

Healthcare-acquired Infection Prevention: Quality Improvement

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Quality improvement is vital in the healthcare environment. It measures the quality of current practice, focuses on issues arising, and highlights excellent practice (Rooke et al., 2021). Quality improvement methods involve understanding and improving the work process. The basic principles are using a scientific, methodical, and regulated series of actions to improve a work process continually (Rooke et al., 2021). With the end goal to offer an improved standard of goods or services for the customer (Rooke et al., 2021). Knowledge, skill, and attitudes towards patient care can improve quality and safety (QSEN Institute, 2020).

When providing nurses with additional training and a culture of quality improvement, there is access to additional opportunities to evaluate goals and improve. Developing a change plan, aligning the focus and measurement of change, and valuing the change is a method to improve safety and quality of care (QSEN Institute, 2020). Healthcare providers must care to prevent healthcare-associated infections (HAI). Given the mixed results of HAI prevention initiatives, management techniques appear to be crucial in supporting clinical infection prevention practices (McAlearney et al., 2021). Despite tremendous advances in reducing some types of healthcare-associated infections, much work still needs to be done. Healthcare-acquired is significant regarding their high patient morbidity, mortality, and medical costs. Prevention of HAIs is a patient safety priority for health care workers. Health care workers can help reduce infections by practicing appropriate evidence-based clinical practices (McAlearney et al., 2021).

Article Summary

This article further explores infection prevention practices and examines their role in preventing catheter-associated urinary tract infections and central line-associated bloodstream infections. The conduction of interviews helps learn about the role of management practices in HAI prevention, with attention paid to CAUTI and CLABSI. The data results show that engaging executive leaders, effectively sharing information, and providing feedback to hospital staff can help prevent HAIs (McAlearney et al., 2021). The study aims to identify prevention techniques for HAIs to help prevent patient deaths. This article is very relevant in the promotion of infection prevention.

Introduction

There is an emphasis on HAI prevention efforts and the importance of preventive maintenance. The study also uses a qualitative method to collect data to support infection prevention. The author addresses promoting infection prevention in the following article, emphasizing leaders' specific practices in HAI prevention efforts. Engagement of executive leadership, information sharing, and manager coaching are all identified as specific practices that can aid in HAI prevention (McAlearney et al., 2021).

Overview

The article includes findings across hospitals that are likely transferable to other HAI prevention efforts. There is an emphasis on enhancing methods like knowledge, skills, and attitudes to help improve patient quality and safety (QSEN, 2020). The article addresses manager coaching as a specific practice to help prevent HAIs. Re-educating and teaching staff on HAI

prevention is a form of knowledge and skill described in the QSEN. Having a positive attitude and valuing change is a method described in the QSEN that can help promote learning from feedback to promote and sustain HAI prevention efforts.

Quality Improvement

The setting described in the article was site visits conducted at hospitals (McAlearney et al., 2021). During the pre-implementation stage, the author discusses previous research that has revealed that leaders' roles can help with infection prevention (McAlearney et al., 2021).

Developing an approved quality plan with a guided process that integrates qualified nursing educators and staff is essential during pre-implementation. Consideration of quality improvement education and financial impact on facilities is essential. Implementing resources such as environmental management is necessary to guarantee infection control and safety success.

During the intra-implementation stage, there would have to be many protective barriers to help implement infection control practices to reduce HAIs. There would also have to be a safe number of hospital staff to help implement the infection control practices. An analysis is completed during the post-implementation stage to verify the success of meeting the objectives. Creation and implementation of new policies if the plan effectively ensures infection prevention.

Preventing healthcare-acquired infections helps reduce unnecessary patient morbidity and mortality. HAI prevention practices can also lead to billions of dollars in medical cost savings.

There is an increase in patient satisfaction when there is a prevention of HAIs because the occurrence of an HAI no longer prolongs their total hospital length of stay. There is an increase in nurse satisfaction when preventing HAIs because it demonstrates a high-quality level of care.

Preventing healthcare-acquired infections is a responsibility of healthcare workers that helps keep patients and coworkers clean and safe.

Application to Nursing

Practice

With catheter-associated urinary tract infections being one of the most frequent device-related infections, there must be measures to improve infection prevention and control. Unnecessary use, poor insertion technique that introduces germs, leaving a catheter in for an extended period, and allowing bacteria to migrate up the catheter to the bladder and cause UTIs and potentially further into the bloodstream are all risk factors for these infections (Kranz et al., 2020). Effective interventions that help decrease CAUTI are reminder systems or defined catheter removal timepoints (Kranz et al., 2020). CAUTIs are more likely to develop when leaving catheters in place for extended periods. The duration of catheterization should, therefore, be kept as short as possible (Kranz et al., 2020). Various measures like reminder systems and duration consideration for catheters are necessary to keep the risk of CAUTI as low as possible for every patient.

Education

Assessing the knowledge of medical professionals is essential in managing issues with CAUTIs and other HAIs. Nursing education includes site cleaning, single-use bladder catheter stabilization devices to limit catheter movement, and daily evaluation on rounds for discontinuing the bladder catheter (Elkbuli et al., 2018). Catheter education should also be done directly with the patient and their family before placement, during Foley care, and during

discharge, if the patient is going home with a catheter (Elkbuli et al., 2018). Teaching urinary catheter uses and needs is necessary for Nurses to learn. Bladder catheters should be inserted only when necessary and left in place for as long as necessary. Using catheters for convenience in managing incontinent patients is unethical (Elkbuli et al., 2018). The continuation of CAUTI nursing education must continue to help enforce change, and the level and quality of staff education have a significant relationship in reducing the number of CAUTIs.

Research

Clinical nursing outcomes can improve by studying many different areas of CAUTIs. Future studies can help prevent morbidity and mortality from complications of catheter-associated urinary tract infections. It is vital to have a strategy addressing culture and clinical practice in a health care setting to reduce CAUTI and keep these improvements going. Despite advances in infection prevention with CAUTI, they are still common, and further research to gain knowledge on safety measures to help infection prevention is necessary. An example of future research conduction is studying the relationship between meatal cleaning solutions used prior to catheter insertion. There must be support from data and meticulously carried out research to support urinary catheter insertion techniques for CAUTI prevention. Overall, further research and studies can improve providers' understanding of factors that contribute to CAUTI and help develop treatment plans and procedures to help control the incidence of CAUTI.

Conclusion

Quality improvement is the framework that utilizes evidence-based information to evaluate and implement changes to improve patient safety, effectiveness, and care experience (QSEN

Institute, 2020). Nurses must have the knowledge, skills, and attitudes necessary to help improve patient experiences and outcomes. Nurses must know patient-centered to identify barriers, describe approaches for changes in care, and measure the quality of care (QSEN Institute, 2020). The skill aspect focuses on removing barriers, seeking information for care outcomes, and providing access to tools or resources (QSEN Institute, 2020). The attitude aspect focuses on respecting the contributions of the own and others' and appreciating the effort from others and oneself to improve care (QSEN Institute, 2020). Cather-associated urinary tract infections are among the most common healthcare-associated infections. CAUTIs are highly preventable, and serious complications can cause comorbidity and mortality. Appropriate measures like quality nursing education, reminder systems, and duration consideration can help decrease urinary catheter use and CAUTI. Helping prevent CAUTIs is essential because it helps prevent extended hospital stays, increased health care costs, patient discomfort, and patient mortality. Nurses play a significant role in preventing CAUTI in patients and must take necessary precautions to keep patients safe and deliver the best possible care.

References

- Elkbuli, A., Miller, A., Boneva, D., Puyana, S., Bernal, E., Hai, S., & McKenney, M. (2018). Targeting catheter-associated urinary tract infections in a trauma population: A 5-S bundle preventive approach. *Journal of Trauma Nursing JTN*, 25(6), 366-373. <https://doi.org/10.1097/JTN.0000000000000403>
- Kranz, J., Schmidt, S., Wagenlehner, F., & Schneidewind, L. (2020). Catheter-associated urinary tract infections in adult patients: Preventive strategies and treatment options. *Deutsches Ärzteblatt International*, 117(6), 83. <https://doi.org/10.3238/arztebl.2020.0083>
- McAlearney, A. S., Gaughan, A. A., DePuccio, M. J., MacEwan, S. R., Hebert, C., & Walker, D. M. (2021). Management practices for leaders to promote infection prevention: Lessons from a qualitative study. *American Journal of Infection Control*, 49(5), 536-541. <https://doi.org/10.1016/j.ajic.2020.09.001>
- QSEN Institute (2020). *QSEN competencies*. https://qsen.org/competencies/pre-licensure-ksas/#quality_improvement
- Rooke, F., Burford, J., Freeman, S., Mair, T., Suthers, J., & Brennan, M. (2021). Quality Improvement: Origins, purpose and the future for veterinary practice. *Veterinary Evidence*, 6(2), 1-14. <https://doi.org/10.18849/VE.V6I2.358>