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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.

A root cause analysis is a process to understand the cause behind a problem. This process allows us to understand and learn why the problem arose. Different analysis techniques are used to collect this data, and an action plan can then be developed to understand the why and prevent the problem from occurring in the future. As WOC nurses and wound care providers, we need to understand what

happened, why it happened, and how to prevent problems from happening again. There are three basic types of root causes; physical, human, and organizational. A physical cause means a material system failure, and a human cause means that a person or multiple people did something incorrectly that failed or caused harm (Black, 2019). Lastly, an organizational cause is when a system or process fails (Black, 2019). As WOC nurses, multiple steps must occur; first, we must define the problem, gather data, and identify the causative factors. Secondly, we must understand how to fix and learn from any underlying issues within the root cause. Third, we need to apply what we learn from this analysis to prevent future issues from occurring.

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.

When surgical procedures are performed, patients are at a higher risk for pressure ulcer development. Pressure injury development in the intraoperative patient is due to immobility and the inability of the patient to perceive pain or discomfort from unrelieved pressure, as well as friction and shearing forces (Black, 2019). The standard at my medical institution is that if a surgical patient develops a pressure injury within 72 hours after the procedure, it most likely indicates that the injury occurred during surgery. The patient was in the operating room for 8 hours in this scenario. This prolonged supine position resulted in the skin and underlying tissue damage. Factors associated with skin breakdown and pressure injury formation include intrinsic and extrinsic factors. Intrinsic risk factors related to the patient's tolerance to sustain a pressure injury include poor nutrition, determined by albumin levels (Magalhaes et al., 2019). This patient is an uncontrolled diabetic; increased glucose levels can stiffen the arteries and contribute to the narrowing of the blood vessels, which can influence pressure injury development and is a risk factor for impaired wound healing (Magalhaes et al., 2019). This patient was also recently diagnosed with coronary artery disease, a heart condition in which the major blood vessels that supply the heart struggle to send enough blood, oxygen, and nutrients to the heart muscle (Wang et al., 2021). Damage to the coronary arteries can be caused by diabetes. Extrinsic risk factors are those variables that increase tissue susceptibility to sustain external pressure; they include temperature, friction, shearing forces, and moisture which this patient would have sustained in the operating room (Magalhaes et al., 2019).

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

Implementing an evidence-based practice system for pressure injury prevention and management can reduce the potential for pressure injury development and promote the healing of existing pressure injuries (Soban et al., 2018). In developing a pressure injury prevention plan, first, we must determine the roles and responsibilities of staff members in preventing pressure injuries. Next, we must get staff engaged and excited about preventing pressure injuries. Finally, the WOC nurse should educate staff on best practices and assign staff to perform these practices based on training and experience. The WOC nurse is responsible for assessing wounds, performing complex treatments, and collaborating with physicians for orders. They work with the nursing staff on pressure injury prevention and daily treatments. They educate patients and families regarding wound care. The staff nurse is responsible for accurate skin assessments and

documentation. On the first admission, they should perform a thorough head-to-toe skin assessment and identify pressure injury risks. Daily assessments should be performed for any change in the patient's condition. Nurses supervise patient care plans, procedures, and treatments. They must also collaborate with the WOC nurse and other staff members to ensure timely and accurate reporting and management of new skin conditions. Certified nurse assistants should monitor the patient's skin each time they are turned, cleaned, or the bed is changed. Any skin issues need to be reported promptly to the staff nurse. Patients should be turned and repositioned at least every two hours. Skin needs to be kept clean and dry; barrier cream can be applied as needed. Regular and ongoing education for staff should include annual education, staff competencies, new staff orientation, training, and training for temporary staff members (Soban et al., 2018). In addition, we need to determine ongoing communication and reporting paths for pressure injury prevention processes. This allows us to collect and analyze data to learn about pressure injury rates and the causes of pressure injuries; then, we will meet regularly to measure pressure injury prevention practices and assess our progress.

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

Pressure injury occurrences and prevention practices must be monitored and tracked as a component of quality improvement (Al Mutair et al., 2019). By tracking performance, we will know whether patient care is improving, staying the same, or worsening in response to our efforts to change practices (Soban et al., 2018). Continued monitoring will help us understand where we started and whether our improvements are working. The implementation team will measure pressure injury rates and prevention practices. Key aspects that need to be monitored are best care practices and clear lines of roles and responsibilities for overseeing the accuracy of skin assessments (Soban et al., 2018). Pressure injury rates are the most direct measurement of success in preventing pressure injuries (Al Mutair et al., 2019). We can calculate pressure injury incidence or prevalence rates by conducting a comprehensive skin assessment on every patient. To monitor these results, I would pick a day of the month and perform a detailed skin assessment on each patient. We will document the results of the skin assessment on every patient noting the presence, number, location, and stage of injury. The WOC nurse or the staff nurse can do this. We will describe the stage for each pressure injury present and determine whether the injury was present on admission. Incidence is the number of patients who develop new pressure injuries after admission (Soban et al., 2018). This provides the most direct evidence of the quality of care so that quality improvement efforts will be focused on incidence rates. In addition, conducting a root cause analysis is a valuable technique for understanding the reasons for a failure in the system.

5. List the references used & cited in this assignment.

Al Mutair, A., Ambani, Z., Al Obaidan, F., Al Salman, K., Alhassan, H., & Al Mutairi, A. (2019). The effectiveness of pressure ulcer prevention

program: A comparative study. *International Wound Journal*, 17(1), 214-219. <https://doi.org/10.1111,iwj.13259>

Black, J. M. (2019). Root Cause Analysis for Hospital-Acquired Pressure Injury. *Journal of Wound, Ostomy and Continence Nursing*,

46(4), 298-304. <https://doi.org/10.1097/won.0000000000000546>

Magalhaes, M. G., Grangani, A., Veiga, D. F., Blanes, L., Galhardo, V. A., Juliano, Y., Ferreira, L. M., (2019). Risk Factors for Pressure Ulcers in Hospitalized Elderly. *Wound Care Learning*, 5(17), 675-683. <https://doi.org/10.1029/wnd.4625>

Soban, L. M., Kim, L., Yuan, A. H., & Miltner, R. S. (2018). Organization strategies to implement hospital pressure ulcer prevention programs.

Journal of Nursing Management, 25(6), 457-467. <https://doi.org/10.1111/jonm.12416>

Wang, Y., Chen, R., Ding, J., Yang, L., Chen, J., & Huang, B. (2021). Predictive value of pressure ulcer risk for obstructive coronary artery disease. *Nursing Open*, 8(4), 1848-1855. <https://doi.org/10.1002/nop2.835>

Selected Article

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.