The Crisis in Crisis Standards of Care

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The coronavirus disease (COVID-19) pandemic has raised the possibility of U.S. hospital capacity-particularly critical care capacity-being outstripped by demand. Facing this existential threat, ethicists and medical leaders across the country have developed crisis standard-of-care plans to guide the allocation of scarce resources should these doomsday scenarios come to pass (1). To date, no U.S. hospital has reported enacting a crisis allocation plan, but with cases again rising in some regions of the country we could again come to a time when implementing these plans become necessary. Unfortunately, a lack of national leadership and public consensus on unresolved ethical and legal issues, as well an underappreciation of the technical challenges in using these plans, make implementation-even when they become needed-unlikely. The result may be misallocation of scarce resources and increased avoidable deaths.

Unresolved Ethical Debates

The leading crisis triage frameworks incorporate several patient factors into multiprinciple frameworks to maximize the population benefit (2). These include factors such as short-term and long-term mortality risk as well special circumstances such as



pregnancy or healthcare worker (HCW) status. But despite painstaking efforts by ethicists and health policy experts to make plans fair and unbiased, critics have continued to label them as flawed or unjust. Consideration of severe comorbid illnesses-a mainstay of crisis triage plans for years-have recently been assailed as discriminatory against the disabled or as a backdoor attempt to disadvantage the elderly (3). Some advocates for racial justice contend that because minority communities experience greater rates of chronic medical disease-at least in part because of systemic racismconsidering these conditions in allocation plans unwittingly amplifies racial inequality (4). In response, a few hospitals have amended allocation plans to factor in racial or economic disadvantage. Although many may favor this idea, the country's divided opinions on how to address disparities make it almost certain that these allowances will draw outcry from others. Even special considerations for HCWs have proved contentions (5), with some seeing priority for HCWs as a simple matter of reciprocity, or preserving their instrumental value in fighting the pandemic, and others arguing that it is self-serving and would increase public distrust of the medical profession. Unfortunately, without widespread public consensus or clear national political leadership on these issues, many hospital leaders may believe they do not have the standing to implement contentious plans.

Underappreciated Practical Issues

Apart from ideological controversies, inadequate attention has been paid to the technical challenges of operationalizing these plans. In fact, the sophisticated scoring schema of multiprinciple allocation plans may just be too complicated to use in a real-life crisis. For example, if medical comorbidities are to be considered, we must acknowledge the disconnect between how these conditions are defined in crisis plans and how they appear in medical records. Allocation plans tend to define comorbid conditions in a manner that is either too granular or too subjective. For example, my state's (Pennsylvania) original crisis allocation plan asked crisis triage teams to assess for several very specifically defined diagnoses (e.g., Class III New York Heart Association heart failure or chronic obstructive pulmona ry disease with a forced expiratory volume in 1 second of <25%). But these conditions are rarely documented with such precision in the written or electronic medical records. Conversely, the updated Pennsylvania plan eliminated objective definitions of comorbidities altogether and substituted entirely subjective definitions such as "advanced dementia" or any condition that makes "death likely within 5 years." Without an effort to align crisis plan definitions to the realities of the medical record, crisis triage teams responsible for assigning allocation scores will be left to either make arbitrary judgments or avoid them altogether.

Another technical issue involves the availability and reliability of patient data for short-term mortality prediction. Almost all allocation plans use a short-term mortality risk predictor—such as the Sequential Organ Failure Assessment (SOFA) score—to help direct resources toward those likely to survive an acute illness and away from those whose acute illness is so advanced that death is nearly certain. But the SOFA, the prediction tool most often incorporated into crisis plans,

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requires six components. Many of these components are not checked routinely or regularly in hospitalized patients. Given that allocation frameworks would apply to all hospitalized patients-not just those ill because of COVID-19-and that it is impossible to predict if, or when, a given patient may develop a need for critical care resources, these data will need to be captured on all patients from the moment they present for hospital care. This means that hospitals need to develop explicit plans to routinely acquire and regularly repeat the tests necessary to complete these scores or leave triage officers making life or death allocation decisions with missing or outdated information. In addition, there are serious concerns about the validity of these tools for predicting death in a respiratory pandemic. The SOFA likely overpredicts mortality in isolated respiratory failure not associated with other severe organ dysfunction (6) and the neurologic measure (the Glasgow Coma Score) was designed to assess consciousness in trauma or brain-injured patients and performs poorly in medical patients or those receiving sedation (as most patients receiving mechanical ventilation would).

Fear of Legal Liability

Finally, unresolved questions on the legality of crisis allocation plans will give many clinicians and hospital administrators pause. Even though they are theoretically acting according to guidelines, clinicians who directly participate in triage decisions cannot count on protection from civil, or even criminal, liability. Experts suggest the possibility of legal consequences for those participating in crisis triage is low (7), but the mere threat may deter many from acting. Current federal and state statutes offer some protection but may not cover so-called "willful" or "wanton acts" such as unjustifiably withholding life support therapies-the essence of crisis allocation plans. Only the state of Maryland has created a statute that explicitly gives healthcare providers immunity for good faith acts performed in a public health emergency.

Creators of crisis triage plans have an ethical and moral duty to create plans that are as fair and just as possible. However, there is an equally strong imperative to create plans that are workable and can be fully implemented. Otherwise, crisis plans (8) risk becoming nothing more than empty academic exercises. Crisis plans using complex patient data may make allocation decisions theoretically more precise, but they are not useful if they do not comport with the realities of clinical practice. In fact, it is not even clear that complex allocation schema result in more public support than simpler allocation approaches (9). Simpler approaches, such as prioritization based solely on age or life-cycle, may be more practical, enjoy more widespread public support than many assume, and have the advantage of minimizing variation in application. Finally, if we expect physicians to implement these difficult allocation decisions without fear of legal repercussions, we must lobby states to write more explicit legal protection for the actions of crisis triage teams.

In the end, there may be no perfect crisis allocation schema. And it is likely too late to change our approach on crisis standards for this pandemic. Hopefully, public health conditions will never degenerate to the point at which hospitals and clinicians must consider applying crisis standards of care. Previous experience with the pandemic suggests that the sheer unpalatability of these plans has driven increases in capacity not previously believed possible. On the other hand, if circumstances do get worse, it is unclear whether those who will be called on to act have the plans that they need.

Author disclosures are available with the text of this article at www.atsjournals.org.

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