Pressure Injury Root Cause Analysis

Cleveland Clinic

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Reviewed by/date: _____

Using academic writing standards and APA formatting of references, respond toeach of the following learning objectives. Using this document, enter the responses directly nextto the corresponding learning objective on this grid. Responses should be 150-350 words in length. Scroll down to last page of this document to see assignment rubric for specific details on how the project will be assessed, and how points will be awarded. Save the completed document as the assignment title with your name and submit to the dropbox.

Learning Objective	Response
1. Define root cause analysis & its role in pressure injury prevention.	Root cause analysis (RCA) is a systematic process for identifying the causes of an adverse occurrence or combined with an approach for a response designed to prevent recurrences (Black, 2019). In a hospital setting, root cause analysis can be used to help reduce the number of hospital acquired pressure injuries as well as identify where the breakdown in the system is causing the injuries. It will need to be determined that the injury is truly a pressure injury. Once this is determined, the next step would be to look at the people and processes that were involved, and look for any patterns that can be changed. At the point where the patterns and/or processes are located, then there needs to be modification to them to aide in preventing further injuries from happening within the hospital. Findings from a root cause analysis can be used to make positive changes. By using root cause analysis, the whole problem is looked at from start to finish, which makes it easier to identify, address, and implement change.
2. Analyze **one**of the case studies from page two (of this document). Describe the system failures that led to the pressure injury.	This patient in Case study #2 upon admission was scored as a low risk of developing a pressure injury. From the point of admission, to when the patient was post op, there was a 3 day window in which the patient could have developed a pressure injury. There was nothing stating that he went into his eight hour long surgery without any injuries. Due to this we will have to assume that the deep tissue injury that was found post op, happened at

	some point from admission to him being post op. There is no way to know that the wound occurred while he was lying on the operating table for eight hours. Eighteen hours after surgery is when the patient was assessed and fond to have a deep tissue injury to the coccyx. The patient was then placed on an alternating pressure powered air mattress and proceeded to end up with an open wound with slough and drainage. There were system failures that caused this patient to end up with a hospital acquired pressure injury. The patient should have had multiple skin assessments, at least one per shift, prior to surgery since he was there for three days before having surgery. This would have identified if the patient remained as a low risk for developing a pressure injury. There should also have been a complete head to toe assessment done in pre op, especially knowing that the surgery he was having would last for an extended period of time. This patient would be supine for hours and even as a low risk patient, there should have been measures put in place in the operating room to protect the patient from injuries. After being supine for 8 hours, it then took another 18 hours before the patients' skin was assessed. It is likely that this patient was supine for over 24 hours with no pressure reducing agents in place. Five days after being placed on an air mattress, the injury has progressed into an open wound instead of improving. This leads me to think that there was no actions taken to reduce pressure to the already compromised coccyx are, and the patient was likely not repositioned on schedule. There is also no mention of the patient being rescored at any point. There were multiple system failures that caused this patient to end up with a hospital acquired pressure injury.
3. Based on these findings, develop a comprehensive pressure injury prevention plan for the organization.	The hospital should already have a plan in place to where the patient is having a head to toe skin assessment done every shift. At the same time the patient should be rescored for the potential of skin breakdown. Patients that are going to the operating room should be assessed by a nurse in the pre op area in preparation for surgery. At this time, even patients

	with a low score, should be treated as high risk if their surgery will be for an extended period of time. These patients should have pressure reducing dressing put in place, strategically based on the position required for their surgery. Using pillows under the knees of patients who are having surgery in the supine position helps to reduce the stress to the sacral areal (Lupe & Cooper, 2013). The heels and occipital areas are also areas that need to be protected with cushioning. If not contraindicated, the patients' position could be slightly shifted or tilted at specific intervals throughout surgery to reduce pressure. Once the patient is out of surgery there should be another skin assessment done with special attention paid to the at risk areas based on surgical positioning. If the patient is going to be unable to turn themselves independently, they should be placed on a pressure reducing mattress at that time. Placing a patient on a pressure reducing surface should not be used as an alternative to repositioning and repositioning should be put into place as soon as it is appropriate (Macklebust & Magnan, 2016). All of these measures should be a part of the EMR and should be required documentation. There should be times alerts for surgical patients indicating positional changes and confirmation that pressure reducing measures are in place. This process not only protects the patient, but also holds the clinical staff accountable.
4. Propose a plan to monitor the results of objective #3.	In order to monitor the proposed plan, there needs to be a task created in the EMR to specifically assess the areas of pressure that were notated at increased risk due to the patients' position in the OR. This assessment should be done every shift for up to 48 hours post op. The hope would be that there is no sign of a developing pressure injury. However, if there is a pressure injury present then, the chart would need to be audited to see where the breakdown in the process took place. If all suggested measures were taken, and the patient still develops a pressure injury, then the process needs to be revisited.

List at least three current references that support your responses (textbook required as one of the references), and include the citations in the body of the written responses. References should be no more than 5 years old.	Black J. M. (2019). Root Cause Analysis for Hospital-Acquired Pressure Injury. *Journal of wound, ostomy, and continence nursing : official publication of The Wound, Ostomy and Continence Nurses Society*, *46*(4), 298–304. https://doi.org/10.1097/WON.0000000000000546 Lupe, L. , Zambrana, D. & Cooper, L. (2013). Prevention of Hospital-acquired Pressure Ulcers in the Operating Room and Beyond. International Anesthesiology Clinics, 51(1), 128–146. doi: 10.1097/AIA.0b013e31826f2dcd. Maklebust & Magnan (2016). Pressure Ulcer Prevention. In D. Doughty & L. McNichol (Eds.), *Wound, Ostomy and Continence Nurses Society™ core curriculum: Wound management* (p. 345). Wolters Kluwer.

a. A patient is admitted to home care after a caudaequina 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

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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.

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	Content objectives are not	Content objectives	Content objectives consistently

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
	or sparsely covered.	consistently addressed. Demonstrates minimal understanding of content.	consistently addressed. Demonstrates understanding of content.	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.