Pressure Injury Root Cause Analysis

Cleveland Clinic

Name: Sara Bickford

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.

Root cause analysis is a process to identify how a problem occurred, as well as identify related factors, and how to prevent the problem moving forward. While using this method, the first step is to identify the problem. Once the problem is clear, it is important to collect information as well as examine the factors that are contributing to this problem happening. The next step in root cause analysis would be to identify the root cause or causes of the problem. Once the root cause is determined and research is completed, recommendations and ideas are then formed to help prevent this problem from continuing to occur (Zanbanize, n.d.). While looking at pressure injury prevention, the main goal is to prevent pressure injuries. The process of root cause analysis can help health care professionals determine ways of improvement related to pressure injury prevention in all settings. It is important for each organizations to have strict and effective policies and procedures set in place regarding pressure injury prevention. Pressure injuries can have some devastating effects on a patient, and could potentially lead to death. A root cause analysis may be performed to identify the causation of a pressure injury, and policies may be changed or updated depending on the results of the analysis.

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 scenario A, there are multiple system failures that could have led to the patient developing the pressure injury. This patient was at very high risk of developing a pressure injury due to having comorbidities such as diabetes, urinary and fecal incontinence, and having limited mobility and possible blood flow disturbance. On the admission of home health services, it states there were no skin conditions noted. I would want to know if the clinician completing the admission was the nurse, or the physical therapist. Did the admitting clinician provide pressure injury prevention education, as well as perform a risk assessment tool? A risk assessment tool such as the Braden scale could have been used by the PT or nurse at admission to determine if the patient is at high risk for developing a pressure injury (Edsberg, 2022). A possible system failure that may have led to the pressure injury, was the identification, but lack of treatment, regarding the patients elevated temperature that developed after 2 weeks of being home. Elevated body temperature is an intrinsic factor that influences tissue tolerance, which can quickly lead to skin breakdown (R. B. Turnbull, Jr. MD School of WOC Nursing Education, 2022). The home health nurse should have done another skin assessment, and provided more pressure injury prevention education at this point. It is hard to determine the failures without more information, but with the information in scenario A, the nurse should have provided extensive pressure injury prevention education starting at admission due to multiple factors showing this patient to be at high risk.

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

Based on the findings in scenario A, a pressure injury prevention plan is needed for this organization to follow. In home health care, education is key. The home health nurses may not be doing visits multiple times a week, unless there is a skilled nursing need. There needs to be a plan for each nurse to follow for the prevention of pressure injuries in the home setting. The plan would consist of assessment of all pressure points at every nursing visit, utilizing a risk assessment tool and determining risk factors. In addition, it would also consist of extensive education to the patient and family on pressure injury prevention strategies. Assessment of pressure points at each nursing visit can help identify if a pressure injury is starting to develop, and is important for early pressure injury identification. A risk assessment tool such as the Braden scale should be used for the nurse to identify risk factors that could put the patient at high risk for pressure injuries. The Braden scale also assesses the nutritional status of the patient, which can be evaluated to determine if malnutrition may play a factor. "The nutrition subscale score may be used as an adjunct nutrition screening tool to detect malnutritioned patients" (Lim et al., 2019). Lastly, the nurse should be providing specific education on pressure injures, and how to prevent them. This education can be done with verbal education, demonstration of pressure relief measures, as well as physical diagrams for the patient to refer to while offloading. Collaborating with other disciplines such as the physical therapist or occupational therapist can increase the education and overall outcome of the patient. Education would need to be provided to the staff on the pressure injury prevention plan, and how to accurately document the findings.

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

To monitor the results of the pressure injury prevention, a plan needs to be established. After each nurse is educated on the pressure injury prevention plan using assessment skills, utilizing the Braden scale, as well as providing in-depth education to the patient, the results of the plan will need to be assessed. After about 4 weeks of the nurses utilizing this plan, the WOC nurse would then identify the patients in the organization that are at high risk for developing a pressure injury. This can be determined by looking at the results of the Braden score, as the lower the score, the higher the risk for skin breakdown. Once the high risk patients are identified, the WOC nurse needs to assess the documentation from the nurses to ensure that the skin assessment, Braden scale, and education provided was all documented in the patients chart. Next, they would determine if any of those high risk patients developed a pressure injury in the 4 weeks that the plan was being executed. The results of this plan will need to be evaluated to ensure that the pressure injury prevention plan is working. If high risk patients did develop a pressure injury in those 4 weeks, despite the plan being in place, another root cause analysis may need to be completed and the plan may need to be changed or updated depending on what was lacking.

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

References

Kanbanize (n.d.). *How to preform root cause analysis in 6 steps?* **https://kanbanize.com/lean-management/lean-manufacturing/root-cause-analysis/perform**

Lim, E., Mordiffi, Z., Chew, H. S. J., & Lopez, V. (2019). Using the Braden subscales to assess risk of pressure injuries in adult patients: A retrospective case-control study. *International wound journal*, *16*(3), 665–673. https://doi.org/10.1111/iwj.13078

R. B. Turnbull, Jr. MD School of WOC Nursing Education. (2022). *Managing wound infections, part 1*. [PowerPoint slides]. Vimeo@CCF.

R. B. Turnbull, Jr. MD School of WOC Nursing Education. (2022). *Pressure injury assessment & care*. [PowerPoint slides]. Vimeo@CCF.

Edsberg, L. (2022). Pressure and shear injuries. In L. L. McNichol, C. R. Ratliff, & S. S. Yates (Eds.), *Wound, Ostomy, Continence Nurses Society core curriculum: Wound management* (2nd ed., pp. 373-395). Wolters-Kluwer.

Edsberg, L. E., Cox, J., Koloms, K., & VanGilder-Freese, C. A. (2022). Implementation of pressure injury prevention strategies in acute care. *Journal of Wound, Ostomy and Continence Nursing*, *49*(3), 211-219. https://doi.org/10.1097/WON.0000000000000878

R.B. Turnbull, Jr. MD School of WOC Nursing Education

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.