What are crisis standards of care (CSC), and how do they relate to COVID-19?

- CSC occur when a disaster or epidemic results in sustained resource shortages that are severe enough to require a change in the usual manner of health care delivery that may increase the risk of poor outcomes. **CSC decisions occur at the institutional level and do not require a formal policy declaration.**
- CSC decisions take into account the needs of the community, not just the individual—i.e., the "greatest good for the greatest number."
- Care is provided on a spectrum. Conventional care is the first and best option; contingency care (functionally equivalent care—perhaps using a different medicine to accomplish the same goal) is the next best; and crisis care occurs when resource shortfalls cannot be addressed without a risk of poor outcome for individual patients.
- CSC should be a last resort. Health care providers should do everything possible to avoid crisis conditions by getting resources, adapting resources, or moving patients to facilities where there are more resources is a core goal.

What resource shortfalls might lead to crisis conditions during COVID-19?

- **Staff**, particularly those with specialized training like critical care.
- **Supplies**, such as medications, N95 masks, dialysis equipment, ventilators, beds, and cardiac monitors.
- **Space**, if there are too many patients for the hospital to accommodate.
- It is important to be aware of when supplies are scarce but could still be preserved before they run out.

How can these shortfalls be addressed?

- Some resource shortfalls can be addressed through adaptation of practices; others may require rationing decisions to be made.
- Strategies include substitution of similar supplies; conservation of existing resources (e.g., smaller doses, restrictions on use); adaptation of one resource for another purpose (e.g., using anesthesia machines as ventilators); re-use of resources (e.g., oxygen masks); and, in the most extreme situations, re-allocation of a resource from a patient with a poor prognosis to one with a better prognosis. Such re-allocation is highly unusual—most rationing involves giving only a portion of treatment to many people (e.g., giving dialysis twice instead of three times per week, or providing outpatient care to selected patients who would be admitted under conventional circumstances).
What is the role of health care providers in implementing CSC?

- Any provider who must make a resource allocation decision that is outside conventional practice should consult a critical care or other expert for advice and support.
- Health care systems should clearly describe to providers recommendations for “best practices for resource use” in order to reduce "ad hoc" provider decisions.
- When crisis conditions exist, clear communication and management of expectations with the care team, patients, and families is required to minimize distress.
- Consistency in decision making by providers, both within a facility and at the local/regional level should be a key goal. "Load balancing" promotes a consistent level of care across the area and is recommended during crisis conditions.
- Providers should be familiar with the availability of resources, facility plans, principles of triage, and especially the need to fairly, legally, and ethically allocate scarce medical resources under crisis conditions.
- Providers should be aware that most resource decisions surround medical futility and how best to "stretch" a resource (e.g., dialysis) and do not involve "taking" resources from one patient to give to another.
- Most prognostic scoring systems (e.g., SOFA) perform poorly in COVID-19 and should only be used in accord with published or adopted guidelines within a facility.

What are the core values that should guide decision allocation?

- **Fairness**—treating each patient with equity and evaluating them in the same way
- **Duty to care**—for each patient, without bias, to the best of your ability
- **Duty to steward resources**—to do the greatest good for the greatest number
- **Transparency**—to have shared assumptions, processes, and documentation
- **Consistency**—to provide a consistent level of care within a facility and region
- **Proportionality**—to only restrict care to the degree that we have to, no more
- **Accountability**—to engage experts as needed and document our decisions and process

CSC decision-making guidelines for health care providers

- Understand the potential resource decisions that may rest on you and determine who you will call for assistance when you have questions or face uncertainty.
- Assess prognosis based on the best available evidence.
- Consider the amount of resources required, duration of use, and potential benefit.
- Do not consider disability, age (unless a prognostic factor), race, gender, or other non-medical factors in your decisions.
- Only consider essential worker or other status when these designations are part of a community/state plan (e.g., priority access to vaccine for health care workers is ethically very different from priority access to critical care).
- Try to incrementally reduce access to resources whenever possible, avoiding giving all to some and none to others by spreading/stretching the staff or resource.
- Do not assume that you know what a patient would want without hearing it from them directly.

This document was authored by Dan Hanfling, John Hick, Rick Hunt, and Eric Toner, drawing on evidence-based reports from the Institute of Medicine (now National Academy of Medicine). To learn more, visit NAM.edu/CSC