The High Cost of Harm

Patient safety events result in millions of direct and indirect medical costs, increasing national health care expenditure, as well as significant patient injury and loss. Health care systems have been tasked with optimizing value and minimizing harm using composites of reporting events and patient clinical data to identify populations of at-risk patients. As patients' medical complexities and medical technology evolve, current harm reduction programs may be inadequate, leaving many patients at risk.

The efforts of the Centers for Medicaid and Medicare Services (CMS) to link hospital reimbursement with quality initiatives have resulted in a value-based program, the Hospital-Acquired Condition (HAC) Reduction Program. The pay structure through the HAC Reduction Program incentivizes reduction in hospital-acquired conditions while penalizing iatrogenic harm through the Patient Safety and Adverse Events Composite (CMS PSI 90) and the Centers for Disease Control and Prevention’s National Healthcare Safety Network health care-associated infection (HAI) measures. The PSI 90 uses Medicare claims, serving as a composite of 8 weighted patient safety measures; the CMS HAI system tracks infection data. Annually, HAC scores are calculated, and the hospitals with the worst scores (>75th percentile) receive a 1% payment reduction.

Implementation of both the PSI 90 and HAI measures has decreased major safety events and iatrogenic harm, albeit disproportionately across iatrogenic injury types. Rates of pressure injuries and catheter-associated urinary tract infections in hospitalized patients continue to rise as these injuries require labor-intensive efforts to avoid or to minimize harm. Given the current structure of the HAC Reduction Program and formulation of composite measures, composite weights of specific iatrogenic harms within the HAI measures and PSI 90 are subject to surveillance bias and redundancy. Padula et al offer a compelling argument for reexamination of health systems’ harm reduction programs and the current CMS reimbursement schedule in their article “Complexity Bias in the Prevention of Iatrogenic Injury: Why Specific Harms May Inhibit Performance.” The authors highlight that current patient safety event identification mechanisms and efforts to decrease the frequency of these events silo harm prevention efforts, suggesting a systematic approach to all harm reduction for all hospitalized patients. As health care models evolve, this article sheds light on the need to refocus the CMS payment structure to ensure the safety of all hospitalized patients.

The authors suggest that by addressing limited components of harm reduction “complexity bias,” health care organizations are missing opportunities to efficiently address overlapping risk factors that predict harm, potentially creating more harm for critically ill, malnourished, and frail patients. They recognize confounding variables for patient outcomes and complexity bias, offering solutions to reduce harm. Suggested system- and division-level steps leading to further harm reduction include identifying common risk factors and providing an equal-sided risk structure: reward and penalty.

Whereas the authors provide many salient points, the inclusion of additional evidence to support their clinical solutions and the impact of inequity on patient safety initiatives could strengthen their stance. We applaud the authors for pointing out that individual improvement efforts may have unintended consequences for other iatrogenic injury. However, before we design the optimal improvement domains, how do we know whether the PSI 90 emphasizes the “right” safety events? The PSI 90s have been widely panned for their inaccuracies and diverting attention from the more inclusive list of harm events that plague patients. Therefore, we find that broadening the scope of identified harms and enhancing the
policies behind these improvement initiatives will lead to more durable change.

Maintaining the safety of all hospitalized patients, including those with increasing number of morbidities, has become more difficult. One of the clinical solutions suggested in the article is to focus on key domains that address safety events on a continuum—mobility, moisture, and nutrition. The Institute for Healthcare Improvement supports moisture reduction, mobility, and nutritional optimization to minimize catheter-associated urinary tract infections and pressure ulcers along with other harm events. Hospitals have had success with modified care delivery systems, focusing on communication and multidisciplinary teams at the core of harm reduction and by using complex bundling to facilitate evidence-based medicine. We question the notion of broad applicability of “multiple response teams,” creating redundancy as is noted in the manuscript. Although that may be accurate at a few larger hospital systems, medium-sized to small hospitals are likely not to be resourced to allow the existence of multiple teams, rather allowing the few individuals focused on improvement to process their own targets. Therefore, with the distillation of the various prevention bundle teams down to just a few people, HAC bundle reconciliation is a natural part of the process. In addition, comprehensive unit-based safety programs have been instituted nationwide to address just this problem, namely, to consolidate and to reconcile intrahospital safety initiatives, optimizing efficiency and implementation.

In addition, patient outcomes are linked not only to medical complexity and infrastructural initiatives but also to demographic characteristics of the patients. Patients’ racial and ethnic differences offer an additional layer of complexity as patient safety outcomes vary on the basis of race, ethnicity, and social determinants of health. As evidence highlighting inequities in safety events grows, we would like to see further reexamination of the CMS payment structure by including disincentives or penalties for inequities in patient outcomes based on racial, ethnic, or socioeconomic differences. Medicaid, in recent years, has dedicated efforts to support states with designing and implementing programs and services to address social determinants of health; patient safety outcomes fall within this initiative. In addition, bias in voluntary event reporting continues to minimize the number of documented safety events, creating greater inequity within populations of at-risk patients. Minimizing these biases and encouraging equity in reporting mechanisms would likely lead to overall improvements in patient outcomes.

Ideally, health care organizations could eliminate all patient safety events and iatrogenic harm equitably for all hospitalized patients. We appreciate the review of the current CMS programs and the conversation surrounding improvement of HAC reduction incentives. Reimbursement is a critical area to explore, and as we iterate on the current structure, achievement of equitable patient safety event reduction should be our target.

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REFERENCES


