NRS 450 Topic 3 Benchmark - Culture of Patient Safety Case Studies

Student Name

Program Name or Degree Name (e.g., Bachelor of Science in Psychology), University

COURSE XXX: Title of Course

Instructor Name

Month XX, 2024

Benchmark - Culture of Patient Safety Case Studies

Ensuring patient safety is crucial in healthcare organizations and maintaining the quality of care while avoiding adverse results is the primary focal point. More than ever, complex and blended medical care requires sound information, communication technologies, and informatics processes to protect patient integrity. This assignment focuses on patient safety, analyzing various scenarios during patient-nurse interaction, national safety, quality objectives, required nursing actions, and the involvement of different healthcare disciplines teams. Further, it discusses aspects of clinical decision support and future trends in home health care concerning Mr. Turner. This assignment aims to bring attention to patient safety and analyze how a systematic approach, technology, and teamwork can promote safe, effective, and quality nursing care and improve health outcomes.

Part 1: Creating a Culture of Patient Safety

Instructions: Please review the following scenario and answer each of the following questions in 150-200 words using one to two sources to support your ideas.

Michael is a nurse working on a busy medical-surgical unit. He is responsible for the care of five patients with complex medical needs. Michael checks on his first patient, Mrs. Wallace. She is lying in bed with the call light button within her reach. The identification armband is in place. Michael verifies that the IV is working and the correct IV fluid is infusing. The monitor ison, and the limits/volumes are set appropriately.

Michael proceeds to check on his second patient, Mr. Baker. As he walks into the room, he finds Mr. Baker on the floor and alert. Mr. Baker tells Michael that he fell trying to get into the bed because the bed rolled away. Michael notes that the locks for the bed were not engaged. There is no call light in the room. The monitor is turned off. Mr. Baker does not have an identification.

armband on. There is an identification band on the bedside table, but it does not belong to Mr. Baker. Michael checks the IV fluid infusing and discovers that the name on the IV bag is the same as the identification armband on the bedside table.

National Safety and Quality Standards

- · Identify two sources and applications of national safety and quality standards to guide nursing practice.
- · Describe two factors that create a culture of safety for Mrs. Wallace's scenario.
- · Support your ideas using one to two sources.

The nursing profession is guided by two primary sources of national safety and quality standards in the United States: The Joint Commission's National Patient Safety Goals (NPSGs) and the Agency for Healthcare Research and Quality (AHRQ). The NPSGs offer direction on patient safety enhancement through five key areas: improper identification of the patient, communication, and medication administration (Shaikh et al., 2024). For instance, checking that Mrs. Wallace wears her identification armband and is compliant with NPSGs regarding patient identification and preventing medication and procedural mistakes is critical. For example, AHRQ has checklists that may be useful for infection control and fall prevention programs. Thus, in the specific case of Mrs. Wallace, one of the measures that create a safety culture is correct patient identification. By proving to Mrs. Wallace that he is a doctor, Michael ensures that all treatments and medications are accurate to prevent the patients from mixing up. Another factor is the proper positioning and assessment of her intravenous therapy or IV. Michael checks that the IV is working correctly and that the right type and amount of fluids are being given. This compliance with safety precautions helps avoid issues with IV therapy, like the wrong choice of fluids and rate of administration(Manu et al., 2020). These practices are specifically designed to reduce the risk of harm in health care delivery through precise identification of the patient and the constant surveillance of treatments.

Nursing Interventions

- Describe three nursing interventions that are necessary for Mr. Baker to create a culture of safety.
- Discuss the nurse's accountability for reporting unsafe conditions, near misses, and errors to reduce harm.

Based on the care plan for Mr. Baker, the three essential safety interventions for nursing include implementing applicable bed safety measures, appropriate patient identification, and access to effective communication aids. Firstly, it is vital to engage the bed locks to avoid falling; as a nurse, one should ensure that the bed is steady to prevent falls like Mr. Baker's. Secondly, adequate recognition of the patient, for instance, Mr. Baker's identification armband, is beneficial so that the correct medication administration and treatment of the wrong patient are performed. Also, keeping functional signals like call lights to allow Mr. Baker to call for assistance or anyone in need is essential in ensuring a quick and adequate response. The nurse's role in documenting and reporting unsafe conditions, near misses, and mistakes is pivotal in avoiding adverse effects and enhancing patients' safety (Yang et al., 2021). Nurses must alert the relevant authorities of any safety issues they notice to ensure that necessary action is taken immediately. This transparency enables recognition of systematic problems, brings change, sustains improvement, and increases patient safety. Reporting also helps adhere to regulatory requirements within the organization and improves the quality of care, thus reducing risks in providing healthcare services to patients.

Interprofessional Team Members

- · Identify the interprofessional team members who will need to be notified regarding Mr. Baker's situation.
- · Select three team members and explain their role in caring for Mr. Baker's situation.
- Explain the nurse's role within this interprofessional team in promoting safety and preventing errors and near misses.

In Mr. Baker's case, the following interprofessional team members should be informed as more holistic and timely care initiation is required. Three interdisciplinary patient safety team members are the physician, pharmacist, and patient safety officer. The physician's role after the fall is to evaluate Mr. Baker's condition, treat any exacerbating injuries, and manage potential fall risk factors in the future. The pharmacist is critical for checking medication orders, calculating IV fluids to infuse the correct volume, and averting ADEs. Moreover, the patient safety officer looks at the specifics of the fall, identifies previous structural weaknesses within the organization, and determines ways to prevent such occurrences in the future. The nurse's role also entails direct care to the patients and the responsibility for organizing care from the interprofessional team, coordinating treatment plans, and patient safety. Besides communicating with other workers, nurses are responsible for doing risk assessments, reporting their findings to the rest of the team, and preventing such incidents from recurring(Mojtaba Vaismoradi et al., 2020). By working together and promoting compliance with the set processes, the nurses play an essential role in improving the safety of patients.

Basic Safety Design Principles

Basic safety design principles help to reduce the risk of harm. Examples of these include errorproofing, safeguards, and training.

- Please select one of the safety design principles and explain how it applies to Mrs.
 Wallace and Mr. Baker.
- Discuss the benefits of using reporting system processes to understand causes of error and improve patient outcomes.
- · Support your ideas using one to two sources.

The safety design activity relevant to Mrs. Wallace and Mr. Baker is error-proofing, one of the most critical design activities. Error prevention is designing processes that minimize the chances of an error happening or reduce the consequences an error would have if it does occur (Franklin, 2019). For instance, error-proofing for Mrs. Wallace could entail using barcode scanning to ensure that the right patient is always identified for medication or treatment. This technology helps to ensure that the right patient receives the proper intervention, and doing so drastically minimizes cases of medication errors. Similarly, for Mr. Baker, some possible error-proofing involves using bed alarms or sensors, which indicate whenever the patient is out of bed and requires help to get back to bed to eliminate the risk of falls.

Employing the reporting system processes provides several advantages in identifying the root causes of errors and enhancing patient outcomes. These systems help healthcare organizations gather information on adverse events, incidents that did not result in adverse events, and system deficiencies to analyze causes and identify contributing factors (Salma Albreiki et al., 2024). The healthcare teams can study These trends and patterns to see where problems are likely to recur, which can allow for appropriate measures to prevent such occurrences. Furthermore, reporting systems raise awareness, people's responsibility, and organizational learning throughout care organizations, resulting in patient protection and better results.

References:

Cite a minimum of two sources in APA format to complete this assignment. Sources must be:

- Published within the last five years.
- · Appropriate for the assignment criteria.
- Relevant to nursing practice.

- Franklin, R. (2019). *Mistake proof of your practice to avoid medical errors*. Mobius MD.

 https://mobius.md/2019/09/18/mistake-proof-your-practice-to-avoid-medical-errors/
 #:~:text=Ideally%2C%20mistake%20proofing%20ensures%20that,way%20to%20avoid
 %20medical%20errors.
- Manu, Langer, T., Djillali Annane, Gattinoni, L., Elbers, P., Hahn, R. G., Inneke De laet, Minini, A., Wong, A., Ince, C., Muckart, D., Mythen, M., Pietro Caironi, & Niels Van Regenmortel. (2020). Intravenous fluid therapy in the perioperative and critical care setting: Executive summary of the International Fluid Academy (IFA). *Annals of Intensive Care*, 10(1). https://doi.org/10.1186/s13613-020-00679-3
- Mojtaba Vaismoradi, Tella, S., Logan, P. A., Jayden Khakurel, & M. Flores Vizcaya-Moreno. (2020). Nurses' Adherence to Patient Safety Principles: A Systematic Review. International Journal of Environmental Research and Public Health/International Journal of Environmental Research and Public Health, 17(6), 2028–2028. https://doi.org/10.3390/ijerph17062028
- Salma Albreiki, Can, M., Qazi, A., & Bouabid, A. (2024). Assessment of the organizational factors in incident management practices in healthcare: A tree augmented Naive Bayes model. *PloS One*, *19*(3), e0299485–e0299485.

 https://doi.org/10.1371/journal.pone.0299485
- Shaikh, U., MD, MPH, & FAAP. (2024, May 7). *National Patient Safety Goals*. Ahrq.gov. https://psnet.ahrq.gov/primer/national-patient-safety-goals
- Yang, Y., Liu, H., & Sherwood, G. D. (2021). Second-order problem solving: Nurses' perspectives on learning from near misses. *International Journal of Nursing Sciences*, 8(4), 444–452. https://doi.org/10.1016/j.ijnss.2021.08.001

Part 2: Delivering Safe Nursing Care Using Information and Communication Technologies

Instructions: Please review the following scenario and answer each of the following questions in 150-200 words using one to two sources to support your ideas.

A home health nurse, Stephanie, is visiting an older man, Mr. Turner, who lives with his daughter. Prior to the visit, Stephanie reviewed the electronic health record (EHR) and the clinical decision support tools for Mr. Turner. He has a pacemaker to help with his congestive heart failure. A module in his home sends information from his device to the cardiologist for monitoring. During this visit, Stephanie will be assisting Mr. Turner and his daughter in sending a report to the cardiologist via the module connected to the internet. Mr. Turner also has type II diabetes using an insulin pump that is connected to an app on his phone. Due to the neuropathy of his feet, Mr. Turner is unstable with his gait and uses a walker to ambulate. He wears a senior medical alert button in case he should fall. Mr. Turner is also scheduled for a telehealth visit with his doctor during Stephanie's visit.

Stephanie arrives at the home for the visit. As she started her assessment of Mr. Turner, the insulin pump began beeping, and there was an error message. Mr. Turner stated that it had not been working right for the last couple of days and that his daughter would try to fix it. He also tells Stephanie that he has stopped wearing the medical alert button because it kept beeping, and he could not get it to stop beeping.

Clinical Decision Support Tools

- · Describe two examples of clinical decision support tools (CDST) for Mr. Turner.
- Evaluate how decision support tools impact clinical judgment and help provide safe patient care.

Two clinical decision support tools (CDST) that may be useful for Mr. Turner are a pacemaker monitoring module and an insulin pump management application. The pacemaker monitoring module acquires and dissects information from Mr. Turner's pacemaker and relays the data to his physician for continual, distanced supervision and adjustment of his cardiovascular treatment. The insulin pump management app enables Mr. Turner to monitor his glucose levels and the insulin he needs to take. It suggests managing the insulin based on his level of glucose activity (Berget et al., 2019). These CDSTs engage clinical judgment by providing the necessary, up-to-date information, alerts, and knowledge to the healthcare providers to make the most suitable clinical decision regarding the case of Mr. Turner. These are tools that help in the early identification of the client's cardiac and diabetic complications so that appropriate and safe care is rendered to the patient to prevent complications that may result from factors like cardiac dysrhythmias or hypoglycemia. They also enable Mr. Turner to take constructive, proactive parts in his administration and therapy and change into participating, compliant customers.

Performance Metrics

- Explain how CDSTs are used to report and monitor performance metrics on patient outcomes.
- · Discuss two to three examples of healthcare performance metrics.

Significantly valuable for promoting the discernment of variations in patient outcomes management, clinical decision support tools (CDST) contain information on what the patient is likely to experience in terms of care and what effects the care is likely to have on the patient. They consistently document patient demographics and ICD diagnosis, treatment, and conclusion, making change, policy intervention, and sensitization easier for healthcare professionals (Sutton et al., 2020). For instance, CDSTs, indices of compliance with processes for diseases like diabetes and hypertension, goals of treatment, and occurrences of complications may be measured. Similarly, CDSTs may also search for any drug interaction, contraindication, or ADE that may help reduce the rate of medication error and adverse effect occurrence. From the CDSTs, the performance indicators concerning the quality and efficiency of care can be evaluated, where it is possible to critically reflect on the quality of care in the healthcare organization and determine what changes must be made to improve the patients' experience.

Technology Use for Care

- Describe how the technology used to care for Mr. Turner enhances the quality and safety of care.
- Identify two modalities that could be used to communicate care delivery for Mr.
 Turner.

In Mr. Turner's management, technologies effectively enhance the quality and safety of care by tracking his condition. For instance, a pacemaker monitoring module means it is possible to monitor his cardiac function and adjust his therapy or diagnose any early abnormalities to reduce the chances of adverse cardiac events. Likewise, the insulin pump management app enables Mr. Turner to check the blood glucose levels and insulin doses and manage diabetes without exacerbating its symptoms. Twos could have been adopted to deliver care to Mr. Turner, using telehealth consultations and secure messaging through health apps. Telehealth consultations help to gain a constant connection with the healthcare providers while avoiding physically going to receive care and check-ups, making it more convenient and easily accessible(Haleem et al., 2021). Health apps with secure messaging provide a convenient method of communication between Mr. Turner, healthcare providers, and other caregivers, therefore enabling the provision of coordinated care and timely flow of information concerning his health condition, compliance with the medications, and any issues or questions in his health plan.

Benefits of Emerging Technologies

- Select two emerging technologies that are used to improve healthcare delivery and clinical decision-making.
- Describe the benefit of these emerging technologies in improving the health promotion of this patient.

Two rapidly growing technologies that improve the healthcare system and clinical practice are wearable health monitors and remote patient monitoring systems. Bright clothing or wearable health devices, including intelligent wristbands or smartwatches, constantly record physiological markers, including heart rate, physical activity, and sleep quality (Hosseini et al., 2023). Remote patient monitoring relates to systems that involve sensors and devices to capture patient data such as vital signs and other physiological information from a distance and transmit the data to healthcare practitioners for consideration and action if required. For a patient like Mr. Turner, these technologies provide much value for health promotion. Wearable health helps him track physical activity, sleep quality, and heart rate trends; through such data, he can make appropriate lifestyle decisions and assess the level of adherence to the selected healthy lifestyle. Also, remote patient monitoring systems help monitor his cardiac status and blood glucose level, quickly identify any variation from normal levels, and treat it to avoid undesirable consequences. Overall, Mr. Turner could self-manage, enhance his health results, and encourage preventive practices to enhance his health promotion and well-being through these technologies.

Reporting System Processes and Functional Issues

 Identify the importance of reporting system processes and functional issues (error messages, misdirections, device malfunctions, etc.) according to organizational policies and procedures. Reporting system processes and functional problems, like the message of error status, misdirection, and issues in a device, are essential per organizational policies and principles to enhance patient safety and healthcare results. These reporting processes allow healthcare providers to recognize any risk factors that could pose a danger to the patients and do something about them to protect their patients before the occurrence of adverse effects(McGowan et al., 2023). In this way, issues that cause unfavorable situations can be described, studied, and corrected by the involved organizations to increase the dependability and effectiveness of medical devices and systems. This brings about an atmosphere of openness and, more importantly, holds staff to high standards while ensuring they can report incidents without fear of being punished for what they did or said. In addition, both policies benefit compliance with the state, and fewer federal regulations are necessary for accreditations and funding. Reporting systems also enhance the reporting, communication, and cooperation among the various healthcare teams so that everyone involved can be alerted and addressed to such risks (Julius et al., et al., 2022). In conclusion, effective reporting mechanisms remain core to maintaining quality services and ensuring patients' health is not compromised.

References:

Cite a minimum of two sources in APA format to complete this assignment. Sources must be:

- · Published within the last five years.
- · Appropriate for the assignment criteria.
- Relevant to nursing practice.

- Berget, C., Messer, L. H., & Forlenza, G. P. (2019). A Clinical Overview of Insulin Pump

 Therapy for the Management of Diabetes: Past, Present, and Future of Intensive

 Therapy. *Diabetes Spectrum*, 32(3), 194–204. https://doi.org/10.2337/ds18-0091
- Haleem, A., Javaid, M., Ravi Pratap Singh, & Suman, R. (2021). Telemedicine for healthcare: Capabilities, features, barriers, and applications. *Sensors International*, 2, 100117–100117. https://doi.org/10.1016/j.sintl.2021.100117
- Julius Cuong Pham, Girard, T., & Pronovost, P. J. (2022, April 27). What to do With

 Healthcare Incident Reporting Systems. ResearchGate; SAGE.

 https://www.researchgate.net/publication/265213107 What to do With Healthcare In

 cident_Reporting_Systems
- McGowan, J., Wojahn, A., & Nicolini, J. R. (2023, August 23). *Risk Management Event Evaluation and Responsibilities*. Nih.gov; StatPearls Publishing.

 https://www.ncbi.nlm.nih.gov/books/NBK559326/
- Mohsen Masoumian Hosseini, Hosseini, M., Karim Qayumi, Hosseinzadeh, S., & Saba, S. (2023). Smartwatches in healthcare medicine: assistance and monitoring; a scoping review. *BMC Medical Informatics and Decision Making*, 23(1). https://doi.org/10.1186/s12911-023-02350-w
- Sutton, R. T., Pincock, D., Baumgart, D. C., Sadowski, D. C., Fedorak, R. N., & Kroeker, K. I. (2020). An overview of clinical decision support systems: benefits, risks, and strategies for success. *NPJ Digital Medicine*, *3*(1). https://doi.org/10.1038/s41746-020-0221-y

