

Putting Patient Safety First for the Quality Care: An Essential Component at all Healthcare Settings

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INTRODUCTION

Patient safety is the absence of preventable harm to a patient and reduction of risk of unnecessary harm associated with health care to an acceptable minimum. Within the broader health system context, it refers to a structured set of actions aimed at establishing cultures, processes, procedures, behaviors, technologies, and environments within healthcare settings. These actions effectively mitigate risks, decrease the occurrence of preventable harm, minimize the likelihood of errors, and reduce impact of harm when it does occur. Patient safety is fundamental to the provision of health care in all settings everywhere. Nevertheless, preventable adverse events, mistakes, and hazards linked to healthcare continue to pose significant challenges for patient safety globally. Ensuring the safety of patients during healthcare delivery and minimizing patient harm is a global priority. However, patient safety incidents are not uncommon. Approximately 10 percent of patients experience harmful incidents while receiving treatment and approximately half of these events are considered preventable.¹

These incidents may arise from healthcare professionals' actions, system failures within healthcare, or a combination of both. Examples of serious patient safety incidents include medication errors, misdiagnoses, wrong-site surgeries, hospital-acquired infections, and in-hospital falls, all of which can result in patient harm. It is recognized that a certain level of harm is inevitable because it cannot always be predicted. For instance, some adverse drug reactions occur without errors in the medication process and cannot be detected early on. The fundamental principle of healthcare is "first, do no harm," and patients should not suffer harm while receiving medical care. Despite this, there is a significant global burden of preventable patient harm across healthcare systems, both in developed and developing nations. Studies reveal that approximately

one in ten patients experience harm during healthcare interventions, resulting in over three million deaths annually attributed to unsafe care. In low-to-middle-income countries, the incidence of death due to unsafe care is even higher, affecting as many as four in every 100 individuals.²

Above 50% of harm (1 in every 20 patients) is preventable; half of this harm is attributed to medications.^{3,4} Such preventable harm often leads to permanent disability or even patient fatalities. Common adverse events contributing to avoidable patient harm include medication errors, unsafe surgical procedures, healthcare-associated infections, diagnostic inaccuracies, patient falls, pressure ulcers, patient misidentification, unsafe blood transfusions, and venous thromboembolism. A significant advantage of initiatives focused on patient safety is their ability to elevate the standards of clinical care. Investing in initiatives aimed at reducing patient harm not only yields significant financial savings but leads to improved patient outcomes.⁵

Within hospital settings, the risk of potential disasters is omnipresent, given the inherently dynamic and imperfect nature of the environment. Achieving patient safety involves the capability to identify errors promptly and intervene to prevent them from resulting in harm and our goal is to improve patient safety and overall quality at the health system. Studies have shown that patients who feel safer are more satisfied with their hospital experience. The medical field is continuously evolving and advancing, offering ample opportunities for enhancement as it progresses and adapts. With hospitals expanding in size and becoming increasingly busy, there is a risk that safety protocols designed to safeguard patients may occasionally be overlooked or neglected.

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COMMON FACTORS LEADING TO PATIENT HARM

Various interrelated factors can contribute to patient harm, often with multiple factors implicated in each instance of compromised safety incident. Taking a systemic approach to patient safety reveals that the majority of errors resulting in harm stem from failures within systems or processes, leading to errors by healthcare professionals.

The following are the common factors implicated in patient safety.

- Medication-related harm, with over a quarter of incidents categorized as severe or life-threatening, represents a significant concern. Half of the preventable harm in healthcare is linked to medication errors.⁴
- Surgical errors persist at a high rate, with 10% of preventable patient harm occurring in surgical settings.³
- Diagnostic errors causing harm were identified in at least 0.7% of adult admissions.⁶
- Healthcare-associated infections result in prolonged hospital stays, enduring disability, increased antimicrobial resistance, added financial strain, and preventable deaths.⁷
- Sepsis, a severe immune response to infection, claims the lives of approximately 25% of affected patients managed in hospitals.⁸
- Patient falls, the most common adverse events in hospitals, lead to injury in more than one-third of cases.⁹
- Venous thromboembolism, a preventable cause of harm, contributes to one-third of complications associated with hospitalization.¹⁰
- Pressure ulcers, stemming from prolonged pressure on specific body areas, can have fatal consequences if not promptly addressed. Despite being preventable, they significantly affect individuals' health and quality of life.¹¹
- Unsafe transfusion practices put patients at risk of serious adverse reactions and transfusion-transmissible infections. Similarly, failure to correctly identify patients can result in catastrophic adverse outcomes, such as wrong-site surgery.

Unsafe injection practices pose risks of infectious and non-infectious adverse events to patients and healthcare workers alike.

A safe health system is one that adopts all necessary measures (prioritizing safety, ensuring a safe working environment, building competencies of health care workers and improving teamwork and communication; establishing systems for patient safety incident reporting for learning) to avoid and reduce harm through organized activities. Acknowledging patient safety as a critical global health concern and an essential element in enhancing health systems on the path toward achieving universal health coverage, the World Health Organization (WHO) underscores patient safety as a pivotal strategic priority. As part of this emphasis, WHO has endorsed the Global Patient Safety Action Plan 2021-2030. Its goal is “to achieve the maximum possible reduction in avoidable harm due to unsafe health care globally”, envisioning “a world in which no one is harmed in health care, and every patient receives safe and respectful care, every time, everywhere”.¹²

Patient safety initiatives are efforts aimed at revising hospital protocols and providing training to staff to work as a team, all with the goal of minimizing errors and ensuring patient protection. Each hospital should launch its Safety First Every Day Initiative, a comprehensive patient safety and quality program aimed at significantly reducing serious safety events, decreasing falls resulting in injury, lowering infection rates, and boosting safety occurrence reporting. The implementation of the Safety First Every Day initiative has led to noteworthy reductions in serious safety events, declines in falls resulting in injuries and infections and an increase in safety occurrence reporting.⁵

All staff members should undergo a continuous safety training program aimed at fostering safety awareness throughout each day, with regular refresher sessions provided. Employees who report safety breaches and actively contribute to their resolution should be recognized and awarded by the hospital. It is essential for every hospital to develop an Early Warning System that integrates clinical expertise and technology to identify patients whose condition is deteriorating before it escalates. Patient safety must be ingrained in our organizational culture, with a commitment to continual improvement and proactive intervention. Prioritizing safety should be a recurring agenda item, with daily safety check-ins and discussions on safety integrated into all meetings to ensure that every staff member incorporates safety awareness into their work.

The program's objective should be to instruct all team members on safe practices, including the importance of attentiveness to details and the utilization of the simple and practical STAR (Stop, Think, Act, Review) approach to prevent things from going wrong. In order to optimize patient safety, physicians, nurses, and clinical administrators put into practice protocols aimed at reducing accidents or misdiagnoses.

CONCLUSIONS

Team members should regularly cross-check each other's actions to ensure adherence to the highest safety and quality standards. It is crucial to collectively emphasize the significance of identifying errors to prevent their recurrence. Additionally, it is important to differentiate between unintentional human errors and deliberate disregard for safety protocols. Striking a balance between individual responsibility and organizational/systemic accountability is essential. We must support individuals who make unintended mistakes and ensure they are not unfairly targeted, especially if the system has failed to adequately educate them on necessary procedures. We also need to educate individuals on behaviors that minimize errors. Instead of placing blame on individuals when mistakes happen, our focus should be on improving the system, thus avoiding the typical blame game. We must strive to foster a culture where individuals openly discuss errors without attributing blame and actively seek methods to prevent them.

REFERENCES

1. Grimm CA. Washington DC: Office of the Inspector General; May 2022. Report no. OEI-06-18-00400.
2. Slawomirski L, Klazinga N. The economics of patient safety: from analysis to action. Paris: Organisation for Economic Co-operation and Development; 2020 (<http://www.oecd.org/health/health-systems/Economics-of-Patient-Safety-October-2020.pdf>, accessed 6 September 2023).
3. Panagioti M, Khan K, Keers RN, Abuzour A, Phipps D, Kontopantelis E et al. Prevalence, severity, and nature of preventable patient harm across medical care settings: systematic review and meta-analysis. *BMJ*. 2019;366:l4185. doi: <https://doi.org/10.1136/bmj.l4185>
4. Hodkinson A, Tyler N, Ashcroft DM, Keers RN, Khan K, Phipps D et al. Preventable medication harm across health care settings: a systematic review and meta-analysis. *BMC Med*. 2020;18(1):1-3. doi: <https://doi.org/10.1186/s12916-020-01774-9>
5. Slawomirski L, Auraen A, Klazinga N. The economics of patient safety: strengthening a value-based approach to reducing patient harm at national level. OECD Health Working Papers No. 96. Paris: Organisation for Economic Cooperation and Development; 2017. doi: <https://doi.org/10.1787/5a9858cd-en>, accessed 6 September 2023).
6. Gunderson CG, Bilan VP, Holleck JL, Nickerson P, Cherry BM, Chui P et al. Prevalence of harmful diagnostic errors in hospitalised adults: a systematic review and meta-analysis. *BMJ Qual Saf*. 2020;29(12):1008-18. doi: <https://doi.org/10.1136/bmjqs-2019-010822>
7. Raofi S, Kan FP, Rafiei S, Hosseinalangi Z, Mejareh ZN, Khani S et al. Global prevalence of nosocomial infection: a systematic review and meta-analysis. *PLoS One*. 2023;18(1):e0274248. doi: <https://doi.org/10.1371/journal.pone.0274248>
8. Markwart R, Saito H, Harder T, Tomczyk S, Cassini A, Fleischmann-Struzek C et al. Epidemiology and burden of sepsis acquired in hospitals and intensive care units: a systematic review and meta-analysis. *Intensive Care Med*. 2020;46(8):1536-51. doi: <https://doi.org/10.1007/s00134-020-06106-2>
9. Agency for Healthcare Research and Quality. Falls. PSNet; 2019. (<https://psnet.ahrq.gov/primer/falls>, accessed 11 September 2023).
10. Raskob GE, Angchaisuksiri P, Blanco AN, Buller H, Gallus A, Hunt BJ et al. Thrombosis: a major contributor to global disease burden. *Arterioscler Thromb Vasc Biol*. 2014;34(11):2363-71. doi: <https://doi.org/10.1161/ATVBAHA.114.304488>
11. Li Z, Lin F, Thalib L, Chaboyer W. Global prevalence and incidence of pressure injuries in hospitalised adult patients: A systematic review and meta-analysis. *International journal of nursing studies*. 2020 May 1;105:103546. doi: <https://doi.org/10.1016/j.ijnurstu.2020.103546>
12. Global patient safety action plan 2021-2030: towards eliminating avoidable harm in health care. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO.