Fall Preventions: Quality Improvement

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Quality improvement within the health care field consists of data collected and analyzed to discern what improvements and enhancements need to change for the safety and efficiency of patient care and medical personnel (Houser, 2023). This change is no exception regarding safety measures needed to prevent falls. Nurses are advocates and are responsible for patient safety while under their care, which is why nurses are held accountable for many safety and health concerns that put the patient at risk for injury. Quality improvement assists in reinforcing patient safety. An example of one organization that investigates quality improvement is Quality and Safety Education for Nurses Institution, QSEN (QSEN Institute, 2020). For safety to occur appropriately, QSEN emphasizes that a nurse must be knowledgeable and up-to-date on current methods, have the proper skills, and have a willing and understanding attitude for change to occur for the better (QSEN Institute, 2020). Due to the high number of falls, which can lead to further injury and prolonged hospital stays, the importance of quality improvement for fall precautions is evident.

Article Summary

Introduction

This study article aimed to reduce the number of falls and fall-related injuries in hospitals by considering the use of technology of continuous video monitoring for safe, quality care with cost-saving methods. Hogan Quigley et al. (2022, p. 123) state that the "Agency of Healthcare Research and Quality estimates 700,000 to 1 million hospitalizations per year due to falls," with one-third to one-half of the patients sustaining a significant injury. Most occurring injuries

include "head trauma, bleeding, and fractures" (Hogan Quigley et al., 2022, p. 123). Since falls are a significant concern for health care professionals, it is crucial to find a way to prevent them as much as possible. A 244-bed suburban hospital on the North-East coast of America conducted a six-month study to decrease fall-related injuries and rates. Statistics were collected from random charts to observe trends of falls and injuries in fourteen-day increments over six months. The virtual sitter observed fall-risk patients via a two-way camera. Hogan Quigley et al. (2022) demonstrate the use of QSEN competencies by using methods, measurements, and addressing education needed for hospitals to implement CVMs.

Results of the implementation of CVM with virtual sitters concluded a "14% decline in fall rates and a 6%" decrease in fall-related injuries" (Hogan Quigley et al., 2022, p. 127). A cost analysis comparing the virtual sitter with a person concluded the total amount of hours saved was "4879.5 hours," meaning at a “$15.00 hourly wage” without benefits, the company saves an estimated $73,192.5 per every three months (Hogan Quigley et al., 2022, p. 126). By looking into this using technology to assist nurses, this research aims to find the most cost-efficient and better way of preventing falls.

Overview

Along with trying to find a solution to decreasing fall rates and fall-related injuries, the researchers also want to discover what past implemented practices to prevent this risk and what practices nurses need to start implementing in their routine of patient care. This article emphasizes that nurses have already used various prevention methods, such as fall-risk signs, bracelets, and nonslip socks. The nurses also provided patient education, performed safety rounds, and used bed alarms whenever the patient wanted to get up. However, these medical

preventions did not detour patients from getting up without assistance. That is why this hospital thought it necessary to incorporate CVM and virtual sitters to help enforce the importance of the need for assistance when getting out of bed.

Besides focusing on the nursing practice's impact, these researchers demonstrated QSEN competencies by illustrating all three skills in their article. Hogan Quigley et al. (2022) exhibited knowledge because they understood a problem with falls rates and took action to find a method to decrease this. They also explained that this method was initially for one hospital area but innovated, so isolation rooms could also use it. The authors displayed skills by using continual video monitoring, a secure HIPAA-compliant internet platform, and a dual-sided audio/video between the patient and virtual sitter, as well as an understanding of the need for encrypted phones for communication between the nurses and devices (Hogan Quigley et al., 2022). Finally, the researchers showed attitude by showing positive support of the project by displaying signs on the unit with the number of days without falls and by encouraging the need for education on fall prevention and staff safety.

Quality Improvement

Implementation of CVM and virtual sitters, along with standardized nursing fall prevention protocols, can be utilized primarily in inpatient care nationwide, especially within more prominent hospitals with a larger nurse-to-patient ratio. However, areas with limited access to the internet and limited financial funds may need help to use this new method of CVMs and sitters. Initially, this method was just planned implementation on cardia units, but once Covid-19 advanced, it was decided to be used for isolation rooms to help protect nursing staff (Hogan Quigley, 2022).

Before implementing this method, proper equipment, education on how to use and clean the equipment, and communication with Information Technology personnel to discuss possible technicalities of video monitoring systems should occur. Virtual sitters must attend a 2-hour introductory session, a web-based training program, and additional education in communication, including how to redirect patients and alert nursing staff to maintain safety and prevent falls and injury. Along with this new method, nurses must understand and know how to implement the standard fall precautions to prevent the excess risk of harm.

Intra and post-implementation stages would require internet access with a secure connection, a secure "HIPAA telemedicine platform, and a 2-way audio/video between the patient and virtual sitter" (Hogan Quigley et al., 2022, p. 124). This system would also require "encrypted phones for communication between the nurses and devices, and technology personnel" who are always available to assist with any problems (Hogan Quigley et al., 2022, p. 124). However, just because a sitter is watching the patient does not mean the patient is not at risk for falls. The nurse must still follow standard safety measures, including "signs, wristbands, nonslip footwear, education, safety rounds, and bed alarms" should be continued to be used (Hogan Quigley et al., 2022, p. 125).

Studies like this impact patients, staff, and the institution, focusing on quality improvement and examining how patients and staff feel about these improvements. The patient in this research article was satisfied with this technology as communication with the virtual sitter was faster than before. At the same time, the nurses were satisfied with this technology's value because it allowed nurses to focus on other things. Both patients and nurses were impacted in safety as well. Patients were impacted by decreased falls and fall-related injuries, while nurses were influenced by reducing the risk of exposure to Covid-19 from isolation rooms. Finally, the

institution was affected overall for the better, as fall rates decreased while saving a substantial amount of money, which the facility can use to enhance patient care in other ways.

Application to Nursing

Nursing is a multifarious job requiring nurses to continually enhance their practice, education, and further research to improve efficiency and patient care. Falls are a significant concern that warrants an improvement in quality and protocols. Nurses should want to enhance their careers to keep patients safe as caregivers.

Practice

Current nursing practices are already in place to prevent patients from falling. According to Hogan Quigley et al. (2022), such practices include bed alarms, fall-risk wrist bands, and nonslip socks. In addition to these current practices, the authors of this article plan to implement further policy practices in healthcare. By incorporating CVM and virtual sitters to help enforce the importance of the need for assistance when getting out of bed, the hospital experienced a decrease in the reported number of falls. This decrease encourages hospitals to use CVM and virtual sitters.

Education

For quality improvement to be effective and change noticed in medical facilities, nurses must always enhance their education to the most current protocol. Hogan Quigley et al. (2022) reference the required education nurses need to implement these new methods to prevent falls. All nurses, certified nursing assistants (CNAs), and virtual sitters had assignments through online

education modules, an online learning management system, and hands-on sessions with the equipment. Virtual sitters received “additional education in communication including how to redirect patients and when to alert the nursing staff to maintain safety and prevent falls and injuries” (Hogan Quigley et al., 2022, p.125). Even though the authors ensured this education at the beginning of the improvement process, they wanted to encourage the medical staff to continue their education for further knowledge of technology and facility strategies. The individual units utilized “demonstrations during the initial 2-week implementation period and follow-up tutorials” to discern if the medical staff had proper management and usage of this new method (Hogan Quigley et al., 2022, p.125).

Research

Although Hogan Quigley et al. (2022) did an excellent job exploring various aspects of setting up and executing this method, the authors did experience some limitations during the implementation of the improvement process. These limitations included limited time frame, lack of cost analysis on how much the system cost to install and program expansion, and limited equipment available. Based on the information mentioned in the article, readers can observe some noticeable limitations. The first area not included would be the use of CVM and two-way communication outside of hospital settings, especially in long-term care facilities, assisted living, and retirement communities. Even though the article mentioned that the authors intended this new method for the cardiac unit to covid precaution rooms, it does not mention further expansion into other medical facilities outside hospitals. The next aspect that needs inspection includes how to handle communication with language barriers and deaf patients. One can assume that a trained medical interpreter could be with a virtual sitter to assist with language barriers, but the article

does not mention this. Finally, internet access in hospitals, especially in small or rural towns, could become an issue because the internet system could become overloaded with information on the cameras, thus slowing down the input and output of all internet connections in the facility.

Conclusion

In conclusion, falls are a significant nationwide problem in many medical facilities. This problem has made to concern, as falls can lead to further and more extensive patient injuries. To help this concern, patients have an advocate, nurses, to try to control and minimize the risk of falls while promoting patient safety by using fall precaution techniques. Quality improvement assists in reinforcing patient safety by referencing QSEN; the nurses must exhibit knowledge of current and up-to-date methods, have the proper and current skills for their practice, and have a willing and understanding attitude for change to occur for the better (QSEN Institute, 2020). Quality improvement helps nurses provide better and more efficient patient care. Since nursing is a multifarious job, it is important for nurses to continually enhance their practice, education, and further research to improve efficiency and patient care. Even though there are kinks in the system, this is a significant enhancement in the medical field to help protect patients better.

References

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