

Equity During Crisis Care Situations *An Information Paper*

Introduction

Healthcare professionals have faced daunting challenges in providing equitable care to our patients during the COVID-19 pandemic. We have had to struggle to distribute treatment among high volumes of critically ill patients, often with limited staff and material resources. These situations pose difficult questions about which patients should and should not receive treatments whose supply is limited. There is general agreement that systems for allocating scarce resources should be fair and equitable, but disagreement about what specific criteria are essential for equitable resource allocation. There is added difficulty in delivering care and distributing resources where health and social inequities already exist without exacerbating them. This article describes several different criteria for allocating scarce resources in crisis situations and assesses their potential effects on vulnerable populations, including maximizing the benefits of treatment, rewarding the social contributions of essential workers, and redressing past injustices.

Background

Ethical and legal standards of care guide the practice of healthcare professionals. During the first and subsequent waves of the COVID-19 pandemic, large surges of critically ill patients reached and exceeded the capacity of some hospitals to care for them according to conventional standards. Professional organizations and public officials responded by distinguishing among conventional, contingency, and crisis standards of care and recommending criteria and mechanisms for implementing these different standards. ¹⁻⁵ Crisis standards of care arise when, despite conservation, re-use, substitution, and adaptation of available resources, demand outstrips supply, and some patient needs will go unmet. In response to a previous pandemic threat, for example, the U.S. Institute of Medicine published a report on crisis standards of care to help guide allocation of scarce treatment resources based on key principles of fairness, duty of care, duty to steward resources, transparency, consistency, proportionality and accountability. ² Among the 29 states with a crisis standard of care in place in 2020, only 52% listed equity as an additional guiding ethical principle. ^{4,5} Nearly two-thirds of states commented that healthcare decisions should not consider race, ethnicity, disability, and other identity-based factors. ⁴

Multiple U.S. states, public and private health systems, and individual commentators have proposed, and some have implemented, triage systems using a variety of ethical strategies, including maximizing benefits, random selection, rewards systems (both retrospective and prospective), and redress of past injustices, to distribute scarce health care resources during crisis standards of care declarations.^{3,6} Each of these strategies has clear moral advantages, but they also have disadvantages, and so their use in triage systems remains controversial.

Triage Principles

As noted above, severe pandemics can create crisis situations in which the number of patients who need specific treatments exceeds the available treatment resources. Because not all patients in those situations can receive the resources whose supply is limited, clinicians confront difficult moral questions about who

should and should not receive the scarce resources. Triage plans developed for these crisis situations appeal to several different principles of distributive justice, including utilitarian and egalitarian principles, and they apply those general principles in different ways. This section will review those principles and describe their application to triage of scarce medical resources.

Maximizing Benefits: Medical

The utilitarian approach to triage directs those scarce resources to be allocated to produce the greatest overall benefit from their use.^{3,6} This triage approach uses information about patients' acuity and severity of illnesses to identify which patients are most likely to survive if they receive the scarce resource, and to succumb if they do not receive it. The plans allocate the resource to maximize the number of survivors, or the number of long-term survivors.

Pandemic triage plans that seek to maximize the benefit of patient survival commonly incorporate patients' severe chronic diseases into allocation algorithms, on the grounds that patients with these diseases have lower life expectancies or fewer life-years to be saved from receiving the scarce resource.^{3,6} This information can be helpful in estimating prognosis for survival, but it also can be problematic because racial and ethnic minorities disproportionately bear greater chronic disease burdens, in terms of prevalence, control, and complications, from conditions such as ESRD, cardiovascular disease, diabetes mellitus, and cancer.^{7,11,12,13} Sole reliance on prognosis for survival of critically ill patients may, therefore, disadvantage minority patients because they are likely to be sicker than other patients.

Obesity is another factor that can predict worse outcome with COVID 19.^{7,12} Obesity is a medical condition that is more prevalent in communities that are chronically underserved and lack resources to prevent and treat chronic diseases.^{12,14} If patients with obesity are triaged to lower levels of care, a disproportionate number of members of these underserved communities will receive a lower level of care. Therefore, use of utilitarian rationale to provide treatment to patients for whom it would do the most good raises questions about the equity of that distribution.

Advocates for patients with disabilities have also argued that pandemic triage plans may unfairly deny life-extending treatment to those patients. 8,15,16,17 One example of a scoring system that penalizes chronically disabled people is the Glasgow Coma Scale (GCS), which is one element of the Sequential Organ Failure Assessment (SOFA), particularly if the speech or motor abilities of patients with disabilities are affected. 8,15,16,17 Critics argue that the use of disabling conditions to predict longer term survival would unfairly deny these vulnerable patients access to scarce life-extending treatment resources. 14,17

Maximizing Benefits: Social

In addition to maximizing medical benefits, some proposed pandemic triage plans include criteria that allocate resources to provide maximum overall benefit to society at large. These criteria are based not on patients' physiology but on their work or societal value. Ten states (34.4%) recognize societal value on resource in their triage criteria, including prioritization of health care workers and other essential personnel.⁵

The social value of different social roles is difficult to analyze, however. During the current pandemic, arguably the most important workers are those who provide essential social services. This group includes public health and safety workers, such as police and health care professionals. It also includes infrastructure workers, including sanitation workers, educators, and those who provide necessary supplies like groceries. There are two arguments for giving such workers priority. The first is that society relies on them to provide essential services. Therefore, they are singled out to work when everyone else is told to stay home. The second argument is that they are exposed to substantial risks in serving society during a pandemic. ^{5,18} Society may therefore owe them treatment, should they come to harm from these risks. This may be a matter

not only of justice, but also prudence—if essential workers cannot expect access to optimal treatment should they fall ill, they may be reluctant to perform their duties.

One counterargument is that many of the essential workers, such as police, fire and healthcare workers voluntarily assumed significant risks when they took their jobs, as service in dangerous environments or exposure to disease are traditional and intrinsic parts of these jobs. Therefore, they are not entitled to extra benefits when those dangers manifest themselves. The argument that essential workers "signed-on" to the risks inherent to their work casts blame on professionals who focus primarily to save lives. Some public servants such as teachers and non-public service workers such as grocery workers did not accept responsibility for workplace risks that are not an intrinsic part of their jobs.

Do these claims for treatment priority also extend to non-professional caretakers? Women, particularly those of color and immigrants, make up substantial portion of domestic workers and caregivers (outside their own homes). ¹⁹ They play a critical role in society; if these caretakers become impaired or die, those who rely on them will also suffer or become a burden to society. Treating a younger patient may result in more life years saved; therefore, treating a young caregiver may provide more net benefit than treating a similarly situated person with no dependents. These benefits of caregiving might be thought to justify positive adjustments to the triage scores for personal caregivers.

Promoting Equity

The sudden and severe onset of the COVID-19 pandemic in the USA early in 2020 created an urgent demand to develop and adopt contingency triage plans to allocate scarce treatment resources in the event of a feared massive surge of critically ill patients. Early COVID triage plans, like that of the University of Pittsburgh, relied on allocation systems developed a decade earlier in preparation for a severe avian flu pandemic.²⁰ The explicit goal of these plans was to promote utility by maximizing patient survival to hospital discharge and beyond.

These utility-based triage plans soon came under criticism from individual commentators and public agencies, however. Critics charged that these plans violate fairness, transparency, and the duty of care by creating a disadvantage to underserved communities, marginalized populations, and people with disabilities. These critics pointed out that ethnicity and race are more than a biological characteristic or a social construct, as they often affect where and what care is administered to patients. For example, patients with poor access to healthcare can be diagnosed in later stages of their disease, are more likely to have their complaints less aggressively worked up, and can have difficulty managing their chronic illnesses due to social constraints. Critics of utility-based triage plans pointed out that marginalized patients, who are likely to be in poorer health due to adverse social determinants, will also be less likely to receive life-saving scarce resources due to their poorer health status.

To provide more equal access to scarce resources, commentators have offered revised triage plans that deemphasize the probability and length of survival. Some plans deduct triage points for marginalized status, thereby increasing chances to receive scarce resources despite poorer health status. Other plans restrict prognosis criteria to short-term survival to hospital discharge, thus giving many patients who are sicker or have major disabilities equal chances to receive scarce resources.²¹ These alternative plans prioritize the value of equal consideration for access to health care resources over maximizing the overall benefit of those resources.

Implementation

Adoption of crisis standards of care shifts allocation of resources from an individual to a population-based focus. ^{22,23} Development and implementation of these standards require effective communication and education for health care professionals, patients and the community.

Community Involvement

Ideally, triage algorithms, whether they be for a public triage system or the triage system of an individual health system, should also be developed transparently and use public engagement. Establishing relationships and partnerships with community leaders can create intentional space for soliciting public opinion and choosing criteria for healthcare allocation.²⁴ Such input can help reveal misunderstandings, biases, and areas of disagreement between the clinicians and the community. Planners should openly divulge how they will consider recommendations, conclusions, and other information emerging from this input.²²

These partnerships can challenge dominant narratives pervasive in healthcare and help combat mistrust within patient communities. For example, community members can prefer saving the most lives possible without focusing on long-term prognosis, while clinicians consider both factors. ²⁴ Giving voice to the ideas of those marginalized can help implement an "inside-outside" strategy to healthcare strategies during pandemics. ²⁴ This is crucial because pandemic planning is not only allocation but also screening, treatments, and hopefully cure.

Provider Communication

When crisis circumstances require implementation of triage systems, healthcare professionals should communicate triage decisions openly and compassionately with patients, explain how the decisions were reached, and offer supportive services such as palliative care, access to patient advocates, spiritual care, and social work services. Who should communicate triage decisions, especially decisions not to provide critical care, to patients and families, is a central question. Different plans delegate this task to triage officers, palliative care professionals, and attending physicians, including emergency physicians for ED patients. Whoever is delegated to carry out this difficult task should receive bias and communication training to help identify potential barriers and/or biases in deciding who would derive the greatest benefit of care²⁶.

Long Term Goals: Equity in Medical Education

The triage systems previously discussed can provide essential direction in severe pandemics, but there are other long-term solutions that also need to be addressed to promote health equity in our healthcare system during pandemics.

In healthcare, we attempt to minimize inequities and bias through different methods. When healthcare professionals do not reflect the patient population, however, there may be significant false assumptions, mistrust, and misunderstandings between people from different backgrounds. 14, 25, 26, 27 Across healthcare settings, there is a stark contrast between the backgrounds and cultures of patient populations and of the clinicians caring for them, especially in health system leadership and administration. In order improve equity in medicine, recruitment and curricula should promote diversity and inclusion, acknowledge social determinants of health, and practice race-conscious medicine. 14,25,26, 27 Active recruitment of underrepresented minorities through student pipeline and internship programs, and acceptance of non-traditional pathways to medicine and of healthcare professionals with disabilities can support culturally competent care and facilitate access to care. 15 Greater diversity among health care professionals will improve the quality of care for our patients and the quality of professional education.

Conclusion

Making triage decisions during pandemics, when resources and staff are limited, remains a complex and controversial issue in the third year of the COVID-19 pandemic. Evidence that the risks of COVID are distributed unequally among different segments of the population has raised important questions about how resources should be distributed. Systems for allocating scarce resources should be equitable, and using benefit-maximizing criteria can be problematic when applied to vulnerable populations and communities.

As more data from this COVID-19 pandemic is published, COVID remains more acute in low-income settings where the capacity to provide services is more limited, which can lead to an increased, continued burden on hospital systems in underserved communities.^{4,6,8} Likewise, social vulnerability has also been associated with poor vaccination rates.^{11,14}

Appreciating and examining the existing disparities and inequalities that the COVID-19 pandemic has exposed are morally necessary courses of action. As we look to the future and prepare for the next pandemic or healthcare crisis, we must take steps that help healthcare professionals and patients by recognizing how patients' differences can affect the care of patient populations.

Resources

- 1. Hick JL, Hanfling D, Wynia MK, et al. 2020. Duty to Plan: Health Care, Crisis Standards of Care, and Novel Coronavirus SARS-CoV-2. NAM Perspectives. Discussion paper. National Academy of Medicine. Washington, DC. doi.org/10.31478/202003b
- 2. Institute of Medicine. 2009. Guidance for establishing crisis standards of care for use in disaster situations: A letter report. Washington, DC: The National Academies Press. doi.org/10.17226/12749
- 3. Koonin LM, Pillai S, Kahn EB, et al. Strategies to Inform Allocation of Stockpiled Ventilators to Healthcare Facilities During a Pandemic. *Health Secur*. 2020 Mar/Apr;18(2):69-74. doi: 10.1089/hs.2020.0028. Epub 2020 Mar 20. PMID: 32196387; PMCID: PMC7194315.
- 4. Manchanda EC, Molina MF, Rodriguez RM. Racial Equity in Crisis Standards of Care—Reassuring Data or Reason for Concern? *JAMA Netw Open.* 2021;4(3):e214527. doi:10.1001/jamanetworkopen.2021.4527
- 5. Cleveland Manchanda EC, Sanky C, Appel JM. Crisis Standards of Care in the USA: A Systematic Review and Implications for Equity Amidst COVID-19. *J. Racial Ethn Health Disparities*. 2021;8:824–836. https://doi.org/10.1007/s40615-020-00840-5
- 6. Emanuel EJ, Persad G, Upshur R, et al. Fair Allocation of Scarce Medical Resources in the Time of Covid-19. *N Engl J Med*. 2020 May 21;382(21):2049-2055. doi: 10.1056/NEJMsb2005114. Epub 2020 Mar 23. PMID: 32202722.
- 7. CDC. Disparities in Deaths from COVID-19: Racial and Ethnic Health Disparities. https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/disparities-deaths.html. Updated Dec. 10, 2020. Last accessed July 6, 2021.
- 8. Fraser S, Lagacé M, Bongué B, et al. Ageism And COVID-19: What Does Our Society's Response Say About Us?. *Age Ageing*. 2020;49(5):692-695. doi:10.1093/ageing/afaa097
- 9. Gershengorn HB, Holt GE, Rezk A, et al. Assessment of Disparities Associated With a Crisis Standards of Care Resource Allocation Algorithm for Patients in 2 US Hospitals During the COVID-19 Pandemic. *JAMA Netw Open.* 2021;4(3):e214149. doi:10.1001/jamanetworkopen.2021.4149
- 10. CDC. *Obesity, Race/Ethnicity, and COVID-19*. https://www.cdc.gov/obesity/data/obesity-and-covid-19.html. Updated Mar 21, 2021. Last accessed Dec 29, 2021.
- 11. Wright JE 2nd, Merritt CC. Social Equity and COVID-19: The Case of African Americans. *Public Adm Rev.* 2020 May 30:10.1111/puar.13251. doi: 10.1111/puar.13251. Epub ahead of print. PMID: 32836453; PMCID: PMC7300605.
- 12. CDC. Community Health and Program Services (CHAPS): Health Disparities Among Racial/Ethnic Populations. Atlanta: US Department of Health and Human Services; 2013. https://www.cdc.gov/minorityhealth/CHDIReport.html#anchor_1607954179. Last accessed January 3, 2022.
- 13. Magesh S, John D, Li WT, et al. Disparities in COVID-19 Outcomes by Race, Ethnicity, and Socioeconomic Status: A Systematic Review and Meta-analysis. *JAMA Netw Open*. 2021;4(11):e2134147. doi:10.1001/jamanetworkopen.2021.34147

- 14. Manchanda EC, Killick C. How Crisis Standards of Care Can Ensure Equity for People with Disabilities. ADA Presentations. http://adapresentations.org/healthcare/doc/03-25-21/Equity%20in%20CSC.pdf. Accessed January 3, 2022.
- 15. Ne'eman A. Opinion | Disabled in the Coronavirus Crisis: "I Will Not Apologize for My Needs." The New York Times. The New York Times. https://www.nytimes.com/2020/03/23/opinion/coronavirus-ventilators-triage-disability.html. Published 2020. Accessed January 14, 2022
- Town M. AAPD Letter to the Mitch McConnell and Charles Schumer. https://www.aapd.com/wp-content/uploads/2020/03/COVID-19-Response-Package.pdf. Published 2020. Accessed January 3, 2022.
- 17. HHS Office for Civil Rights in Action. Bulletin: civil rights, HIPAA, and the coronavirus disease 2019 (COVID-19). https://www.hhs.gov/sites/default/files/ocr-bulletin-3-28-20.pdf, Last accessed January 4, 2022.
- 18. Kirby J. Enhancing the fairness of pandemic critical care triage. *J Med Ethics*. 2010;36(12):758-761. doi:10.1136/JME.2010.035501
- 19. Connor J, Madhavan S, Mokashi M, et al. Health risks and outcomes that disproportionately affect women during the Covid-19 pandemic: A review. *Soc Sci Med.* 2020 Dec;266:113364. doi: 10.1016/j.socscimed.2020.113364. Epub 2020 Sep 13. PMID: 32950924; PMCID: PMC7487147.
- 20. White DB, Katz MH, Luce JM, et al. Who should receive life support during a public health emergency? Using ethical principles to improve allocation decisions. *Ann Intern Med.* 2009;150:132-8.
- 21. North Carolina Protocol for Allocating Scarce Inpatient Critical Care Resources in a Pandemic. 2021 (January 11). Available at: https://files.nc.gov/covid/documents/guidance/North-Carolina-Protocol-for-Allocating-Scarce-Inpatient-Critical-Care-Resources-In-a-Pandemic.pdf. Accessed June 15, 2022
- 22. Baker E, Moskop J, Vearrier L, et al. The Role of Emergency Physicians in Triage and Resuscitation Decisions: The Case of COVID-19. *ACEPNow*, Vol 39(9): 2020.
- 23. Hanfling D, Altevogt BM, Viswanathan K, Gostin LO, eds. Committee on Guidance for Establishing Crisis Standards of Care for Use in Disaster Situation; Institute of Medicine. Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response: Volume 1: Introduction and CSC Framework. In: *Crisis Standards of Care*. National Academies Press; 2012:4-34. doi:10.17226/13351
- 24. Hertelendy AJ, Ciottone GR, Mitchell CL, et al. Crisis standards of care in a pandemic: navigating the ethical, clinical, psychological and policy-making maelstrom. *Int J Qual Health Care*. 2021;33(1):mzaa094.
- 25. Clayborne EP, Martin DR, Goett RR, et al. Diversity pipelines: The rationale to recruit and support minority physicians. *J Am Coll Emerg Physicians Open*. 2021 Jan 2;2(1):e12343. doi: 10.1002/emp2.12343. PMID: 33532751; PMCID: PMC7823093.
- 26. Zeidan AJ, Khatri UG, Aysola J, Shofer FS, Mamtani M, Scott KR, Conlon LW, Lopez BL. Implicit Bias Education and Emergency Medicine Training: Step One? Awareness. *AEM Educ Train*. 2018 Sep 24;3(1):81-85. doi: 10.1002/aet2.10124. PMID: 30680351; PMCID: PMC6339553.
- 27. Baker J. Moving from Race-Based to Race-Conscious Care. *ACEPNow*. 40(4). https://www.acepnow.com/article/moving-from-race-based-to-race-conscious-care/. Accessed January 5, 2022.

Created by members of the Ethics Committee (Goett R, Martin D, Simon JR, Basford JB, Iserson KV, Moskop JC) - September 2022

Reviewed by the Board of Directors – October 2022