

Bringing the Equity Lens to Patient Safety Event Reporting

Tejal K. Gandhi, MD, MPH, CPPS; Lucy B. Schulson, MD, MPH; Angela D. Thomas, DrPH, MPH, MBA

Certain populations are at increased risk for experiencing patient safety events. As the link between safety and equity becomes clearer, it is important to evaluate existing safety processes and methods and identify opportunities to embed equity into routine safety work.^{1,2} Safety event reporting is a critical component of safety programs in the hospital and health system setting as well as across the continuum of care. However, as we bring the equity lens to our safety event reporting processes, we are now learning about issues with patient safety reporting that are strongly connected to inequity and bias. In this commentary, we identify these issues and propose a path forward that health systems may take to mitigate them.

Bias and inequity can occur in many areas of the safety event reporting process, and the identification of those areas can be difficult. First, most reporting systems do not routinely capture patient demographic data and do not integrate easily with other systems that have such data, making it difficult to even look for disparities, let alone address potential inequities in patient safety events.

Second, even among health systems where patient demographics are captured, there is inequity in how harm is reported. Safety reporting is an integral tool in reducing harm, particularly given its ability to identify near misses, but it may play a role in perpetuating disparities. For example, in one health system, white patients were more likely to have safety events reported than minoritized patient populations.³ In another study, compared to a tool that extracted laboratory and pharmacy data, safety reporting was less likely to identify issues in populations that have been made vulnerable by health care and other systems.⁴ These studies do not elucidate why these differences in reporting exist; differences are likely multifactorial and may stem from provider bias, racism, or other larger systemic factors. Alternatively, patients who have been marginalized by the health system may feel less comfortable bringing patient safety events they experience to the attention of their providers, resulting in lower reporting of these events. Furthermore, some studies have shown that patients rate their experience of care lower when cared for by race-discordant physicians,⁵ which can be a reflection of their trust in the

caregiver. This lack of trust could lead to less willingness to speak up about safety issues.

A third concern with patient safety event reporting is that bias may be embedded in the types of events reported. For example, for events wherein harm reached the patient, Black patients were more likely to have security/safety, skin/tissue, and diagnosis/treatment events reported; white patients were more likely to have falls, line/tubes/drain, and surgery/procedure events reported.³

Fourth, certain health care workers may feel more or less empowered to report patient safety events, leading to differential rates of reporting. National data demonstrate that workforce perceptions of patient safety culture differ by a health care worker's race, ethnicity, and gender. For example, nurses who identified as Hispanic or Latino reported lower perceived safety culture compared to non-Hispanic, white nurses.⁶ It is conceivable that health care team members who themselves are of a race or ethnicity that is minoritized may be more likely to recognize patient safety events in minoritized patient populations but may be less likely to speak up because of their comfort level. However, most organizations do not capture data on the demographics of the reporter, making it difficult to understand how reporter demographics may influence reporting. To complicate matters further, in the absence of a psychologically safe culture, reporters from marginalized groups may choose not to report at all if reporter demographics were known or required in the reporting process.

Fifth, there are also differences in the demographics of clinicians identified as part of a patient safety event. In one study,⁷ female physicians and physicians who were members of racial and ethnic minority groups were more likely to be reported for low-severity communication-related safety issues compared with their male and white counterparts, respectively. Ideally, reports are not used punitively against clinicians named. However, this is often not the reality, particularly as many organizations still have not robustly implemented fair and just cultures. In addition, reports might be used for credentialing or performance evaluations and therefore could have long-term career implications.

Sixth, when reports are analyzed for improvement opportunities, it is rare for equity to be a major consideration. Few health systems include equity-related questions in their analyses of events, such as the role of structural racism or implicit bias in the event. One large academic medical center has piloted a health equity checklist in adverse

High Level Recommendation	Potential Solutions
1. Technology changes to capture race/ethnicity/gender data of patients and reporters	<ol style="list-style-type: none"> 1. Data integration between EHR and patient safety reporting system 2. An option for reporters to self-identify when filing a patient safety report
2. Culture and system changes to reduce biases in patient safety event reporting	<ol style="list-style-type: none"> 1. Segment data to understand disparities in reported events. 2. Conduct organizationwide implicit bias training. 3. Foster a culture that empowers patients to speak up about patient safety events. 4. Use objective methods, such as trigger tools, to augment staff patient event reporting systems. 5. Broaden the definition of patient harm to include bias and discrimination (in other words, emotional harm).
3. Understanding inequities by type of patient safety event	<ol style="list-style-type: none"> 1. Add an equity prompt to all safety event reporting systems to increase detection of inequities. 2. Perform segmentation of event types to understand and address inequities.
4. Foster a psychologically safe work environment.	<ol style="list-style-type: none"> 1. Implement a culture of safety and inclusion through known methods, such as leader commitment to safety as a core value, fair and just culture, leader rounding, and huddles.
5. Who gets identified as part of a safety event	<ol style="list-style-type: none"> 1. Segment and review who (staff) gets identified in reports. 2. Consider how reports are used for clinician feedback and promotion.
6. Incorporate equity into safety event analyses.	<ol style="list-style-type: none"> 1. Apply an equity lens to understand if bias/discrimination/racism contributed to an event as well as other factors (for example, SDOH). 2. Bring diverse patients into analyses and development of action items such as root cause analyses. 3. Embed equity experts into root cause analyses. 4. Harness the power of natural language processing to identify bias, microaggressions, and racism in EHRs and patient safety event reporting systems.

EHR, electronic health record; SDOH, social determinants of health.

gynecological event reviews and found that for half of preventable cases reviewed, social determinants or bias played a role.⁸ Health systems nationwide must adopt this type of practice to maximize opportunities for equity in safety.¹

More research and exploration is needed to fully understand and mitigate these issues.² In that context, we believe there are several steps health systems and policymakers can take to make patient safety reporting more effective at addressing health inequities (Table 1), and organizations should work to measure and evaluate the impact of these steps. Health systems should work with their voluntary occurrence reporting vendor to capture the demographic information of patients and reporters and stratify those data to identify disparities. This must be done thoughtfully, as some reporters may feel less safe reporting due to fears of repercussions. One thoughtful approach would be to provide the ability for reporters to report anonymously. Health

systems must also ensure that equity is embedded into safety culture by segmenting safety culture to identify differences between groups in terms of comfort with reporting and fear of punishment, and then implement interventions to narrow those differences.⁶ In addition, safety culture is strongly correlated with perceptions of diversity and inclusion, so equity and safety culture efforts should be well integrated.⁹ Health systems must also ensure that clinician feedback provided in patient safety reports is not used in a punitive manner and that fair and just culture algorithms are in place.

Racial justice and equity education and training can also be important to help reporters recognize if and when they might be identifying different event rates in historically marginalized patient populations. This training could also help staff who review safety reports to ensure that their own biases do not influence how reports are managed based on

the demographics of patients and providers. Despite the lack of strong evidence of its benefit,¹⁰ standard implicit bias training is becoming more prevalent.¹¹ Going forward, it will be important to assess the impact of this kind of training on these kinds of outcomes.

Given evidence of likely reporting bias, health systems must also incorporate other safety event identification systems, such as electronic trigger tools, that may be more sensitive and with less bias.^{4,12} Health systems should also ensure that safety event report prompts and taxonomies for analysis include racism, bias, and social determinants as potential contributors to near-miss and harm events. In fact, a national coalition of organizations (Rise to Health) is advocating actions to advance equity and safety, including “Add an equity prompt to all harm-event reporting systems (e.g., patient safety/sentinel events) to increase detection of inequities.”¹³

When analyzing event descriptions, tone and sentiment analysis also can be leveraged to identify strong emotions that could indicate bias, as significant differences have been found in providers’ use of negative tone and sentiment toward Black patients in electronic health records when compared to white patients.¹⁴ Finally, equity must be integrated into solutions for preventing future patient harm to ensure that these solutions are not leaving certain groups behind.

As organizations work to implement these recommendations, barriers to adoption will be encountered. Leaders must be fully committed to the concept that inequities contribute to harm and to the importance of bringing the equity lens to event reporting. Leaders can then work to build organizational buy-in, in particular through the use of data, stories, and transparency, and implement these interventions into their safety event learning system.¹⁵

In conclusion, inequities can contribute to harm and therefore equity must be embedded into safety activities. Because safety event reporting is a core component of patient safety programs, a deeper understanding of where it may be contributing to inequities is essential. We have proposed a path forward for health system leaders to begin to ensure that the equity lens is embedded into every aspect of the safety event reporting learning system. Further research and evaluation will be critical to ensure that these efforts are advancing our goal of reducing harm equitably for all patients.

Conflicts of Interest. Dr. Gandhi is an employee of Press Ganey Associates.

Tejal K. Gandhi, MD, MPH, CPPS, is Chief Safety and Transformation Officer, Press Ganey Associates LLC, Boston. **Lucy B. Schulson, MD, MPH**, is Associate Physician Policy Researcher, RAND Corporation, Boston, and Assistant Professor of Medicine, Chobanian & Avedisian School of Medicine, Boston University. **Angela D. Thomas, DrPH, MPH, MBA**, is Vice President, Healthcare Delivery Research, MedStar Health Research Institute, Hyattsville, Maryland, and Adjunct Assistant Professor, Health

Systems Administration, Georgetown University. Please address correspondence to Tejal K. Gandhi, tejal.gandhi@pressganey.com.

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