

## ***Addressing Shortcomings in Contingency Standards of Care***

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### ABSTRACT

During a crisis, when healthcare capacity becomes overwhelmed and cannot meet regular standards of patient care, crisis standards of care are invoked to distribute scarce hospital space, staff, and supplies. When transitioning between conventional standards of care and crisis standards, hospitals may have to manage resources under scarcity constraints in an intermediate phase defined as the contingency phase. While much attention has been paid to the ethics of crisis standard of care protocols, contingency measures were more widely implemented, though little exists within the literature on the ethics of contingency measures or a clearly explicated contingency standard of care. This paper addresses three ethical issues with the current contingency response to COVID-19: the lack of formalization, the risks of using short-term solutions for prolonged contingency shortages, and the danger of exacerbating health disparities through hospital-level resource allocation. To mitigate these ethical issues, I offer recommendations for reimagining resource allocation during contingency standards of care.

**Keywords:** Contingency, Crisis Standards of Care, Resource Allocation, COVID-19, Public Health

### INTRODUCTION

When transitioning between conventional standards of care and crisis standards, or in situations where shortages do not immediately threaten care delivery, hospitals may have to manage scarce resources in an intermediate phase, known as the “contingency” phase.<sup>1</sup> While much attention has been paid to the ethics of crisis standards, less literature covers the ethics of contingency measures or a clearly explicated contingency standard of care. Many states and hospital systems do not have contingency standards of care to dictate allocation absent an event triggering crisis standards. Crisis standards of care, used when healthcare capacity becomes overwhelmed and cannot meet regular standards of patient care, reflect ethical priorities relevant in times of shortage or other emergencies. These priorities include saving the

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most lives, the stewardship of scarce resources, and justice relating to equitable resource distribution.<sup>2</sup> Crisis standards of care delineate specialized allocation protocols and triage decision-making bodies at the institutional or state levels. Crisis standards of care require formal activation at the state level, and in the absence of clear triggers or governmental willingness to use them, hospitals may adopt informal strategies to manage allocation in the form of contingency measures.

The contingency phase is defined by two simultaneous goals: prevent or stall crisis-level scarcity by managing limited resources and providing patient care that is functionally equivalent to usual care.<sup>3</sup> In other words, allocate scarce resources with no significant health consequences to patients. However, this is an unrealistic expectation: meeting a patient's medical needs and allocating resources on the basis of scarcity instead of medical indications can be at odds, creating an ethical tension. This paper addresses three ethical issues with the current contingency response stemming from this tension: the lack of formalization, the risk of using short-term solutions for prolonged contingency shortages, and the danger of exacerbating health disparities through hospital-level resource allocation. To mitigate these ethical issues, I offer recommendations for reimagining resource allocation during contingency standards of care.

#### I. Lack of Formalization

One shortcoming of current contingency measures is that they fail to meet the same level of procedural detail and clarity as crisis standards. The early COVID-19 surges in Italy and France demonstrated the pitfalls of bedside allocation in the absence of procedural guidance. The acute scarcity of critical care resources forced doctors in these countries to make allocation decisions at the bedside, which often resulted in de facto age-based allocation as well as experiences of moral distress and shame among providers.<sup>4</sup> In France, medical allocation guidelines and statistics were never released to the public, raising concerns over the role of transparency in implementing crisis standards and triage guidelines, and causing the public to question the trustworthiness of provider triage.<sup>5</sup> Though many states in the US have crisis standards of care that can be implemented in the case of a large-scale triage event, these measures vary widely. A 2020 review of 31 crisis standards of care in the US found that only 18 contained strong "ethical grounding," 28 used "evidence-based clinical processes and operations," 21 included "ongoing community and provider engagement, education, and communication," and 16 had "clear indicators, triggers, and lines of responsibility."<sup>6</sup>

The need for standardization, public transparency, and guidelines for crisis standards of care to prevent bedside allocation has been widely recognized. However, these issues remain unresolved by public policy or legislative efforts during the contingency period before (or after) crisis standards apply. A recent public health study that observed triage team members in a high-fidelity triage simulation highlighted the challenges of making equitable frontline allocation decisions.<sup>7</sup> In the simulation, participants nudged patient priority status up or down depending on what they subjectively identified as morally relevant factors. Through the simulation, participants reported difficulty separating implicit biases about patient characteristics from their clinical judgment. In the absence of formal institutional or regional guidelines for allocation during contingency-level shortages, there are few to no procedural safeguards against biased, ad hoc, and non-transparent rationing. Without formalized or standardized contingency allocation guidance, providers are left to make bedside allocation decisions that are susceptible to individual biases and patterns of unintended discrimination.

An example of this susceptibility is seen when hospitals allow patients who no longer benefit from ICU resources to continue occupying ICU beds. This is based on a first-come-first-served (FCFS) approach to bed allocation. FCFS is often a default for patient intake, which led to disparities in care access during the early

COVID-19 pandemic. Media reports of hospitals with “plenty of space” being unwilling to accept patients from overwhelmed, lower-income hospitals illustrate that the FCFS default advantages those who could show up first to a particular hospital: often privileged, well-funded healthcare systems that were inaccessible to low-income communities.<sup>8</sup> FCFS is blind to several morally relevant factors, including the likelihood of survival to discharge, reciprocity (i.e. prioritizing healthcare workers), and varying degrees of access to healthcare. Therefore, it inappropriately privileges those in proximity to healthcare systems or with social connections enabling greater initial access to care.<sup>9</sup>

During crisis standards of care, excessive mortality that would result from FCFS is mitigated through formalized system-wide triage protocols based on current patient health status and potential benefit from resources. Crisis and contingency standards may provide liability coverage for providers who reallocate critical care beds away from those who no longer benefit during periods of scarcity. This liability coverage shifts bed allocation away from an FCFS model, but only if the policy is well-defined, clearly established, and known to providers. Without a formal system to guide the process or transition from the usual method of allocation to the contingency period, contingency decisions about who gets a scarce resource may continue to operate on an implicit FCFS basis, even when approaching crisis levels of scarcity. Additionally, these decisions will fall unsustainably on individual providers or transfer center workers, leading to moral distress on the frontlines when hospitals are already strained.

Lessons from the crisis and contingency responses during COVID-19 can improve future contingency responses. There are multiple ways of achieving equity during contingency allocation, ranging from hospital-level to state-level policy changes. State-wide policies and interventions to facilitate resource-sharing can relieve some of the scarcity burdens that hospitals may face during the contingency period. For example, moving ICU patients to lower levels of care once they have sufficiently recovered is a challenge for doctors, who often call other hospitals to find open beds. In these situations, providers who do not move patients who no longer benefit from ICU beds unknowingly reinforce the FCFS system in which those who arrive first keep the scarce beds, while those who arrive later or wait for one are disadvantaged by having limited access to them. State-wide patient transfer centers, often facilitated by state public health departments, present an alternative by balancing patient needs and bed distribution more equitably and efficiently than individual physicians do, as demonstrated following COVID-19 surges in hospitalization.<sup>10</sup> These centers aid not only in allocating open tertiary care beds, but also in identifying open beds at lower levels of care and assisting physicians with transferring out patients who can be safely downgraded and no longer benefit from tertiary care resources. However, the simplest solution is to encourage the creation of ethics guidance or protocols for contingency allocation at the hospital level. In hospitals, institutional ethics guidance can help providers navigate difficult decisions and conversations with patients. When providers face time-sensitive allocation decisions, like the allocation of open ICU beds, the guidance would be a useful tool for making transparent, principled, and ethically justified allocation decisions in real-time to mitigate the risk of ad hoc or implicit rationing.

## II. Unsited for Prolonged Resource Shortages

Secondly, neither contingency nor crisis standards are currently designed to respond to prolonged strains on the healthcare system. Since the start of the pandemic, a prolonged period of staffing shortages began and is projected to persist.<sup>11</sup> However, both crisis and contingency standards assume that the system will eventually return to conventional standards of care. For example, as a contingency or crisis standard, many hospitals deferred elective surgeries to preserve limited resources for emergency and life-saving procedures. Massachusetts, for instance, issued a public health emergency order that required hospitals

to defer 50 percent of all non-essential and non-urgent (elective) surgeries. This order demonstrates the use of this contingency measure in response to prolonged staffing and bed shortages.<sup>12</sup> However, the deferral of elective procedures can result in adverse long-term community health consequences. Medical conditions typically addressed through elective surgery, such as joint replacement surgeries for osteoarthritis patients, may worsen if delayed. This can result in greater numbers of acute emergencies, the need for more complex surgical procedures later, increased reliance on pain medications, and longer recovery times.<sup>13</sup> Without a greater understanding of long-term complications in community health, existing contingency strategies, such as the deferral of elective surgeries, may be unsuitable for prolonged shortages.

This becomes a greater threat to patient safety when contingency measures inappropriately take the place of crisis standards, risking the long-term implementation of emergency measures designed for temporary use. Although some state emergency planning documents identify indicators and triggers for activating contingency and crisis operations,<sup>14</sup> this transition is not always clear in action. For example, New York did not implement crisis standards of care during the early COVID-19 pandemic despite being one of the hardest-hit cities in the US.<sup>15</sup> Other states, including California, Texas, and Florida, did not activate crisis standards of care, leaving hospitals to implement informal contingency measures that ultimately required allocation strategies very similar or identical to many crisis standards of care protocols.<sup>16</sup> Due to the hesitance to activate crisis standards, ad hoc contingency measures and bedside decision-making prevailed over formal triage protocols. If contingency measures are not set forth in objective documents and are inappropriately used in the place of crisis standards, these short-term measures may result in an unfair or non-transparent distribution of scarce resources. When shortages in space, staff, or supplies jeopardize the ability to provide necessary care for critically ill patients under a conventional standard of care, failures to activate crisis standards risk the inappropriate use of ad hoc contingency measures in their place.

With clear contingency standards of care, the duration of an ad hoc approach could be limited. Crisis standards are defined and activated at the regional or state-wide level, but outside of hospital-specific resource limitations, there are generally no standardized indications or triggers for transitioning into and out of contingency measures. Leaving contingency needs to individual hospitals may seem beneficial but defining the contingency period at the hospital level and the crisis period at the state or regional level blurs the line about when it is appropriate for decision makers to activate crisis standards, risking delayed activation or failure to activate them at all. Therefore, it is important that state policies implement automatic triggers for activation that clearly delineate between contingency and crisis responses.<sup>17</sup> Automatic triggers based on validated metrics like remaining available resources can inform the appropriate decision makers about when they *must* activate crisis standards. These triggers should be transparent to the public, validated, and updated over time with evolving data. These automatic triggers would prevent confusion, inconsistent guidelines, and inequitable contingency allocation at the hands of distressed providers when crisis standards are needed. Defining when to begin crisis standards could help limit the length of the contingency period. This would protect against the inappropriate application of contingency measures to crisis-level scarcity and prolonged shortages that they could not sustainably ameliorate.

### III. Potential to Exacerbate Health Disparities

Inconsistencies in contingency allocation open the door to disparities in care and unequal distribution of scarcity burdens among different communities based on their location or health needs. This is a concern because it is unclear whether contingency measures can meet their goal of achieving functionally

equivalent patient outcomes when resource allocation must be balanced with patient-centered care.<sup>18</sup> The care under contingency standards is meant to be functionally equivalent to regular care. The definition assumes (or may wrongly suggest) that any contingency strategy in place to avoid critical scarcity has no significant impact on patient outcomes. While functional equivalence is attainable, there is currently little research into which contingency measures achieve functionally equivalent outcomes and which patient groups may be disproportionately affected by harmful resource allocation strategies. Although the transition from contingency standards to crisis standards is defined by the inability to provide functionally equivalent care, the difference in practice may merely be a distinction between visible, immediate sacrifices to patient well-being during crises and less-obvious, long-term decrements in community health due to protracted contingency care alterations.

Two common contingency measures are cause for concern over disparate patient outcomes and the attainability of functional equivalence. First, restricting emergency room visits by the patient's degree of need has worrying consequences. In late 2021 and early 2022, hospitals in Massachusetts faced widespread staffing shortages, leading to an emergency order that restricted emergency visits to emergency needs.<sup>19</sup> While this order is a reasonable method of allocating limited staff in the emergency department during severe shortages, it is doubtful that the outcomes of this restriction were equivalent to usual care. Health issues that are soon-to-be emergencies are filtered out until they worsen, resulting in patients overflowing to urgent care clinics or presenting to ERs with more severe forms of sicknesses later on. Given the empirical evidence demonstrating ER treatment and admission disparities that disadvantage Black and Hispanic patients, such a measure would only exacerbate these disparities by further limiting access to needed care.<sup>20</sup>

Second, altered staffing ratios, which stretch a limited number of providers to meet patient needs during a staffing shortage, are another concerning yet common contingency measure. Staffing allocation is often viewed similarly to the allocation of space and medical equipment, such that contingency alterations to staffing operations may not seem like they significantly jeopardize patient care quality and outwardly appear functionally equivalent.<sup>21</sup> However, lower ratios of qualified nurses are associated with poor outcomes such as higher inpatient mortality<sup>22</sup> and lower survival rates of in-hospital cardiac arrest for Black patients.<sup>23</sup> These examples highlight the strong potential for contingency measures to amplify social health disparities, particularly when adopted over a prolonged time frame.

Lowered standards of care in crisis allocation disproportionately impact racial and ethnic minorities.<sup>24</sup> For example, crisis standards of care used clinical scoring systems that were not developed or validated for crisis triage to prioritize access to life-saving treatments during the COVID-19 pandemic. This practice actively gives rise to racial health disparities and discrimination against disabled patients.<sup>25</sup> Not only were the standards inequitable in practice, but they varied widely from state to state and sometimes even from hospital to hospital, creating disparities across and within geographic regions.<sup>26</sup> If contingency measures are similarly implemented across hospitals or hospital departments without standardization or advance planning to ensure equitable outcomes, it is likely that the burden of a lower standard of care will fall primarily on disadvantaged patient groups and racial minorities. However, standardization alone may be insufficient. Other factors like varying levels of details on patients' charts between hospitals could produce unfair outcomes if used to determine patient admission or transfer priority, even if the criteria for admissions and transfers are consistent. Thus, ongoing monitoring for unintended patterns of disparity must accompany standardization to ensure that blind spots in the allocation process are identified and corrected.

Bioethics has long been preoccupied with the micro-allocation of limited resources within hospitals instead of confronting the structural inequities that underlie broader scarcity and patient needs. The traditional dilemma of allocating limited hospital resources among a certain number of patients overlooks questions about how other resources have already been allocated, which patients were present at the hospital in the first place, where hospitals have (and have not) been built, and whether previous allocation strategies created bias in the broader distribution of resources. Therefore, to achieve fairness, bioethicists must pay attention to aspects of the broader distribution of resources, such as social determinants of health and the allocation of preventative resources at the public health level. One strategy for measuring and addressing these disparities is the Area Deprivation Index (ADI). The ADI quantifies the effects of race, class, and socioeconomic background by geographic region for use in public health research and the prioritization of resources.<sup>27</sup> It has shown promise in identifying geographic regions in need of targeted community health efforts for diabetes management based on electronic patient health records.<sup>28</sup> The ADI and similar tools would be useful in proactively deciding how to allocate public health resources when hospitals are strained. Moreover, through using population health and resource data, public health organizations may forecast contingency shortages allowing for the adoption of early measures to mitigate health disparities that might otherwise be amplified from hospital-level contingency allocation decisions.

## CONCLUSION

Meeting community health needs during periods of contingency scarcity, both before and after crisis standards of care apply, will require contingency standards of care rather than a bedside ad hoc distribution of scarce resources. While it is not inherently ethically unjustifiable for hospitals to adopt measures that may lower the standard of care during contingency standards, the necessity of these measures requires that bioethicists consider how equity, transparency, and the overall aim of functional equivalence can best be achieved under conditions of scarcity. The long-term health consequences of existing contingency measures, the potential for ad hoc and inconsistent allocation of scarce resources, and the need for consensus about when it becomes appropriate to make the formal transition to crisis standards of care demand further consideration. Because contingency measures will likely amplify existing disparities as crisis standards have, hospital-level management of scarcity is inadequate. Public health measures should be adopted in parallel to anticipate and manage health needs at the community or state level when resources are strained.

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