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.

CASE STUDY 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.

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

After a major problem occurs, such as an adverse event, it is important to determine the cause. The process to determine the cause and breakdown of events is called a root cause analysis (Black, 2019). A root cause analysis is an important piece during an investigation of an adverse event. More importantly, a root cause analysis can help find barriers and breakdowns, including human errors, that can be addressed in the future to prevent similar events (Black, 2019). Root cause analyses are very helpful in the investigation of pressure injuries. The Joint Commission orders the use of root cause analysis for major events (Black, 2019).

Pressure injuries can occur due to a variety of human and mechanical factors. When a pressure injury occurs, Black recommends that a root cause analysis occurs within seventy-two hours of injury occurrence (2019). The WOC nurse needs to be involved during the initial phases of the root cause analysis to both confirm the existence of a pressure injury and the extent of what type of injury has occurred (2019). Once the severity of a pressure injury is identified, the healthcare team working on the root cause can examine the timeline to identify disparities that can be improved upon.

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.**

In case study B listed above, a 58-year-old gentleman suffered a deep tissue injury that evolved into full thickness wound. First, it is important to identify patient risk factors that put him at risk for injury. For one, his history of uncontrolled diabetes as evidenced by his HgA1c 13.2% as well as coronary artery disease are indicators that he is at high risk for wound complications and healing. Patients who are also found down after an unknown amount of time as well as prolonged surgical cases are also at risk for deep tissue injuries.

Although these risk factors are important in the overall assessment, it is important to further investigate the timeline of his operative course. This writer would first want to know if skincare was documented on the morning of surgery to identify if there was any sign of injury pre-operatively. During his operative case, this writer would also want to understand if pressure assisting devices were used or if there was an opportunity for offloading and/or repositioning. Although in the supine position, remaining on a bony prominence for 8 hours without offloading may be a cause of deep tissue injury.

Deep tissue injuries may self-resolve or they can quickly escalate to a full-thickness wound (R. B. Turnbull, Jr. MD School of WOC Nursing Education, 2022). In this case, the deep tissue injury evolved into a full-thickness unstageable wound as evidenced by an open wound with dense slough and serous drainage. The slough should be debrided. The four types of debridement include autolytic, enzymatic, surgical, and mechanical (Shi & Carson, 2009). For this wound, this writer would recommend either sharp debridement in the operating room or the use of an enzymatic debridement. The only FDA-approved enzymatic debridement for wounds is collagenase (Santyl) (Shi & Carson, 2009). This medication works to achieve healthy non-necrotic tissue by using proteases to break down collagenous in slough, eschar, and necrotic tissue (2009). Enzymatic debridement with Collagenase may be used if the patient is not deemed safe for surgery, has a history of blood thinning medications, has increased bioburden to the wound and may be used with lower extremity wounds and/or pressure injuries (R. B. Turnbull, Jr. MD School of WOC Nursing Education, 2022). If light slough is apparent, a hydrocolloid dressing may be used for autolytic debridement. Hydrocolloid dressings aid in tissue debridement, and promote granulation formation and epithelization (R. B. Turnbull, Jr. MD School of WOC Nursing Education, 2022).

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

Healthcare organizations should be prepared with a comprehensive pressure injury prevention plan. Having a committee of different healthcare professionals can be effective in distinguishing concerns and obstacles with pressure injury prevention. A multidisciplinary and holistic approach in prevention plan techniques have been proven to be most effective against pressure injury formation (Ayello et. al., 2020). An organizational pressure injury committee can decide upon which risk tools, such as the Braden and Norton scale, should be implemented at their institution to assess low versus high-risk populations. Along with this tool, the organizational committee can establish goals and benchmarks that can be easily followed to ensure adherence and make improvements (Ayello et. al., 2020). The WOC nurse plays an influential role in the organizational committee to implement and update an evidence-based pressure injury prevention plan (Borchert, 2022). Pressure injuries are a much larger problem and require the attention of all healthcare providers rather than solely cared for by the WOC nurse. As reported by Ayello et. al., staff nurses believe that their entry-level knowledge of wounds could be expanded upon with further wound care education (2020). WOC nurses can participate in department education sessions to teach and educate nurses and healthcare providers on prevention strategies, assessment, and documentation techniques.

It is important to recognize that not all pressure injuries are created equally. For this reason, patient-individualized care plans should be implemented when pressure injuries are identified (Borchert, 2022). Once the staff nurse has proper education in prevention and assessment techniques, they can implement the individualized pressure injury prevention plan. These plans may vary between

organizations. For this scenario, this writer would like the pressure injury prevention plan to include the following assessments- Braden score, nutrition, moisture related to fecal or urinary incontinence, shear or friction exposure, and limitations in activity (Borchert, 2022).

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

A pressure injury prevention plan is an excellent framework to implement into patient care however it is just as important to follow-up to monitor the prevention plan. The purpose of this would be to evaluate compliance of this plan among staff, the outcome of the prevention plan and to also obtain feedback on the prevention plan. The WOC nurse is a great resource to analyze this information following data collection. It would be noteworthy to compare pressure injury rates prior to implementing the prevention plan versus the data post-implementation (Borchert, 2022). If pressure injuries are identified following the implementation of the prevention plan, it would be worthwhile to perform a root cause analysis to find out where the breakdown was in care. By understanding the failures in care, the WOC nurse can make changes to the pressure injury prevention plan to improve outcomes. Monitoring of the pressure injury prevention plan is best served across the organizational level, intradepartmental level, and unit level as each tier has a different role in the scope of patient care with regards to pressure injury (Borchert, 2022).

References

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