Name: _____

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 (RCA) is an organized and guarded process for uncovering the reasons why a situation occurred, this is done in order to prevent such events in the future.
   Root cause analysis can play a big role in how nurses and hospital's risk management system can improve their mode of operations which in turn results in prevention and reduction in the number and severity of pressure injuries. It provides quality improvement in a facility or healthcare system.
   The first step in RCA of pressure injuries is to first establish that the wound in question is a pressure injury. Does the wound have an appearance of other kinds of wounds? Next is to evaluate the human root causes which are the protocols and processes of care for timeliness, expertise and the quality of services rendered.
   The final part is the examination of the system and processes that might require modifications with the goal and benefit of preventing future pressure injuries from occurring (Black, 2019).

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.**

   Scenario 2
   Considering the preexisting conditions of the patient; he has several factors that increase the risks of developing pressure injuries. Diabetes is a nutritional and metabolic problem that signifies a deficiency in nutrient metabolism and supply, coronary artery disease is impactful on blood oxygen supply, the patient also experienced mobility issues. These conditions are risk factors for developing pressure injuries.

   Analyzing the system failure, in my opinion, the patient's risk assessment for skin breakdown is not "very low" as graded in his assessment. The patient's uncontrolled diabetes and coronary artery disease are factors that increase the risk of pressure injuries.
   Just as in this scenario, the surgeon's operating gurney is usually an overlooked source of pressure to the bony structures of the body; the patient spent eight (8) hours in the supine position for a coronary bypass surgery.

   A timely assessment, turning and repositioning (which seem inadequate in this scenario) would have prevented the deep tissue injury experienced by the patient. 18-hours post-surgery is a long time enough to develop a pressure injury (Borchert, 2022).

   Pressure injury is a patient safety issue, many have agreed that pressure injury development is not just the fault of the nursing care, but also a failure of the entire healthcare system (Ayello & Lyda, 2008). The entire healthcare team of nurses, physicians, physical therapies,

dieticians, CNAs and others all at different points of care for the patient have contributory efforts that could have yielded a better outcome.

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

A comprehensive pressure injury prevention plan is a well-developed, patient-centered; evidence-based plan that has prevention of pressure injury as its core and central value, because pressure injury prevention is the best defense against pressure injuries. The plan should be a bundle of best practices with infrastructures to support it, the knowledge base, motivation, commitment and involvement of the entire health care team will also be largely required.

A good start for the prevention of pressure injury is the maintenance of skin health and early detection of skin injury: This is achieved by a regular comprehensive head-to-toe skin inspection by the staff. Skin assessment is not a visual inspection alone, palpation of the skin will detect the temperature, edema and tissue consistency. The EPUAP/NPUAP & PPPIA recommends the timing of skin assessment to be as soon as possible upon admission and transfer; at the time of pressure injury risk assessment; periodically based on the patient's risk and prior to discharge from the facility. One of the important tools for Pressure injury risk determination is the Braden scale.

Management of risk factors based on the outcome of assessment done on the patient. This is another level of the pressure injury prevention plan. Limitation in mobility and managing the magnitude and duration of pressure that the patient is exposed to are the major tasks involved in this process. Individuals on bedrest are at higher risk of developing pressure injury, an early mobilization plan, repositioning, using support surfaces in beds and on chairs and the use of appropriate technology will reduce the risk of pressure injury in the patient.

Exposure to body fluids and body waste substances should be monitored and prevented as these alter the acidity of the skin and make the skin vulnerable to friction and shear damage.

Nutrition management is another core area of the pressure injury prevention plan because both inadequate nutritional intake and undernourishment are linked to the development of pressure injuries, pressure injury severity and prolonged healing.

Included in the program is the prevention of medical device-related pressure injuries. Non-medical devices like bed clutters and furniture can also cause pressure injuries in patients when they remain in contact with the skin over a long period of time. The right sizing of equipment for patient's use is an important factor in prevention of pressure injuries.

Patient and family education is an important aspect of the prevention plans. Education includes the importance of turning and repositioning. A variety of teaching methods will be available to provide for different learning styles and literacy levels (Borchert, 2022).

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

   An effective monitoring process is the one that allows for reporting a facility-acquired Pressure injury. A periodic assessment of pressure injuries prevalence and incidence through an effective self-reporting process will be an invaluable tool in monitoring the results and effectiveness of the plan. Information should include the number and percentage of patients with pressure injuries, and whether the injuries occurred before or after admission to the facility. A periodic determination of the number and percentage of injuries that developed after admission is an important information regarding the effectiveness of the current pressure injuries prevention plan already in place. This plan is put in place both at the unit and interdepartmental level involving all departments and disciplines.
   An effective prevention management team that meets together on a regular basis will be constituted as this promotes communication, education, feedback and the effectiveness of the plan. Each team member should be able to provide information about activities that fall within their scope of responsibility and provide information about barriers that impact their ability to achieve goal-specific tasks.

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

References

Black, J. M. (2019). Root cause analysis for hospital-acquired pressure injury. *Journal of wound, ostomy and continence nurse society*, *46*(4), 296-304. https://doi.org/10.1097/WON.0000000000000546

Borchert, K. (2022). General principle of topical therapy. In L. McNichol, C. Ratliff, S. & Yates. (Eds), *Wound, Ostomy and Continence Nurses Society core curriculum: Pressure injury prevention: Implementing and maintaining a successful plan and program Wound management* (2nd ed., pp. 397-419). Wolters Kluwer.

Lyder, C. H., & Ayello, E. A. (2008). Pressure ulcers: A patient safety issue. In R. G. Hughes (Ed.), *Patient safety and quality: An evidence-based handbook for nurses*. Agency for Healthcare Research and Quality (US). https://pubmed.ncbi.nlm.nih.gov/21328751/

ABBREVIATIONS

EPUAP - European Pressure Ulcer Advisory Panel

NPUAP - The National Pressure Injury Advisory Panel

PPPIA - Pan Pacific Pressure Injury Alliance

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.