A Comprehensive Unit-Based Safety Intervention Program for the Prevention of Falls in Hospital

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Introduction

- Falling is a major **public health problem** with sequelae that range from minor bruises and abrasions to more serious consequences such as lacerations, fractures, head injuries and even death (1).
- **Inpatient fall and injury incidence** varies according to unit characteristics, with medicalsurgical patients at higher risk than intensive care patients (2).
- The acute care patient may be at increased risk of falling due to newly altered mobility, medication side effects, history of previous falls, frequent toileting and altered mental status all in an unfamiliar environment.
- **Safety Attitude Questionnaire (SAQ)**, was used to explore the relationship between safety climate scores and patient outcomes" (Colla et al 2005) good reliability and validity.
- Comprehensive Unit-based Safety Program (CUSP) was adopted from John Hopkins Hospital to align culture change, to identify, eliminate patient safety hazards & improve local culture.



Objectives

- To develop a system that identifies patients who are fall risk during admission and implement the interventions to promote for best outcomes.
- Aim to **evaluate The Effectiveness** Of Comprehensive Unit-based safety program (CUSP) In **Improving Patient Safety Culture and Reducing Falls** In A Teaching Hospital by implementing an interdisciplinary program.



Method



- Quality Improvement study using implementation research framework as established by the WHO Alliance for Health Policy & Systems Research.
- This evaluation process guided by the UK Medical research Council.
- Initiated in a medical adult hematology ward with 21 beds
- The sample population were the HCPs from the selected ward
- SAQ was used to assess the safety culture pre and post intervention with web based education.



Comprehensive Unit-based safety program (CUSP)

- The CUSP was developed by patient safety researchers at the Johns Hopkins Hospital in 2001, to improve local safety culture and to learn from defects by utilizing a validated structured framework.
- CUSP is designed to target the work of unit level, engaging and empowering staff in the identification and elimination of patient safety hazards in the organization.
- CUSP needs teamwork, communication and engaging senior executives for the improvement in patient safety culture (Weaver SJ et. al, 2013; Shekelle P.G et. al.,2013)
- The goal of CUSP is to create sustainable patient safety improvements by creating a culture of safety that drives units to achieve organizational and national patient safety goals (AHRQ, 2017).





Process of CUSP interventions



Step 1 of the CUSP intervention educates staff on the science of improving patient safety, focusing on systems thinking and design.



Step 2 asks the teams to identify local issues and/or defects, which are defined as anything that should not recur in either a clinical or operational context.



Step 3 requires the unit to partner with a senior executive to help bridge the gap between the management and the frontline staff, prioritize safety hazards, and provide resources for local interventions.







Step 4 introduces the staff to the tools that enable them to understand and learn from the identified local defects.



Safety culture using SAQ & Fall rates



	Year	Total number of	Rate
		falls	
Pre-intervention	2017	7 falls	11.18
	2018	5 falls	8.2
Post- intervention	2019	4 falls	6.5
	2020	0 falls	0

Post implementation, the fall rate dropped to zero. The unit observed the longest of fall-free days in 2020, at a total of 365 days.



Conclusion

CUSP leads to sustainable changes in quality of care and practices of HCPs.

Spreading interventions & expanding collaboration to reduce patient harm

