insurance status, and especially for the most vulnerable or those who suffer disproportionately.

To ensure these decisions are made as fairly as possible, each affected hospital should establish triage teams whose responsibility it is to implement the allocation framework in this policy. The triage teams will be created under each hospital's medical director or physician executive. The triage team is a group of healthcare workers and community members who are not involved in the clinical care of patients that are being triaged. The goal of creating the triage team is to relieve the moral distress of having the treating physicians be required to choose who receives an allocated resource and avoid ad hoc decisions. **It is important to emphasize that patients' treating physicians should not make allocation decisions; a triage team with expertise and training in the allocation framework will make allocation decisions.**

Additionally, when establishing triage teams the hospital should establish a Triage Oversight and Review Committee. This committee should be made up of at least three individuals, recruited from the following groups or offices:

Medical Director or designee, Chief Nursing Officer or designee, County Counsel (as a non-voting member) , hospital Ethics Committee or Consult Service, and/or an off-duty triage team member. In addition, the Triage Oversight and Review Committee should have representation consistent with the patient population being served. Three committee members are needed for a quorum to render a decision, using a simple majority vote.

Local senior leaders, including physicians and Hospital Administration, are responsible for appointing members of triage teams, and Triage Oversight and Review Committee, preferably no later than during surge conditions. A roster of approved triage team should be maintained that is large enough to ensure that a team will always be available on short notice; that team members will work in shifts lasting no longer than 13 hours; that team members will have sufficient rest periods between shifts; and that the rationale for all allocation decisions is comprehensively documented in the medical chart/EHR and in ways that facilitate rapid, real-time reporting as described herein. Senior leadership should provide the triage team with support staff to collect, analyze, and distribute information about the team's work. The support staff member must be allocated appropriate time and provided with appropriate computer and IT support to maintain updated databases of patient priority levels and scarce resource usage (total numbers, location, and type).

2.7 Triage

2.7.1 Responsibility of Triage Teams

A triage team reports to the medical director or physician executive. Triage teams should be implemented no later than in surge conditions. Each team is led by a Triage Leader who shall be the intensivist, hospitalist, or physician with the highest level of training in critical care on the triage team. This individual will oversee the processes of:

1. forming and educating triage team members during surge conditions, and;
2. making allocation decisions during crisis, which includes assessing all patients, assigning a level of priority for each, communicating with treating physicians, and directing attention to the highest-priority patients.

A triage team should include a physician with intensivist or hospitalist background, a representative from critical care nursing, representative from social services, a member of the ethics committee and a community member of the Ethics Committee or volunteer approved by the medical director. In the event of shortages, at a minimum a physician (intensivist or hospitalist) critical care nurse and one other member must participate.

2.7.2 Responsibility of Triage Oversight and Review Committee

The Triage Oversight and Review Committee reports to the Chief Medical Officer, or designee. The Triage Oversight and Review Committee shall decide appeals for withdrawal of scarce resources, and periodically evaluate whether the review process is consistent with effective, fair and timely application of the allocation framework. The appeal review process can happen by telephone or in person, and the outcome should be promptly communicated to whomever brought the appeal.

2.7.3 Activation of Triage Team

During crisis conditions, the triage team will be activated by the HICS. Once activated, teams will use the explicit allocation framework described in this plan to determine priority grouping for all patients eligible to receive scarce resources (see Attachment #3 - Triage Workflow for detailed process). For patients already being supported by a scarce resource, the evaluation will include reassessment to evaluate for clinical improvement or worsening at pre-specified intervals. The Triage Leader will review the comprehensive list of priority scores for all patients and will communicate with the clinical teams immediately after a decision is made regarding allocation or reallocation of a scarce resource.

2.7.4 Procedure Overview

During activation of the crisis care protocol, first responders and bedside clinicians should perform the immediate stabilization of any patient in need of critical care, as they would under normal circumstances. Along with stabilization, temporary ventilatory respiratory support should be offered to allow the triage team to assess the

patient for critical resource allocation. Every effort should be made to complete the initial triage assessment within 90 minutes of the recognition of the need for scarce resources.

Chronic ventilator patients are subject to the crisis care protocol. However, chronic ventilator patients using their own ventilators will not have their ventilators reallocated.

A patient's attending physician cares for his/her patient and performs all clinical evaluations. A triage team examines a patient's clinical data and determines the patient's level of medical need for a scarce resource (i.e., who is eligible for and/or continues to have access to a scarce resource). The protocol consists of two steps: (1) assessment of mortality risk, and (2) periodic clinical assessments ("time trials"). Based on these initial and ongoing assessments, patients will be placed in one of 4 priority groups. Priority groups will receive care beginning with the highest priority and ending with the lowest priority. As patients with higher priority enter the system, patients in lower priority groups may lose access to the resource (i.e. ventilator, ICU care).

Once the triage team is established, the team will have the following duties:

- **a)** Receive number of scarce resource available and determination of which numerical group, following the scoring process below, will have access to the resource from HICS.
- **b)** Evaluate patients in need of scarce resource (i.e. critical care, ventilatory support, medications).
- **c)** Perform reassessment at weekly intervals for two weeks and then every three days for all patients receiving a critical resource. Between these intervals, the treating team can notify the triage team of any significant change in the clinical picture, which prompts a reassessment by the triage team. Standard care will be followed between these intervals, which may include withdrawing resource prior to next evaluation.
- **d)** Advise and assist the healthcare system to carry out the mission during a public health emergency through resolution of uncertainties and disputes over the healthcare systems capacity.
- **e)** Review all triage decisions retrospectively to create a routine quality review process.
- **f)** Be involved in the real-time appeals process regarding triage decisions

The triage framework must be applied to all patients presenting with critical illness and needing a scarce resource, not simply to those with the disease or disorder that arise from the public health emergency.

2.7.5 Triage Scoring

1) Patients shall receive a Sequential Organ Failure Assessment (SOFA) score based on established guidelines. This score should be automatically calculated within the electronic medical record. See Appendix 3 for SOFA Score Scale.
2) The Glasgow Coma Scale score should not add points to the SOFA score when a patient cannot articulate intelligible words, even if this condition is due to a pre-existing speech disability or chronic ventilation. Clinicians should use clinical judgment to adjust SOFA scores downward where appropriate to account for chronic baseline levels of physiological functional impairment, including for any temporary elevation of a score or score element caused by any patient inability to access a regularly used stabilizing device or treatment (such as a CPAP or BiPAP unit, dialysis, or specific medications).
3) Using the Multi-Principle Strategy (see Table 1 below) calculate patient's score from 1-8 based on SOFA score and comorbidities
   a) Enter patient's SOFA score into the MPS Scoring system to determine score from 1-4
   b) The primary physician will perform an assessment of patient's comorbidities (see Attachment 4 - MPS Scoring/Comorbidity Table for scoring) and assign a score of 0, 2 or 4 for comorbid conditions. This will be documented in the EHR.
      a. Under crisis conditions, it is expected that physicians will be able to more accurately prognosticate about a patients' long-term chances of term survival with meaningful recovery, because the generalized resource scarcity entails that fewer people are likely to receive adequate healthcare to recover under crisis conditions than under normal conditions.

c) Using Table 1 below, calculate the MPS Score (1-8) based on the SOFA score combined with the comorbidities score.

Table 1. Multi-Principle Strategy for Allocation of Scarce Resources During a Public Health Emergency

Principle	Specification	Point System*			
		1	2	3	4
Short-term survival	Prognosis for short-term survival (SOFA score[#])	SOFA score <6	SOFA score 6-8	SOFA score 9-11	SOFA score ≥12
Long-term survival	Prognosis for longer-term survival (medical assessment of prospects for survival after hospital discharge)	…	Life expectancy <5 years despite successful treatment of acute condition	…	Death likely within 1 year despite successful treatment of acute condition

[#]SOFA = Sequential Organ Failure Assessment; note that another measure of acute physiology that predicts in-hospital mortality, such as LAPS2 score, could be used in place of SOFA, but should similarly be divided into 4 ranges.
*Scores range from 1-8, and persons with the lowest score would be given the highest priority to receive critical care beds and services.

4) After calculating the MPS Score, the score is provided to the triage team who examines the information and assigns the patient a numerical code as follows:

- #1 Highest Priority. Patients in this group have the highest level of access to scarce resources because they are most likely to recover with treatment (and not likely to recover without it) and have a moderate risk of mortality.
- #2 Intermediate Priority. They will have access to scarce resources if available after each patient in the # 1 group has received access.
- #3 Lowest Priority. Those assigned the number 3 are patients who potentially have the worst outlook for survival, even with aggressive therapy, and therefore have lowest access.
- 0 - manage without scarce resource as it is not needed at this time

If scare resources become available patients are reassessed and may become eligible for scare resource.

Priority Assignments Based on MPS Score

Level of Priority	MPS Score	Group #
Highest Priority	MPS: 1-3	1
Intermediate Priority	MPS: 4-5	2
Lowest Priority	MPS: 6-8	3
Manage without scare resource	No score – patients do not need resource	0

5) When there are not enough resources to treat an entire group with the allocated resource the following procedure is followed as a tiebreaker:

a) If further stratification within a group is required the raw MPS score can be used to differentiate among group members.

b) Finally, simple lottery, or random allocation, is used as a last resort.

6) During Crisis Allocation, patients who are receiving the allocated resource must undergo periodic assessments: at one week, at two weeks and then every three days using the identical MPS scoring system.
- **a)** The patient's attending physician performs the necessary clinical assessments involved in recalculating the SOFA and MPS Score and documents this number in the chart.
- **b)** The results of the clinical reassessments are provided to the triage team to assign a numerical code (0,1,2,3) to the patient.
- **c)** If a patient's overall MPS score is higher than patients who are awaiting the critical resource, the patient will no longer have access to that resource so that patients with a statistically higher chance of survival may benefit from the resource.

7) Procedure for Ongoing Allocation of Resource: Triage teams will make daily, or twice daily, determinations about how many priority groups can receive scare resources based on information about available resources from the HICS.
- **a)** Based on real time knowledge about the degree of scarcity of resource.
- **b)** Based on predictions about the expected volume of new cases that will be presenting for care.

8) Communication of Allocation Decisions
- **a)** Triage team will notify the Attending Physician about all decisions regarding allocation of resources.
- **b)** The Attending Physician will notify the patient/family members about the triage team's decision.
- **c)** In isolated circumstances, the triage team may assist in communication with the family.
- **d)** During all situations requiring the triage of resources, the appropriate HICS position will oversee the distribution of appropriate communication to patients, family members and the public.

9) Decision-Making Process for Withdrawing the Scarce Resource
- **a)** Occurs when an incoming group #1 patient requires the allocated resource and one or more patients in the group #2 category are currently receiving that resource. The below procedure is followed.
  - **a.** Review of MPS Scores/numerical group for all patients receiving care.
  - **b.** If #1 coded patients enter the healthcare system and are eligible for care, they are to receive that care in lieu of patients from #2 and #3 numerical groups.
  - **c.** Patients from the same numerical group as an incoming patient will not have the resource withdrawn to accommodate a patient in the same numerical group.
  - **d.** Patients in a lower prognosis group (i.e. Group #2 and Group #3) will have the resource removed to accommodate a patient in a better prognosis category. <u>Families will be notified about these triage decisions</u>.
  - **e.** Disagreement related to this redistribution should be brought to the Triage Oversight and Review Committee.

10) Process for appeals

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. On practical grounds, different appeals mechanisms are needed for the initial decision to allocate a scarce resource among individuals, none of whom are currently using the resource, and the decision whether to withdraw a scarce resource from a patient who is clearly not benefiting from that resource. This is because initial triage decisions for patients awaiting the scarce resource will likely be made in highly time-pressured circumstances.

a) Appeal of initial scoring assessment.

Appeal of the initial scoring assessment will need to be adjudicated in real time to be operationally feasible. For the initial triage decision, the only permissible appeals are those based on a claim that an error was made by the triage team in the calculation of the priority score or use/non-use of a tiebreaker. The process of evaluating the appeal should include the triage team verifying the accuracy of the priority score calculation by recalculating it. The treating clinician or Triage Leader should be prepared to explain the calculation to the patient or family on request.

b) Appeals for withdrawal of scarce resource.

i) The appeal should be immediately brought to a Triage Oversight and Review Committee.

ii) The individuals who are appealing the withdrawal decision should explain their disagreement with the decision. An appeal may not be brought based on an objection to the overall triage framework. The Triage Oversight and Review Committee should review the SOFA score, comorbidity score, overall MPS score and numerical group assignment to ensure that no errors have been made.

iii) The Triage Oversight and Review Committee should explain the grounds for the withdrawal decision that was made.

iv) The appeals process must occur quickly enough that the appeals process does not harm patients who are in the queue for the scarce resource. If this is untenable, simple verification priority scoring should be offered.

v) The decision of the Triage Oversight and Review Committee will be final.

11) Palliative care and/or alternative forms of medical intervention are provided to those who are waiting for or are not eligible for scarce resources. Goals of care conversations and review of advance directives should occur on admission and as frequently as clinically indicated.

12) Reassessments Throughout the Entire Period(s) of Allocation
The triage process requires regular reassessments of the status of the healthcare crisis, available resources, and of all patients. As new data and information become available during a pandemic, the adult allocation protocol may be revised accordingly to ensure that triage decisions are made commensurate with updated clinical criteria.

2.8 Non-Acute Care Facilities and Services

The role of non-acute care facilities, such as ambulatory care centers, clinics, hospices, home care, skilled nursing facilities, alternative care facilities, etc. is different than that of acute care hospitals during a surge event. These facilities can provide critical capacity, both outpatient and post-acute care, and may be needed to broaden their scope of care during such incidents.

If the facility has adequate capacity/resources, consider the following contingencies:

a. Extended hours

b. Conversion of space and staff from specialty care to primary care duties

c. Changes to charting and administration to enhance work flow (template charts and prescriptions for the event)

d. Changes to scheduling (e.g. cancel or re-schedule elective procedures and appointments)

e. Enhanced use of tele-medicine, telephone prescribing, and e-visits to manage workload

f. Adjust clinic flow to avoid exposing well persons to ill persons

g. Communicate and implement guidance on scarce resources (e.g. guidelines for prescribing anti-viral medications or administering vaccine)

h. Increase your normal acuity of patients to support acute care hospitals

i. Consider the utilization of volunteers to provide check-in and other services

2.9 Ethical Considerations

A. Basic biomedical ethical principles should be incorporated into decision-making regarding allocation of healthcare resources. These are:

- **Autonomy**: respect for persons and their ability to make decisions for themselves may be overridden by decisions for the greater good; however, patients must still be treated with dignity and compassion

- **Beneficence**: care providers must subordinate their personal and institutional interests and shift from those in the best interest of the patient to those in the best interest of the population as a whole
- **Justice**: equitable distribution of resources, allocation decisions applied consistently across people and across time, transparency and accountability, and fair processes and procedural justice to sustain public trust. In general, triage decisions must meet the five basic requirements outlined in the IOM/NAM 2012 publication:
- **Fair and Equitable**: process recognized as fair, equitable, evidence based, and responsive to specific needs of individuals and the population focused on a duty of compassion and care, a duty to steward resources, a duty to abide by nondiscrimination laws, and a goal of maintaining the trust of patients and the community.
- **Transparency**: in design and decision-making.
- **Consistency**: in application across populations and among individuals with reasonable modifications for disability.
- **Proportionality**: public and individual requirements must be commensurate with the scale of the emergency and degree of scarce resources (i.e. the restrictions on care should not be more restrictive than the situation requires – and this may require re-evaluation as more resources become available).
- **Accountability**: individuals making the decisions and the facilities and governments to support the processes and the providers.

B. Guiding ethical principles used in defining allocations of scare resources and proactive triage include:
   - Duty to implement distributive justice (socially just allocation of goods)
   - Duty to care: treat people with dignity and respect, and make decisions based on an individualized assessment based on objective medical evidence
   - Duty to plan: steward resources and promote instrumental value
   - Duty to transparency (in planning and implementation)

C. All crisis standards of care planning should be designed to achieve the following:
   - To create meaningful access for all patients. All patients who are eligible for ICU services during ordinary circumstances remain eligible and there are no exclusion criteria based on age, disabilities, or other factors, including those listed in Section 1.4.1 Key Points About Crisis Care.
   - To ensure that all patients receive individualized assessments by clinicians, based on the best available objective medical evidence.
   - To ensure that no one is denied care based on stereotypes, assessments of quality of life, or judgments about a person's "worth" based on the presence or absence of disabilities or other factors, including those listed in Section 1.4.1 Key Points About Crisis Care.
   - To diminish the impact of social inequalities that negatively impact patients' long-term life expectancy by keeping in mind historic disparities and inequalities.

D. Ethical principles as applied to triage raise considerations of moral equality. Triage must respect equality and human dignity in the following ways, among others:
   - **Protection and Provision for Vulnerable Populations**: Health systems should take deliberate, active steps to ensure that vulnerable or marginalized populations receive equal access to scarce resources. These should include, among other things:
     - Reaching out to organizations and services designed to serve groups with special needs or groups that are particularly vulnerable or disadvantaged
     - Ensuring access for those with disabilities, limited English proficiency (LEP), and other groups with functional needs
     - Mitigating or eliminating, as far as possible, the sense of distrust that some historically or currently disadvantaged people might feel towards the medical system in general or a tirage system in particular

- Being prepared to participate in regional or statewide plans designed to ensure that the same resources are available and in use at similarly situated facilities – a step that helps mitigate or eliminate disparities of access and distribution among facilities.

- **Disability and Return to Previous State of Health**: Some triage protocols make allocation decisions based not only on overall predicted acute-episode survival but also on quality of life after treatment. Such protocols are sometimes viewed with suspicion by individuals with disabilities who fear that they are seen as having lower quality of life than non-disabled individuals and therefore that they may be assigned lower triage priority in virtue of their disabilities. To ensure non-discrimination against individuals with disabilities, triage protocols must either not score individuals based on their quality of life after treatment, or assess at most how far treatment will return the patient to their own baseline quality of life. Decisions cannot be based on generalized assumptions about a person's disability. The mere fact that a person has diabetes, depression, an intellectual disability, or a mobility impairment, for example, cannot be a basis for denying care or making that person a lower priority to receive treatment. Treatment allocation decisions cannot be made based on misguided assumptions that people with disabilities experience a lower quality of life or that their lives are not worth living.

2.10 Special Considerations

2.10.1 Behavioral Health

It can be assumed that during any disaster or large-scale emergency, there will be an increase in psychological casualties among those directly affected, including responders, health care personnel, and members of the population who have not experienced direct impact. This increase can include aggravation of prior mental health conditions, new disorders (including PTSD, depression and substance abuse), as well as significant distress at a population level. HCSC members impacted by crisis standards should communicate anticipated or observed behavioral health needs in response to the event to the MHOAC and/or the county of occurrence's Behavioral Health Department (as needed). Each county's Behavioral Health Department should make efforts to have counselors available to address this increased demand for mental health services.

2.10.2 In-Hospital Deaths

It is anticipated that hospital deaths occurring in Tuolumne or Calaveras County during a surge event will be handled by the county of occurrence's Coroner's Office for post-mortem processing. Individual facilities are expected to contact their Coroner's Office for individual cases. If the in-hospital deaths become too numerous for the facility to handle, the HCSC can assist with operational area-wide tracking of deaths (if requested), working with Tuolumne/Calaveras MHOAC to identify support needs for storage at the facilities, and petitioning for regulatory relief regarding storage of the deceased beyond 30 days (if Coroner's Office case load prevents timely removal from the healthcare facilities). Additionally, if the surge event becomes a mass fatality incident, "Annex 13. Mass Fatality Plan" of the Tuolumne County HEPReP will be activated and followed as appropriate.

2.11 Deactivation and Recovery

The healthcare system should, at all times, be making every effort to move away from crisis standards of care back to contingency and then conventional standards. When additional resources have become available, and allocation is no longer necessary, the triage committee(s) and teams will cease operations, and will be moved to being available on standby. Once HICS command has determined the surge event has ended, through a combination of patient volume returning to pre-surge capacity and the hospital being able to return to conventional standards of care, the committee(s) and teams will stand down and the CSC plan will be fully deactivated.

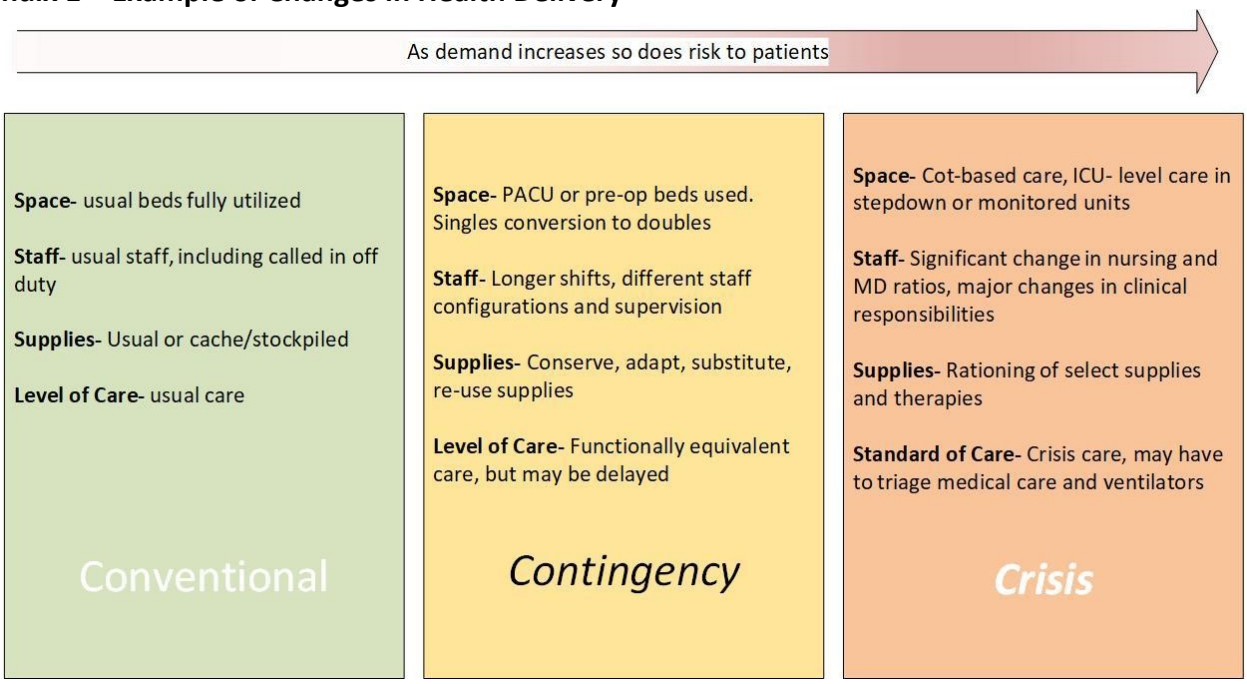
After the decision to transition from crisis to contingency or conventional standards has been made, stakeholders, media and the public needs to be notified of the rationale for transition, as well as what the transition means. All healthcare stakeholders within the coalition should be given advanced notification of any deactivation/change in the CSC plan so they can plan appropriately for the shift away from crisis standards.

To document response efforts and improve future disaster responses, the HCSC will coordinate a comprehensive evaluation of the response, including an after-action report (AAR) and implementing improvement plan items. The AAR and improvement plan (IP) should be shared with appropriate partners, including regional and state partners.

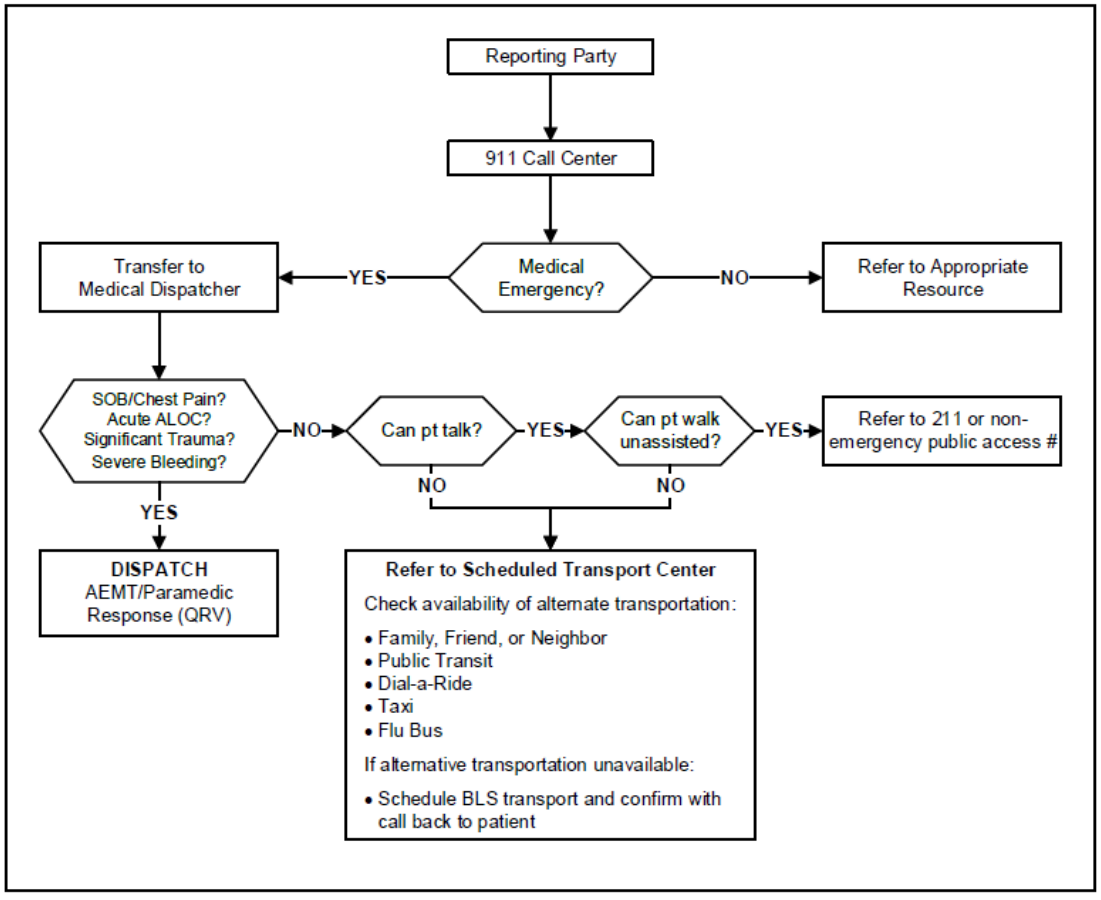
Government response partners should be aware of their role during the recovery phase, particularly regarding ongoing mental health operations for the public and for health care personnel.

3. Appendices & Attachments

3.1 Appendix 1 – Example of Changes in Health Delivery



3.2 Appendix 2 – Altered 911/EMD Triage



3.3 Appendix 3 – Sequential Organ Failure Assessment (SOFA) Score Scale

***Organ System*, Measurement**	**SOFA Score**				
	0	1	2	3	4
Respiration PaO_2/FiO_2, mmHg	≥400	<400	<300	<200 (with respiratory support)	<100 (with respiratory support
Coagulation Platelets $X10^3/mm^3$	≥150	<150	<100	<50	<20
Liver Bilirubin, mg/dL (µmol/l)	<1.2	1.2-1.9 (20-32)	2.0-5.9 (33-101)	6.0-11.9 (102-204)	>12.0 (>204)
Cardiovascular Hypotension, µg/kg/min	MAP ≥70 mmHg	MAP <70 mmHg	Dopamine ≤5 or dobutamine (any dose)*	Dopamine >5 or epinephrine ≤0.1 or norepinephrine ≤0.1	Dopamine >15 or epinephrine >0.1 or norepinephrine >0.1
Central Nervous System Glasgow Coma Score	15	13-14	10-12	6-9	<6
Renal Creatinine, mg/dL (µmol/l) or Urine output	<1.2	1.2-1.9 (110-170)	2.0-3.4 (171-299)	3.4-4.9 (300-440) or <500 mL/day	>5.0 (>440) or <200 mL/day

*Adrenergic agents administered for at least 1 hour (doses given are in mcg/kg/min).

Additional Clinical Information regarding SOFA Glasgow Coma Scale Score Criteria			
Function	**Response**	**Score**	**Criteria Score**
Best Eye Response (1 – 4)	No eye opening	1	
	Eye opens to painful stimulus	2	
	Eye opens to verbal command	3	
	Eyes open spontaneously	4	
Best Verbal Response (1 – 5)	No verbal response	1	
	Incomprehensible sounds	2	
	Inappropriate words	3	
	Confused	4	
	Oriented	5	
Best Motor Response (1 – 6)	No motor response	1	
	Extension to painful stimulus	2	
	Flexion to painful stimulus	3	
	Withdraws from painful stimulus	4	
	Localizes to painful stimulus	5	
	Obeys commands	6	
Total Score (add three subscores, range from 3 to 15):			

3.4 Attachment 1 – Crisis Standards of Care EMS System Orders

	Crisis Standards Of Care EMS System Orders	Attachment #1

NOTICE

ORDERS MUST BE CONFIRMED VERBALLY WITH AN EMS REPRESENTITIVE

The following actions shall be implemented immediately to maintain the stability of the EMS delivery system. All PSAPs, ambulance dispatch centers, EMS provider agencies and personnel shall be informed of these orders. If it is not possible to provide a copy of this form electronically, these orders may be relayed verbally to all affected agencies and personnel.

Effective Date/Time:	End Date/Time:

Affected OA(s): ☐ Tuolumne ☐ Calaveras

CRISIS STANDARD OF CARE EMS SYSTEM ORDERS

Name:	Title:
Signature:	Date/Time:

Operating as an agent of the ☐Tuolumne ☐Mountain Valley EMS Agency, I hereby authorize the following orders:

	Order #	Initial to Execute	DESCRIPTION
DISPATCH	CSO-1		**Notify all on-duty dispatch personnel of Crisis Standard of Care EMS System Orders**
	CSO-2		**Notify all on-duty EMS units/personnel of Crisis Standard of Care EMS System Orders**
	CSO-3		**Conduct a roll call to determine status and welfare of on-duty units** Contact each unit to determine status and ability to respond. This may be used following an incident when ambulance resources may have been compromised.
	CSO-4		**Place all available ambulances in service** Place all available ambulances in service and make them available for 911 system response. Dispatchers shall assign BLS ambulances to any appropriate event. Once assigned to an event, the BLS ambulance should not be canceled because of ALS availability.
	CSO-5		**Dispatch BLS ambulances to Alpha, Bravo and code 2 EMS calls** Once assigned, the BLS ambulance should remain on the event even if the call is upgraded. If ALS is required, first responder (FR)/Quick Response Vehicle (QRV) personnel should provide this service (if available).
	CSO-6		**Automatic ambulance dispatches suspended until verified by FR/QRV personnel** Ambulances should only be dispatched to calls when a patient has been identified to be in need of immediate transportation by FR/QRV personnel. Patients not in immediate need will not be transported.
	CSO-7		**Ambulance dispatches to Alpha, Bravo and code 2 EMS calls are suspended**
	CSO-8		**PSAPs may discontinue use of emergency medical dispatching (EMD) procedures** Implement Altered Triage Algorithm (Reference Attachment #2)
	CSO-9		**Implement Pandemic EMD Triage Card**

	Crisis Standards Of Care EMS System Orders	Attachment #1

	Order #	Initial to Execute	DESCRIPTION
CONTROL FACILITY	CSO-10		**Use of non-traditional patient transport resources (buses, taxis, etc.) are authorized**
	CSO-11		**Notify all hospitals of Crisis Standard of Care System Orders**
	CSO-12		**Suspend system communications on_____radio frequency** Notify all hospitals that use of the_____radio frequency is suspended and allocated for EMS command net communications.
	CSO-13		**Direct all ambulance patient destinations (including alternate care sites, clinics, etc.)**
EMS PROVIDERS	CSO-14		**Implement/continue ambulance system surge actions**
	CSO-15		**Alert all EMS command staff (managers, supervisors, etc.)**
	CSO-16		**Activity Suspension** Announce to all on-duty units that the following activities have been suspended: ☐ Off-duty times ☐ Meal breaks ☐ Inter-facility transports.
	CSO-17		**Ambulances shall transport to the closest open emergency department**
	CSO-18		**Ambulances shall contact the control facility for all patient destinations**
	CSO-19		**Replace ePCRs with interim patient care reports or triage tags** Discontinue use of ePCRs, and replace with written interim patient care reports or triage tags for patient care documentation purposes.
	CSO-20		**Move all ambulances to muster stations** All available ambulances shall be staged at the following muster locations: **RESOURCE** **LOCATION** #1 _____ _____ #2 _____ _____

Notes:

Discontinue the following orders:

Total number of actions to execute:	**Total number of actions to discontinue:**

3.5 Attachment 2 – Crisis Standards of Care Prehospital Treatment Orders

	Crisis Standard Of Care Prehospital Treatment Orders	Attachment #2

NOTICE	
ORDERS MUST BE CONFIRMED VERBALLY WITH AN EMS REPRESENTATIVE The following actions shall be implemented immediately to maintain the stability of the EMS delivery system. All PSAPs, ambulance dispatch centers, EMS provider agencies and personnel shall be informed of these orders. If it is not possible to provide a copy of this form electronically, these orders may be relayed verbally to all affected agencies and personnel.	
Effective Date/Time:	End Date/Time:
Affected OA(s): ☐ Tuolumne ☐ Calaveras	

CRISIS STANDARD OF CARE PREHOSPITAL TREATMENT ORDERS	
Name:	Title:
Signature:	Date/Time:
Operating as an agent of the ☐Tuolumne ☐Mountain Valley EMS Agency, I hereby authorize the following orders:	

Initial to Execute	General Prehospital EMS Directions
	Implement changes to accommodate BLS transport

Adult Treatment Protocols			
Initial to Execute	**Treatment Protocol**	**Altered Treatment**	**Altered Disposition**
	C-1 Pulseless Arrest	No treatment	Refer to Public Access #
	C-2 Return of Spontaneous Circulation	No change	Schedule BLS transport
	C-3 Bradycardia With Pulses	No change	Schedule BLS transport
	C-4 Tachycardia With Pulses	No change	Schedule BLS transport
	C-5 Ventricular Assist Device	No change	Schedule BLS transport
	C-6 Chest Discomfort/Suspected ACS	No change	Schedule BLS transport
	R-1 Airway Obstruction	No change	Schedule BLS transport
	R-2 Respiratory Arrest	Attempt to open & establish airway if appropriate	Refer to public access # for deceased - schedule BLS transport for all others
	R-3 Acute Respiratory Distress	No change	Schedule BLS transport
	M-1 Allergic Reaction/Anaphylaxis	No change	Schedule BLS transport

	Crisis Standard Of Care Prehospital Treatment Orders	Attachment #2

Adult Treatment Protocols (continued)			
Initial to Execute	**Treatment Protocol**	**Altered Treatment**	**Altered Disposition**
	M-3 Phenothiazine/Dystonic Reaction	No change	Schedule BLS transport
	M-5 Ingestions & Overdoses	No change	Schedule BLS transport
	M-6 General Medical Treatment	No change	Schedule BLS transport
	M-7 Nausea/Vomiting	Treat for shock if indicated - trial of PO fluids & OTC antiemetic	Schedule BLS transport
	M-8 Pain Management	No change	Schedule BLS transport
	M-9 CO Exposure/Poisoning	No change	Schedule BLS transport
	M-11 Behavioral Emergencies	No change	Schedule BLS transport
	N-1 Altered Level of Consciousness	No change	Competent adults with normal V/S, blood glucose & mental status 10 min after ALS intervention may be released-at-scene if their condition cause & solution have been identified
	N-2 Seizure	No change	Competent adults with normal V/S, blood glucose & mental status 10 min after ALS intervention may be released-at-scene if their condition cause & solution have been identified
	N-3 Suspected Stroke	No change	Schedule BLS transport
	OB/G-1 Childbirth	No change	Schedule BLS transport
	E-1 Hyperthermia	No change	Schedule BLS transport
	E-2 Hypothermia & Avalanche Resus.	No change	Schedule BLS transport
	E-3 Frostbite	No change	Schedule BLS transport
	E-4 Bites/Envenomations	No change	Schedule BLS transport
	E-7 Hazardous Materials Exposure	No change	Schedule BLS transport
	E-8 Nerve Agent Treatment	No change	Schedule BLS transport

	Crisis Standard Of Care Prehospital Treatment Orders	Attachment #2

Adult Treatment Protocols (continued)			
Initial to Execute	**Treatment Protocol**	**Altered Treatment**	**Altered Disposition**
	T-1 General Trauma Management	If shock develops & does not respond to IV bolus of 2000 ml, provide palliative care only - provide immobilization, ice packs and pain control (EMS or OTC pain meds as appropriate) - clean wounds with soap and water, remove foreign bodies/debris, irrigate with NS or clean water as available & apply dressings - signs of infection require a higher level of care	Schedule BLS transport
	T-2 Tension Pneumothorax	No change	Schedule BLS transport
	T-3 Suspected Moderate/Severe TBI	No change	Schedule BLS transport
	T-4 Hemorrhage	No change	Schedule BLS transport
	T-5 Burns	No change	Schedule BLS transport
Pediatric Treatment Protocols			
	P-1 General Pediatric Protocol	No change	Schedule BLS transport
	P-2 Neonatal Resuscitation	No change	Schedule BLS transport
	P-3 Brief Resolved Unexplained Event	No change	Schedule BLS transport
	P-4 Pulseless Arrest	No treatment	Refer to public access #
	P-6 Bradycardia – With Pulses	No change	Schedule BLS transport
	P-8 Tachycardia – With Pulses	No change	Schedule BLS transport
	P-10 Foreign Body Airway Obstruction	No change	Schedule BLS transport
	P-12 Respiratory Failure/Arrest	Attempt to open & establish airway if appropriate	Refer to public access # for deceased - schedule BLS transport for all others
	P-14 Respiratory Distress – Wheezing	No change	Schedule BLS transport
	P-16 Respiratory Distress – Stridor	No change	Schedule BLS transport
	P-18 Allergic Reaction/Anaphylaxis	No change	Schedule BLS transport
	P-20 Shock	Oral rehydration (water, electrolyte replacement fluids, etc.)	Schedule BLS transport

	Crisis Standard Of Care Prehospital Treatment Orders	Attachment #2

Pediatric Treatment Protocols (continued)			
Initial to Execute	**Treatment Protocol**	**Altered Treatment**	**Altered Disposition**
	P-22 Overdose/Poisoning	No change	Schedule BLS transport
	P-24 Altered Level of Consciousness	No change	Schedule BLS transport
	P-26 Seizure	No change	Schedule BLS transport
	P-28 Suspected Moderate/Severe TBI	No change	Schedule BLS transport
	P-34 Pain Management	No Change	Schedule BLS transport

Additions/Notes:

3.6 Attachment 3 – Triage Work Flow

Activation

1. HICS: Surge is identified and possible need for allocation of resources is identified.
2. HICS via medical director requests triage teams to begin assessments. No actions to be taken at this time. This means resources continue to be allocated as per clinical need as determined by patient's primary attending provider.
3. Crisis is identified. HICS activates triage teams to begin to allocate resources.

Allocation of Resources

1. HICS determines the remaining available resources and notifies the Triage Committees. Triage Committees determine which priority level of patients (1,2,3) will continue to have access to the restricted resource. When the resource is no longer available for all three levels of patients and patients continue to present for care, resource allocation will occur as outlined below.
2. HICS will notify hospital staff that resource allocation is occurring in order to expedite triage decisions and patient transfer within the hospital.
3. Triage teams using prescribed method will calculate MPS (Multi Principle Strategy) score for all patients. See below for triage team details.
4. Triage team to categorize the patient into the described patient triage groups (see below for triage team workflow details).
5. HICS determines the remaining available resource and notifies the Triage Committees. Triage committee uses this information about current resources available to determine what priority group will receive resources. The patients who do not fall into that determined group(s) will be excluded from critical care and alternative medical therapy or palliative care will be provided.
6. Triage team to notify primary attending physicians and HICS of specific patients who will not be allocated the resources.
7. Primary team attending physician to notify patient and/or family.
8. Appeals process can be initiated by the primary team if they deem necessary.
9. Current patients who are using resources will be re-evaluated at 7 days, then 14 days after initial allocation, then every 3 days after that.
10. If they no longer meet criteria for critical resources, the triage team will notify the attending physician who will notify the family.

If resources become available those in other priority groups may become eligible for critical resources.

Palliative care services will be available for all patients throughout this process.

Patient's Primary Attending Role

1. When surge is initially identified, the primary team's assessment of the patient is expected to be completed expeditiously for all patients at risk for intubation. This will enable triage team sufficient time to complete their assessments.

2. Primary team to review patient's comorbidities in the hospital's EHR system, ensuring all sections are filled out. If a patient does not have a certain comorbidity, primary team is still expected to document the patient does not have it.
3. Triage team will contact the primary team attending to confirm the MPS score and assign the patient to the corresponding priority group. The goal is for triage assessments to be done within 90 minutes of the process being triggered.
4. The primary team attending will notify the patient/family members about triage team's decision.
5. Appeals process can be initiated by the primary team if they deem necessary. If the primary team wants to appeal, they should communicate with the triage team immediately.
6. Primary team can consider social work or palliative care consult for assistance with difficult situations.

Triage Team Workflow

1. HICS via medical director to reach out to the head of triage committee to communicate the beginning of the health system surge to activate triage teams. This will then be communicated to triage team leaders who will communicate to their triage team.
2. HICS will be responsible for reaching out to the head of the triage committee to indicate when escalation from surge to crisis becomes necessary.
3. Individual triage team leader to activate triage process. Meanwhile patient's attending physician shall concurrently assess comorbidities and completing triage notes. Once this is completed the triage team work process can be started.
4. Guidance for Multi-Principle Strategy (MPS) score is found in Table 1.

The two rows in the table are independent point values that are then totaled. The process includes the following:

   a. Determine SOFA score, assign point value in the column header. (e.g. SOFA 10 = 3 points). MPS per SOFA score can range from 1-4. If baseline MAP is <70 remove 1 from the SOFA score calculated prior to placing into MPS score.
   b. Then, no matter the SOFA score or point total for step one, determine the comorbidity burden and assign either 0, 2 or 4 points based on existing comorbidities (e.g. cirrhosis with a MELD score > 20 = severely life limiting comorbidity = 4 additional points).

Example of how to calculate comorbidities: If a patient has more than one comorbidity that fits the categories they get one score for the highest MPS scoring item. E.g. if a patient has malignancy with a life expectancy of 6 years that counts as a "major comorbidity" and should score 2 points. If the same patient has cirrhosis with a MELD score of 28, then that counts as an "indicator of morbidity within 1 year" and therefore they score 4 MPS points. In this example the patient gets 2 MPS points for malignancy or 4 MPS points for cirrhosis. Given that we pick the highest number the only comorbidity score will end up being 4. <u>We do not count the 2 anywhere at this stage</u>.

   c. Total the two point values (in our example above 3 + 4 = 7). I.e. the points for SOFA score (must be between 1-4) + points for comorbidities (must be either 0,2, or 4).

d. Group into priority groups 1,2,3 and 0 according to this total.
e. The maximum point total for these additions is 8. If it is more than 8, recheck your calculations.

5. If not told otherwise by HICS at this point, communicate the result to the primary team attending. There must be a confirmation by the primary attending of the result, a "warm handoff" is preferred.
6. If communicated to triage team by HICS that a certain priority group has resources only for a limited number of patients then the team will proceed to apply the following as a tiebreaker:
   a. If further stratification within a group is required the raw MPS score can be used to differentiate among group members.
   b. Finally, simple lottery, or random allocation, is used.
7. Reassessments of patients including recalculation of their MPS Score will be done periodically. As a base standard the timeline has been established to be at 7 days, 14 days and every 3 days after that. These intervals can be adjusted as necessary based on the nature of the surge event. The hospital's EHR system can be configured to trigger a reassessment at these time points.
8. Triage team leader is responsible for running a triage report (a list of everyone's priority groups) every day to ensure that patient's current priority group is still accurate based on the latest automatically calculated MPS score. If there is a discrepancy between the priority group and MPS score, then triage team leader should start recalculation of MPS.
9. If a patient's MPS score changes upon reassessment the patient may be assigned to a different priority group and resources reallocated within the new groups.

3.7 Attachment 4 – MPS Scoring/Comorbidity Table

MPS Scoring/Comorbidity Table

1. Alzheimer's or Related Dementia Scoring Scale

DEMENTIA SEVERITY	STAGE	CHARACTERISTICS	COMORBIDITY SCORE
Normal Aging	1	No subjective memory deficits	0
Age associated memory impairment	2	Subjective memory deficits. Forgetting names. No objective memory deficits	
Mild cognitive impairment	3	a) Gets lost going to unfamiliar locations b) Poor work performance c) Concentration deficit	
Mild Dementia	4	IADLs become affected: i.e. bill paying, cooking, cleaning, traveling	

Moderate Dementia	5	a) Cannot survive without assistance b) Can't recall major relevant aspects of life e.g. address, names of close family. Needs help selecting proper attire. c) DO NOT NEED HELP with toileting or eating	2
Severe Dementia (moderately-severe)	6a	Needs help putting on clothes	4
	6b	Needs help bathing	
	6c	Needs help toileting	
	6d	Urinary incontinence	
	6e	Fecal incontinence	
Severe Dementia	7a	Loss of verbal abilities – speak 5-6 words during day	
	7b	Speaks only 1 word clearly	
	7c	Can no longer walk	
	7d	Can no longer sit up	
	7e	Can no longer smile	
	7f	Can no longer hold up head	

2. Heart Failure Classification

CLASS	NYHA FUNCTIONAL CLASSIFICATION	Comorbidity Score
I	Patients with cardiac disease but without resulting limitations of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea or anginal pain	0
II	Patients with cardiac disease resulting in slight limitation of physical activity. They are comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea or anginal pain.	
III	Patients with cardiac disease resulting in marked limitation of physical activity. They are comfortable at rest. Less than ordinary physical activity causes fatigue, palpitations, dyspnea or anginal pain.	2
IV	Patients with cardiac disease resulting in inability to carry on any physical activity without discomfort. Symptoms can occur at rest without any physical activity.	4

3. Other Cardiac Comorbidities

	Comorbidity Score
Coronary artery disease with stenting or CABG	0
Severe inoperable multi-vessel CAD	2
Unwitnessed cardiac arrest with delayed or no CPR	4

4. Chronic Lung Disease Classification

A. Chronic Obstructive Pulmonary Disease (COPD)

Stage	Severity	FEV1 % predicted	Comorbidity Score
GOLD 1	Mild	≥80%	0
GOLD 2	Moderate	50 – 79%	2
GOLD 3	Severity	30 – 49%	4
GOLD 4	Very Severe	<30%	

B. Restrictive Lung Diseases

Severity	TLC % Predicted	Comorbidity Score
Mild	70 – 79%	0
Moderate	60 – 69%	2
Severe	<60%	4

C. Chronic Hypoxic Respiratory Failure

Severity	Supplemental O2 Requirement	Comorbidity Score
Mild	≤2 LPM	0
Moderate	3 – 4 LPM	2
Severe	>4 LPM	4

D. Chronic Hypercapnic Respiratory Failure

Severity	Baseline PaCO2	Comorbidity Score
Mild	>50 mmHg	0
Moderate	50 – 60 mmHg	2

Severe	>60 mmHg	4

5. Chronic Kidney Disease Classification

GFR Category	GFR	Comorbidity Score
Stage I	>90	0
Stage II	60 – 89	
Stage III	30 – 59	
Stage IV	15 – 29	
Stage V (*usually on dialysis*)	<15	2

6. Cirrhosis Classification

MELD	Comorbidity Score
< 20	0
≥ 20	4

7. Malignancy / Cancer

Varies depending on cancer type.

Prognosis	Comorbidity Score
> 10 year survival	0
< 10 year survival	2
Metastatic cancer receiving only palliative treatments	4