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 to the dropbox.

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

   According to Black (2019), root cause analysis is a systemic process of identifying the true roots of a problem. Root cause analysis reviews an adverse occurrence to prevent recurrences. The goal is to understand why the problem arose and learn to prevent it. Root cause analysis examines the problem and the human roots, such as interactions or non-interactions of staff and the overall system of care (Black, 2019). According to the Joint Commission (2022), a pressure injury may contribute to premature mortality and marks a poor overall prognosis. Joint Commission (2022) states that Stage 3 and 4 pressure injuries are patient safety events that could be sentinel events. Pressure injuries are more common in patients in a critical care unit, hemodynamically unstable, and patients with diabetes, as stated by the Joint Commission (2022). The U.S. Center for Medicare & Medicaid will no longer pay for additional costs for hospital-acquired pressure injuries (Joint Commission, 2022). The Joint Commission (2022) statement says that pressure injuries can be prevented based on evidence-based nursing practice.

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 in that situation.

   The patient, a 58-year-old with a history of uncontrolled diabetes, is admitted to the hospital after being found unconscious at home. His blood glucose was elevated with an A1c of 13.2%, and having mild chest pain, nausea, and tingling in his left arm. The patient underwent open heart surgery and was on the table for 8 hours. The risk assessment was 20 on admission, and he underwent surgery three days later. Postoperatively 18 hours later, the nurse noticed a painful deep purple, bruised area on the coccyx. The WOC nurse was notified, placed the patient on an alternating pressure-powered air mattress, and noted an open wound five days later. The patient is suing the health care system due to lost time from work, cost of care, and pain and suffering.

   Analyzing the scenario several risk factors need to be reviewed. In the case study, the patient has diabetes with elevated blood glucose levels on admission. What is the nutritional status pre and post-op? No Braden scores were noted after the initial risk assessment, on the operating room table for 8 hours, skin assessment is not mentioned until 18 hours after surgery, no mention of turning and repositioning the patient, and no further mention of skin assessment after the patient was placed on the alternating pressure powered air mattress for five days.

Doing a root cause analysis here are areas of concern. The pressure injury site, coccyx, and the date of the pressure injury were noted 18 hours after surgery. There was a risk assessment noted on the day of admission. However, no risk assessments were noted afterward, especially after the patient was lying on the operating table for eight hours. The patient was placed on an alternating pressure bed 18 hours after surgery, but no documentation on turning and positioning the patient every 2-3 hours. No skin assessment is noted upon or after admission (Borchert, 2022). The patient has diabetes which can inhibit healing. The patient arrived with an elevated blood surgery; the A1c was elevated at 13.2%, and there is no notation of this being addressed.

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

The comprehensive pressure injury prevention plan would start with interviews with all the staff involved in patient care to understand where the breakdown started. Asking questions such as did the patient have any pressure injury on arrival and if so, was it documented? What did the initial head-to-toe assessment reveal on admission, and is it documented? Next, the risk assessment must be reviewed, looking at all the risk factors and whether it was done daily. Due to the patient having surgery that resulted in the patient being on the table for 8 hours, what considerations were made to prevent pressure injuries? What type of padding was on the OR table, and was there a skin assessment before the patient was placed on the table and postoperatively?

The prevention plan would start with educating the nursing staff on head-to-toe assessments on admission and reviewing the risk assessment tool, and educating on the importance of the head-to-toe assessment on admission with two different nurses and doing the risk assessment tool daily. In addition, any patient with elevated blood sugars needs to have the Diabetes Educator consulted for lowering the blood sugars before surgery and postoperatively, as blood sugars can impede wound healing and cause vasculature problems. Operating room personnel will also be included.

Next would be to set up process interventions, such as the Head-to-toe assessment on admission and the risk assessment score on admission and daily. A WOC nurse consult is generated if the patient has a low-risk assessment or the daily risk assessment decreases during admission. The following consults or interventions would generate based on risk factors, nutritional support, and diabetes education. Guidelines are set for a WOC consult for any patient on the operating room table for more than 3 hours as WOC nurses' practice is based on evidence-based outcomes (Black, 2019).

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

   The plan of care to monitor the organization's results would start with education by the WOC nurse for the operating room staff and all nurses. Educational sessions and case scenarios would be used at the training and for the yearly competencies. Audits would be done daily by the WOC nurse and unit manager to ensure that the head-to-toe and risk assessments were completed on admission and daily. Appropriateness of the support devices would be included in staff education, and a review will be done on all patients with a low-risk assessment and in the operating room for over 3 hours by the WOC nurse. Managers and charge nurses will monitor the turning and positioning every 2 hours daily. Monitoring will be daily for one year and then reviewed with the committee. A review of the policies and procedures will be done immediately to ensure that they are current with the standards of care and that the policies reflect who and when a consult is to be completed (Black, 2019).

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

Black, J. (2019). Root cause analysis for hospital-acquired pressure injury. *J Wound Ostomy Continence Nursing*, 46(4), 298-304. https://journals.lww.com/jwocnonline/Abstract/2019/07000/Root_Cause_Analysis_for_Hospital_Acquired_Pressure.7.aspx

Borchert, K., (2022). Pressure injury prevention: implementing and maintaining a successful plan and program. McNicols, L., Ratliff, C., & Yates, S., (Eds.). *Wound, Ostomy, and Continence Nurses Society Core Curriculum Wound Management*, (2nd ed., pp 373-395). Wolters Klumer.

Joint Commission, (2022). *Preventing pressure injuries*, Issue 25. https://www.jointcommission.org/-/media/tjc/newsletters/quick-safety-25-update-3-21-22.pdf

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

a. A patient is admitted to home care after a cauda equina injury. The injury occurred 2 weeks ago at her home and she was then admitted to the hospital for severe lower back pain and numbness in the lower extremities. During the hospitalization, she developed urinary and fecal incontinence. Surgery was performed to repair the injury and after an unremarkable recovery, she is referred to home health care for physical therapy and skilled nursing care. The surgical site is well approximated without drainage. She has a comorbid condition of diabetes, continues to have numbness in the lower extremities along with urinary and fecal incontinence, and spends most of her day in a recliner chair. On admission to home care she has no skin conditions noted and her blood sugar is 165 mg/dL. After 2 weeks she develops a fever of 100.8 F. After 3 weeks of home care a 2.5cm length x 3.0cm width area of thick, dense eschar is noted over her sacral area, and she is referred to the WOC nurse for evaluation. Explain what risk factors led to the sacral wound and how you would set up her plan of care.

b. 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.