Pressure Injury Root Cause Analysis

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Using academic writing standards and APA formatting of references, respond to each of the following learning objectives. Using this document, enter the responses directly next to 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 systemic process method to help determine the exact cause of a problem. The RCA involves a critical assessment of the care provided to patients and can be used to identify adverse incidence such as acquired pressure injuries(PI) to adequately identify any gaps in patient's care and with the intent to improve care. It requires a team of members who are involved in reviewing the steps that may unintentionally have caused a problem, concludes if any of the steps in the care process can be changed in order to avoid having the same problem reoccur (Maklebust & Magnam, 2016). The RCA is a critical examination of the real problem and includes a group of people that analyze the process of care to look for modifiable trends or patterns identified, missing actions that may be linked in the development of a particular pressure injury. The final significant inspection is used to prevent recurrences, aid nurses and hospital (Quality and Risk Management) to determine how the organization can improve to reduce the quantity and severity of pressure injuries. In regards pressure injury prevention through a structured review and analyzed RCA can be used to determine what, how and why the PI happened to eliminate negative effects and promote positive changes and improve performance, take corrective actions and create solutions, address the issues that could be changed to reduce risk of subsequent pressure injuries, implement and monitor a performance improvement program (Black, 2019).

2. Analyze **one** of the case studies from page two (of this document). Describe the system failures that led to the pressure injury.	A patient was found unconscious and brought to the hospital experiencing mild chest pain, nausea tingling in his left arm, high blood sugar level 220mg/dl and HgA1c of 13.2% admitted to the hospital to r/o MI and manage blood sugar. Patient admitted to the hospital after sustaining a fall at home and being found unconscious. After several tests, he has been diagnosed with a new onset of Coronary arterial disease and requires surgical intervention; bypass surgery to open up the arteries. Upon admission patient skin assessment was identified as low risk of 20. Overall since admission the patient presented with diminished micro vascular blood supply and hyperglycemia factors that increase the risk for infection, compromised skin integrity which may delay the healing process. Patient requires surgical intervention, with a prolonged time in surgery laying on a hard surface for eight hours in a supine position, then after 18 hours, localized skin discoloration discovered on the coccyx area, within five days the affected area appears as an open wound with a layer of dense slough present surrounded by induration and redness with serous exudate present and a resolving bruise. Multi-system failure, intrinsic and extrinsic factors, unrelieved pressure during surgical intervention, hyperglycemia, and poor tissue perfusion are some of the immobility factors that may increase the risk for skin breakdown. A pressure injury can develop in a short period of time, as it appears this patient with decreased mobility and activity as well as laying extended periods of time in the same position with inadequate tissue perfusion developed a deep tissue injury which advanced to unstagable pressure injury. Plan of care by gathering information from medical records , pre-existing health conditions upon admission, implementing a preventing pressure injury program, monitoring skin integrity (head to toe assessment)upon admission, Risk assessment (Braden scale score) upon admission and every shift. Initiating preventative measures (turn and repositioning, nutritional consult, protective measures skin barrier/foam dressings, offload heels, and provide support surfaces as needed). Document possible contributing factors that may compromise skin integrity (co-morbidities, patient hemodynamic unstable) as these factors could be a trigger to focus in appropriate interventions and skin management (Maklebust & Magnam, 2016).

3. Based on these findings, develop a comprehensive pressure injury prevention plan for the organization.	Pressure injury prevention plans should be based on the policies and procedures established by the institution. A comprehensive pressure injuries prevention plan to identify appropriate interventions to minimize hospital acquired pressure injuries, promote and provide optimal care to patients at risk of or with existing pressure injuries. ● Assessment of skin integrity upon admission and every shift, when observing any change in skin condition. Pay particular attention to areas of bony prominence at increased risk for pressure friction and shearing (Maklebust & Magnam, 2016). ● Risk assessment using the Braden Scale score, overall score is important to trigger and alert potential risk problem based on score results (Maklebust & Magnam, 2016). ● Manage excessive moisture by cleaning at intervals and apply skin barriers ointment for proper skin management. ● Nutrition and hydration by performing a nutritional assessment and following dietary recommendations to maintain skin integrity and prevent further skin breakdown. Keep patient hydrated, monitor diet and intake (Maklebust & Magnam, 2016). ● Interventions include positioning and repositioning regardless of the support surface on which the patient is on, maintaining patient body alignment and limits of tolerance. Utilize wedge pillow, boots to offload heels (R.B. Turnbull, Jr. MD School of WOC Nursing Education, 2020). ● Specialty bed implementation, low air loss mattress pressure redistributes surfaces to manage pressure load. Microclimate, moisture shear and friction ● Utilize assistive devices such as slide sheet, protective foam dressing to minimize tissue damage (R.B. Turnbull, Jr. MD School of WOC Nursing Education, 2020).
4. Propose a plan to monitor the results of objective #3.	Most pressure injuries are preventable if proper measures are implemented. Plan to monitor effectiveness of preventative measures requires ongoing or continued skin assessment of all patients. Analysis of the possible causal factors in the event of pressure injury development. Selection of appropriate pressure relieving devices. Interventions to monitor results of

	preventative measures and pressure injury reduction will be specific to the patient's individual needs and risk category (Black, 2019). Collaboration with the Leadership and Wound Care Department provides education to nursing staff on the importance of early detection of alteration in skin integrity, importance of pressure reduction by frequent turning, skin assessments, proper use of Braden scale score and proper preventative measure implementation. Perform an auditing tool to monitor admission, utilize a tracking tool every shift, assign nursing staff to collect information, complete a check list of task completed upon admission (Braden scale score, skin assessment, initiation of preventing measures) by regularly reviewing this audit data and summarizing the results you could determine whether each patient has a comprehensive skin check and provide a log for nursing managers to review incidence and prevalence of each unit and positively reinforce rounding and documentation. Communication among nurses caring for these patients to notify any change of skin condition and take corrective actions if needed (Maklebust & Magnam, 2016).
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.	

References

Black, J. M. (2019, July/August). Root cause analysis for Hospital-Acquires pressure injury. *Journal of Wound, Ostomy, and Continence Nursing*, 46(4). Lippincott Williams & Willkins

Maklkebust, J., & Magnam, M. A. (2016).Pressure ulcer prevention and agency-wide strategies specific measures In D. Doughty & L. McNichol (Eds.), *Wound, Ostomy and Continence Nurses Society™ core curriculum: Wound management* (pp. 333-360). Wolters Kluwer.

R.B. Turnbull, Jr. MD School of WOC Nursing Education. (2020). *Support Surfaces* [PowerPoint slides]. https://www.youtube.com/watch?v=UwhKpguDZgk&feature=youtu.be

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 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.