Pressure Injury Root Cause Analysis

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Points criteria:

Criteria	Under performance <3 points per criteria	Basic 3 – 3.9 points per criteria	Proficient 4.0 – 4.4 points per criteria	Distinguished 4.5 – 5 points per criteria
Required content objectives	Content objectives are missing or sparsely covered.	Content objectives are not consistently addressed. Demonstrates minimal understanding of content.	Content objectives consistently addressed. Demonstrates understanding of content.	Content objectives consistently addressed. Demonstrates mastery of content.
Academic writing standards	Writing lacks scholarly tone & focus. Sparse content. Multiple grammatical, spelling, & factual errors. Reliance on bullet points rather than effective writing in speaker notes. 4 or more direct quotes per project.	Writing is unclear and/or disorganized. Inconsistent scholarly tone. Inadequate depth of content. Grammatical and spelling errors. No more than 3 direct quote of less than 40 words per project.	Writing demonstrates general exploration of content. Responses are clearly written using scholarly tone. Few grammatical and/or spelling errors. No more than 2 direct quote of less than 40 words per project.	Writing demonstrates comprehensive exploration of content. Responses are clearly written using scholarly tone. Rare grammatical and/or spelling errors. No more than 1 direct quote of less than 40 words per project.
APA formatting	References and citations have multiple errors or are missing.	References and citations have errors.	References and citations have few errors.	References and citations have rare errors.

Carefully review the above rubric on how points are awarded. Select one (not both) of the case studies listed on page three. Then, using academic writing standards and APA formatting of references and citations, respond to each of the learning objectives listed on page two. Each response should be 150-350 words in length and should be entered below each objective on this document. Save the completed document as the assignment title with your name and submit it to the dropbox.

1. Define root cause analysis & its role in pressure injury prevention.

Root cause analysis (RCA) is a method of problem-solving used to identify the contributing causes of an issue or problem. A complete investigation should be performed to find the contributing factors of the problem to determine its root cause. Instead of treating the surface-level symptoms, the goal is to prevent problems from recurring by addressing the source of the issue. Root cause can aid nurses and hospital risk managers to determine how the system can improve to reduce the number and severity of pressure injuries (Black, 2019). It can help identify causes of pressure injury and develop a practical approach to prevent them. It involves identifying any contributing factors that led to the development of the wound at different levels of care.

A. The first level for an RCA is to identify the problem's immediate cause—improper patient positioning or inadequate pressure relief. It is crucial to gather all data related to this incident. Obtaining staff reports, patient records, and any relevant policies or procedures. This information can be used to identify factors that could have contributed to the issue and develop corrective actions to address these factors.
B. The second level would be to examine the care process involved—inadequate staff training and lack of proper equipment for pressure relief. Improve communication and collaboration among staff.
C. The third level is the systemic causes, such as inadequate staffing or lack of resources.

2. Analyze one (not both) of the case studies from page three of this document and describe the system failures that led to the pressure injury.

The second case study involved a patient who underwent bypass surgery to open three coronary arteries, and I have come to find possible system failures, which are as follows:

A. The patient has inadequate blood sugar control, and HbA1c is 13.2%. Uncontrolled diabetes can increase the risk of developing wounds. High sugar levels damage nerves and blood vessels. Constant pressure decreases the blood flow to tissues. The patient was supine for 8 hours in the OR.
B. Primary risk factors for ulcer development in intraoperative patient are immobility and inability to perceive pain or discomfort from unrelieved pressure, as well as friction and shearing forces (Primiano et al., 2011). The patient was in the OR for 8 hours in the supine position.
C. No mention of table surface used in the OR. An effective measure to prevent pressure injuries is the use of high-tech support surfaces.

D. There is no mention of a post-anesthesia care unit (PACU) skin assessment score. Regular skin assessments before, during, and after surgery can help identify and address skin issues.
E. Prolonged immobility, inadequate pressure relief, positioning of patient. Frequent patient repositioning to relieve pressure and prevent skin damage during the procedure.

3. Based on these findings, develop a comprehensive pressure injury prevention plan for the organization.

To address findings, the pressure injury prevention plan would include:

A. Utilize pressure injury assessment tools such as the Braden scale. It can be used to guide care planning to prevent the development of pressure injuries.
B. Provide adequate pressure relief after surgery.
C. Proper positioning equipment and support service.
D. Monitoring the patient closely for signs of DTPI and taking appropriate action to prevent its progression.
E. Minimize shear, friction, and pressure. HOB < 30 degrees and repositioning every 1 – 2 hours.
F. Nutrition – Registered Dietician to assess calorie intake, protein, supplements, carbohydrate control, and dietary counseling.
G. Effective blood glucose control requires an interdisciplinary approach that addresses diet, physical activity, and medication management (McNichol, 2022).
H. Education – staff/family/patient. Educate staff on best practices for wound care. Should receive regular training to ensure up-to-date on the latest wound care protocols.
I. Recommend gradual increase in activity over time as per provider's order.
J. Mobility – referral physical therapy to help improve mobility.
K. Meticulous wound care – recommend hydrocolloid dressing to maintain a moist environment and protect the wound from infection. Protect peri-wound using skin prep.

4. Propose a plan of care to monitor the results of the organization-wide, comprehensive pressure injury prevention plan.

A plan to monitor the effectiveness of Root Cause Analysis is essential. There should be benchmarks and metrics to evaluate progress and develop a schedule to see how often monitoring will occur. We need to identify who will monitor progress and report results. Review the development of pressure injuries that occurred after the patient was admitted. You should look at deviations from the facility's pressure injury policies and procedures. This can be used to improve the facility's skin management program. Customized care plans should be implemented. It can be a learning and growth opportunity for staff. When an RCA is performed, the cooperation of all healthcare team members and clinicians involved in patient care is critical to understanding the "Why" behind the source of medical error and identifying future strategies to mitigate such errors and improve patient outcomes (Singh, 2023). Outcomes and measures should be evaluated and made available to staff. Results can be placed on a daily management board containing the goals of the organization's improvement methods. Tracking progress and analyzing results regularly can identify areas for improvement in wound care practices and adjust as needed to improve patient outcomes.

5. List the references used & cited in this assignment.
    a. *See the course syllabus for specific requirements on references for all assignments.*

Singh, G. (2023). *Root Cause Analysis and Medical Error Prevention.* StatPearls – NCBI BookShelf. https://ncbi.nlm.nih.gov/books/NBK570638

Black, J. M. Root Cause Analysis for Hospital-Acquired Pressure Injury. *Journal of Wound, Ostomy, & Continence Nursing*: July/August 2019 – Volume 46 – Issue 4 – p 298-304 doi: 10.1097/WON.0000000000000546

Primiano, M., Friend, M., McClure, C., Nardi, S., Fix, L., Schafer, M., Savochka, K., & McNett, M. (2011). Pressure Ulcer Prevalence and Risk Factors among Prolonged Surgical Procedures in the OR. *AORN Journal*, *94*(6), 555. https://doi.org/10.1016/j.aorn.2011.03.014

McNichol, L. L., Ratliff, C. R., & Yates, S. S. (Eds.). (2022). *Wound, Ostomy, and Continence Nurses Society core curriculum: Wound management* (2nd ed.). Wolters Kluwer

Select just one (not both) to respond to the learning objectives listed on page two.

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a. A 58 year old patient with a history of uncontrolled diabetes is admitted to the ED. He was discovered unconscious in his back yard by neighbors who called 911. He was transported to the ED of Acme Hospital where he regained consciousness. His blood glucose was 220 mg/dL, and his HbA1c is 13.2%. He is also experiencing mild chest pain, nausea, and tingling in his left arm. He is admitted to the hospital to rule out MI and to gain control of his blood glucose level. On admission, his risk assessment for skin breakdown indicated a 20 or very low risk. After several tests to determine the cause of his chest pain, he is diagnosed with coronary artery disease and is in need of bypass surgery to open three coronary arteries. He goes to surgery on day three of his admission and is in the OR for 8 hours in a supine position. 18 hours after surgery, his nurse notices he has a painful deep purple bruised area in the coccyx region and contacts the WOC nurse to evaluate the lesion. At this point the patient is placed on an active alternating pressure powered air mattress. Five days later the bruised area in the coccyx begins to show evidence of an open wound, with measurements of 4.0 length x 1.0 cm width, and deep in the natal cleft there is dense slough with mild serous drainage. The surrounding skin is indurated with redness and evidence of a resolving bruise. Explain what risk factors led to the sacral injury and how you would set up his plan of care.