As Maine EMS responds to the COVID-19 pandemic, we have been forced to prepare to enter into standards of care that are unfamiliar to many of us. The COVID-19 pandemic brings with it the threat of not only a sudden, rapid surge of critically-ill patients but as we “flatten the curve”, a prolonged response to critically-ill patients across the state which could lead us toward crisis standards of care if we are not adequately resourced. The goals of this white paper are to:

1. define the standards of care,
2. discuss what triggers us to enter those standards, and
3. review the principles that we must consider while planning our response across each standard in the context of our EMS response to the COVID-19 pandemic.

Standards of care fall along a continuum of three stages, reflecting the incremental surge in demand relative to available healthcare resources:

1. **Conventional** care is everyday healthcare services.
2. **Contingency** care arises when demand for medical staff, equipment, or medications begins to exceed supply. Contingency care seeks functionally equivalent care, recognizing that some adjustments to usual care are necessary.
3. **Crisis** care occurs when resources are so depleted that functionally equivalent care is no longer possible.

When we start moving across the continuum from conventional to crisis standards of care, there is an associated increase in morbidity and mortality. As the resources become so depleted that we cannot provide functionally equivalent care (as noted above), our goal of taking the best care of the individual must shift to that of taking the best care of the community, i.e. provide the greatest good for the greatest number. This means that care may need to be rationed. This concept is one that causes unease for us as healthcare providers. We are trained to do all that we can for each and every patient; the thought of having to make decisions regarding who does and does not get what we know to be conventional standards of care causes a great deal of inner conflict. While it is essential to work as hard as possible to prevent the need for altered standards of care, once crisis standards must be adopted, healthcare providers must have a corresponding change in viewpoint and recall that the system’s focus is shifting from care of the individual to care of a community.

The guiding principle in planning for pandemics such as this one is to strive to never need to enter crisis standards of care. In order to accomplish this, the impact of shortages (i.e.

---

equipment, personnel, hospital beds, medications) must be minimized. Preparation is paramount but sometimes it is not enough. As we may be forced to move across the continuum, we must strive to save the most lives possible and have to recognize that some patients, who otherwise would have survived during conventional and contingency standards of care, will not in crisis standards of care.

Understanding the Standards of Care Continuum for EMS

Conventional

Pre-Pandemic/Normal Response
AND
Phase One of the Pandemic Response Protocol
- MEMS Trigger: Incidence of disease
- Standard conventional care as well as disease-specific treatment protocols with increased precautions (more PPE)
- Increased screening mechanisms through EMD
- No changes to transport decisions

Contingency

Phase Two of the Pandemic Response Protocol
- MEMS Trigger: Widespread disease in Maine communities and strain on the hospital system
- Functionally equivalent care
- Specialized protocols for illness-severity screening
- Assess/No-transport option in select cases with OLMC discretion

Crisis

Phase Three of the Pandemic Response Protocol
- MEMS Trigger: Widespread disease in Maine communities and strain on the healthcare system, including EMS
- Functionally equivalent care is NO longer possible
- Protocol 36 with EMD is activated
  - Tiered response alterations
  - Delayed response
- In-home assessment and treatment/no-transport of mild-to-moderately ill patients

Increased Demand on Hospitals and EMS Services
Increased Risk to Patients

What triggers us to move from one standard to the next must be clearly spelled out. Again, we want to do all that we can to avoid entering crisis standards of care. What triggered Maine EMS to enter Phase 1 of the Pandemic Response Protocol were the first reported cases of COVID-19 in our state. Here, conventional care continues with the goal of protecting the EMS workforce. Phase 1 also has some COVID-19 specific care guidelines aimed at minimizing risk to EMS providers. Phase 2 of the Pandemic Response Protocol was activated when widespread disease was identified in Maine communities with an anticipated strain on hospitals. The goal of this phase has been to continue to protect the EMS workforce and to provide the option of an assess/no-transport disposition for mild-to-moderately ill COVID-19 patients to decrease the burden on hospitals. This is done in conjunction with on-line medical control so as to have minimal impact on patient outcome. Phase 2 falls in the contingency standards of care. As the system becomes more stressed and we see effects on both hospitals and the EMS systems, Phase 3 may be triggered. Prior to activation of Phase 3 of the Pandemic Response Protocol,
hospitals and the EMS systems will have to have exhausted their attempts at mitigating surge via various strategies within their own facilities/systems. Phase 3 will prompt the activation of the International Academy of Emergency Dispatch’s Protocol 36 (The Pandemic/Epidemic/Outbreak Protocol). This will alter the EMS response to certain Alpha-, Charlie- and may even encroach on Delta-level calls at the height of the pandemic. Careful guidance on how to implement this will be scripted with attention to the key elements of crisis standards of care planning.

As we plan for entering altered standards of care and are faced with the stark reality that many of our patients may die, there are five key guiding elements:\(^1\)

1. **Ethical grounding:** the core ethical principles of fairness, duty to care, duty to steward resources, transparency in decision-making, consistency, proportionality and accountability must all be adhered to.

2. **Engagement, education, and communication** are key to ensure the legitimacy of the process and the resulting standards so as to achieve the best possible results. Healthcare leaders must be proactive, honest, transparent and accountable when communicating the state for their institutions and the system as a whole. Leaders must also consider the physical and psychological effects of working under crisis standards of care conditions. Continued two-way communication and support are crucial to maintain the workforce during such a response.

3. **Legal considerations** are broad. Protection of the public’s health and respecting individual rights must be considered. Healthcare workers will need adequate guidance and legal protections and will need to be able to follow all relevant statutory changes that may occur during crisis standards of care.

4. **Indicators, triggers, and responsibility** should be clearly communicated and outlined. For instance, indicators and triggers to each phase of the Maine EMS Pandemic Response Protocol are listed and the responsibility of the providers during each phase are subsequently outlined via the protocol. As changes can rapidly occur in the pandemic setting, it is essential the providers maintain situational awareness, have clear lines of communication, authority and responsibility.

5. **Evidence-based clinical operations** may change frequently as the pandemic evolves and more data is gathered. As SARS-CoV-2 behaves so differently from other diseases that we have encountered in the past, prior clinical-decision support tools are often inadequate to guide us but may be relied upon early in the pandemic until more data is gathered.

Crisis standards of care are applied when a pervasive or catastrophic disaster make it impossible to meet usual healthcare standards. We have to do our best to avoid entering crisis standards of care. Maine EMS has been working diligently to provide guidance, phased protocols and other resources to mitigate the need for crisis standards of care. If we are forced to move along the continuum of standards of care, we assure you that we have been and will continue to curate our response with ethical, legal, and evidence-based standards. We will maintain high levels of communication, reaching out and keeping our providers updated and engaged as we continue to learn about this pandemic together.