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Social Factors and Critical Care Triage: Right Intentions, Wrong Tools

To the Editor:

We appreciate the attempt by Dr. White and Dr. Lo to provide additional equity in critical care decision-making, but we believe their proposed variables are inappropriate in critically ill patients (1).

The area deprivation index (ADI) should be used to determine geographic areas that likely have poor access to health care, testing, vaccination, and other interventions designed to mitigate illness. Disproportionate allocation of resources to these areas to achieve equity is highly encouraged.

Many high-index ADI areas are urban and predominately communities of color; others are rural and predominantly white. Though most of these individuals are economically challenged, live in multigenerational housing, lack private transportation, and work in essential service jobs, there are also many individuals residing in these areas that are privileged and low risk. Thus, residence in an at-risk area is not the indication for prioritization of assets, but significant benefit accrues to the community by providing resources to all citizens in that area. This distinction becomes critical when dealing with specific and scarce treatment assets that are assigned to individuals. Because the ADI could award life-saving assets to an individual on the basis of address alone, we would essentially be prioritizing an individual over another who might live blocks away who was in far worse financial and physical health.

Essential worker status prioritization is also debatable. The only accepted social consideration for the allocation of critical care resources we are aware of has been healthcare worker status. In Minnesota, no priority was granted because of the difficulty in verifying that the illness was work related (in fact, the majority of illness is not) (2) and because recovery to contribute to the response was uncertain. Healthcare workers were prioritized for vaccination and early therapies such as monoclonal antibodies that preserved their essential function (3).

It is also unclear how the “life-cycle” recommendation would be operationalized and then withstand civil rights challenges that could expose providers and their institutions to significant risk. Though many agree with the principle of prioritizing younger patients for care, this is not accepted by cultural groups that value their elders. According to the Office of Civil Rights, age may not be used in resource allocation unless it is a clear independent prognostic variable (which is the case in coronavirus disease [COVID-19], but the recommendation of the authors is more sweeping) (4).

Separately, we are troubled by the race and value statements in White and Lo’s Table 1 in which patients are described as “Black” and “drives elderly and disabled patients to their medical appointments.” These are exactly the types of information that a triage team should not have access to (to avoid bias) and could introduce major medicolegal challenges to decisions made (5).

The stated goal of White and Lo’s use of the ADI is to reverse structural inequity. Though it is within the public health and medical realm to assure equity in care, to prioritize individuals on the basis of historical inequity and with an imprecise instrument is without precedent or basis. Critical care rationing at the individual level requires us to be extremely careful to assure that our ethical intent is upheld, as the consequences are so significant. Regardless of how well intended, we may do grave injustice to individuals by introducing social factors into this process and require community, legislative, and legal support to do so because these are not medical decisions. We should focus our efforts to combat structural inequity on establishing trust and understanding the needs of the community as we provide access to medical care, testing, vaccination, and early treatment. We agree with White and Lo that there is much to be done to improve equity, but the use of the nonmedical factors as proposed does not advance this goal.

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

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We appreciate Dr. Hick’s and Dr. Hanfling’s engagement with our proposed strategies (1) to promote equity in ICU triage during a pandemic, as well as their ongoing national leadership regarding crisis standards of care. They criticize us for attempting to rectify historical injustices with ICU triage. However, our triage framework is not designed to accomplish the much-needed work of compensatory justice for our country’s history of slavery, segregated medical care, Jim Crow laws, redlining, a racist carceral system, or numerous other unjust policies. Rectifying these injustices will require a very different set of policy interventions on a much larger scale (2).

Instead, our proposal is far more modest in scope: triage should be designed to save as many lives as possible while mitigating the impact that present-day unfairness in the distribution of the social determinants of health has on disadvantaged patients’ outcomes during the pandemic. The important distinction is between historical injustices on the one hand—which we are not attempting to remedy during triage—and present-day inequities causing disparities in coronavirus disease (COVID-19) outcomes on the other—which we believe are a proper target of ICU triage policies.

Drs. Hick and Hanfling express concern that our recommendation to give some priority to younger patients will not withstand legal challenges related to claims of age discrimination. However, the Commonwealth of Pennsylvania’s allocation guideline—which includes age as a tiebreaker in its multiprinciple allocation framework—was reviewed and permitted by the Office for Civil Rights of the U.S. Department of Health and Human Services (3). Recent legal scholarship also suggests that it is legal in the United States to consider age as one criterion when allocating scarce lifesaving resources (4).

Moreover, the American Geriatric Society’s recent guidelines for ICU triage did not object to the use of age as a tiebreaker (5). More broadly, we believe that society has an ethical obligation to foster fair opportunity for individuals to formulate and carry out their conception of a meaningful life over a lifespan. In this regard, the young are the worst off because they have had the least opportunity to live through life’s stages. Therefore, fairness requires that they receive some priority in access to absolutely scarce lifesaving resources. Finally, using age as a tiebreaker is not only ethical and legal but will also likely offset racial disparities and other disadvantages because deaths of minority patients (6) and people with life-shortening disabilities (e.g., Down syndrome or cystic fibrosis) tend to come at earlier ages.

Drs. Hick and Hanfling take issue with our recommendation to give heightened priority to all frontline essential workers rather than only to healthcare workers; they also disagree with prioritizing any essential workers because the workers may not be able to return to their jobs in time to contribute to the societal response to the pandemic. On the former point, it strikes us as unfair to give priority to healthcare workers and not give priority to other workers who take on similar personal risk to benefit society during the pandemic, many of whom are racial and ethnic minorities. On the latter point, this pandemic has (so far) occurred in numerous waves over more than a year, which suggests that workers who are successfully treated will be able to return to their frontline jobs in time to benefit society. Moreover, we believe society has a reciprocal ethical obligation to protect the workers who take on added risk to benefit us, even if they are not able to return to their jobs in short order.

They criticize the use of the Area Deprivation Index to correct for structural disadvantage on the grounds that, as a probabilistic, population-level metric, it may misclassify some people as disadvantaged who are not (e.g., some patients who live in very disadvantaged neighborhoods may not be very disadvantaged). However, policy-makers already accept the risk of misclassification in the most widely accepted triage criterion—allocation according to a patient’s chances of survival determined by a probabilistic mortality prediction model. For example, if a probabilistic mortality prediction model (e.g., the Sequential Organ Failure Assessment or Acute Physiology and Chronic Health Evaluation) identifies 100 patients who are each predicted to have a 75% chance of death and we then use that information to withhold treatment from all of them, then 25 of those 100 patients who die because of triage decisions would actually have survived if treatment had been provided. Of note, this psychologically unsettling characteristic of triage persists even in perfectly calibrated probabilistic models. We see no compelling reason to allow the use of a probabilistic approach for one triage criterion (i.e., survival) while disallowing a probabilistic approach for another (i.e., disadvantage).

Finally, we wholeheartedly agree with Drs. Hick and Hanfling that community stakeholders should be involved in the development of scarce resource allocation policies and that such policies should have legislative and legal support. The allocation criteria we recommend were supported by community stakeholders in Pittsburgh, Pennsylvania, and by a diverse taskforce convened by the Commonwealth of Pennsylvania.

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