In this well-executed study using data from the American College of Surgeons Trauma Quality Improvement Program (TQIP), Hoit et al demonstrated that the timing of withdrawal of life-sustaining treatment (WLST) in critically injured adults between ages 18 and 64 years was statistically associated with the type of insurance they carried. Specifically, the authors showed that even after accounting for patient and hospital characteristics, individuals without insurance were approximately 50% more likely to undergo WLST earlier than others who were insured (eg, private insurance or Medicaid). As the authors noted, the law in the United States requires that critically ill individuals taken to hospitals receive the best possible care regardless of financial means. However, the law does not include provisions to pay for such care. Thus, more than two-thirds of uninsured patients in the United States are at risk for health expenditures that exceed either their ability to pay or 10% of their total income. Catastrophic health expenditures effect over 11 million Americans and remain a leading cause of personal bankruptcy. It is cynical but reasonable for the authors to hypothesize that inability to pay for future health care needs could factor into decisions to withdraw life-sustaining treatment.

Like most good studies, especially those using secondary data, this evaluation of associations between insurance coverage and treatment decisions raises more questions than it answers. Compared with other national retrospective data used to study trauma care, the TQIP data uniquely describes clinical factors associated with WLST, including important descriptions of the limitations, the timing of WLST, and injury severity. However, a lack of contextual data leaves substantial gaps in our understanding of how these decisions occur at the bedside.

First, medical decisions for adults who are critically ill typically depend on surrogates. In the context of sudden and unexpected illness, surrogates may be especially unprepared for their role. Even when present, advance directives are rarely sufficient to guide clinical decisions in emergent scenarios because the directives are frequently too general, too specific, or unable to be located. It is also noteworthy that among almost 370 000 patients, only 18 had preexisting do not resuscitate documents; the infrequency of advance directives in trauma patients further limits their use as clinicians are unlikely to include them in routine workflows. Consequently, surrogates must base decisions on few data aside from prognostic information from clinicians and their own assumptions about the treatment and quality of life the patient would find acceptable. Detailed data about the attributes among the surrogates who made decisions about WLST are necessary to characterize how surrogate preparedness and understanding of future health needs are associated with the timing of WLST.

Second, diseases of despair, including suicide, substance use, and alcoholism, are ongoing threats to American life expectancy. Sociologists Case and Deaton note that there were 150 000 deaths of despair in the United States in 2017 (coincident with the first year of data in this study). White non-Hispanic males in midlife were among the hardest hit. At its core, injury is fundamentally a social disease, and the data in Hoit et al bears this out. The study cohort demonstrated clinically meaningful differences by insurance type with respect to alcohol use, mental health or personality disorder, and substance use disorder, which may have factored into clinician decisions. Conspicuously, self-inflicted harm was associated with 54% higher likelihood of earlier WLST, suggesting that even though depression is a treatable disorder, comorbid depression may have biased clinicians and surrogates toward WLST. Others have shown that when presented with hypothetical scenarios, depressed individuals were significantly more likely to reject life sustaining
treatment if treatment would confer a negative fiscal effect. Clinicians, researchers, and policymakers must closely examine how comorbid depression, alcoholism, and substance use disorder influence treatment decisions after injury and amend biases to ensure equitable treatment.

Third, stark geographic differences in health measures, insurance coverage, and attitudes about medical care across the United States may influence study findings and are yet unmeasured. One of the more important findings in this study is that having any insurance vs no insurance is more important than having public vs private insurance in terms of risk of treatment withdrawal. Specifically, the Patient Protection and Affordable Care Act in 2010 was a catalyst for Medicare expansion, which has since occurred in all but 10 states. Compared with injured adults in non-Medicare expansion states, individuals in Medicaid expansion are more likely to survive hospitalization, have shorter hospitalizations, and are more likely to receive rehabilitation postdischarge. Furthermore, Medicaid expansion is associated with less medical debt, improved access to behavioral health care, and greater funding for rural hospitals. It is plausible that limited access to health care to address the underlying contributors to injury and the sequelae of the injury itself can influence families and clinicians as they determine the coping and resilience necessary to meet the health states that would be acceptable to an individual patient. Nearly all US citizens who are in the coverage gap (ie, they are ineligible for Medicaid or subsidies for private insurance) live in the South. Thus, an exploration of how insurance coverage weighs into these life-and-death treatment decisions is incomplete without contextualizing these events within the policy structures in which they occur.

Trauma disparities researchers will continue to identify treatment differences until every injured patient has access to timely, high-quality medical care and other social determinants of health throughout their lifespan. Until then, it is incumbent upon individual clinicians and health systems to closely and uncomfortably examine how bias either creeps or marches into the life-and-death decisions we make for everyone under our care.

**ARTICLE INFORMATION**

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