

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

Learning Objective	Response
<p>1. Describe the incidence and prevalence of catheter associated urinary tract infection (CAUTI).</p>	<p>A catheter associated urinary tract infection (CAUTI) is an infection involving any part of the urinary system due to a catheter being placed into the bladder to drain urine. According to the Centers for Disease Control and prevention (CDC), UTIs are the most common healthcare associated infection, where approximately 75% are associated with a urinary catheter (CDC, 2020). The incidence and prevalence of CAUTI are not only dissatisfy a patient, but can lead to septicemia or other further deterioration of patients. An estimated 17% to 69% of CAUTI may be preventable with recommended infection control measures, which means that up to 380,000 infections and 9000 deaths related to CAUTI per year could be prevented (Umscheid, et al., 2008). The Center for Medicare and Medicaid Services (CMS) has implemented an inpatient prospective payment system (IPPS) that rewards acute care hospitals through a value based purchasing program to provide incentives to improve quality and safety to patients (CMS, 2020). Through programs where facilities lose money if they have poor performance metrics and healthcare acquired conditions, they are forced to be proactive in their process improvements.</p>

<p>2. List factors associated with the development of CAUTI.</p>	<p>According to current findings in the literature and a record review of patients with CAUTI, the following are risk factors gender, advanced age, history of urinary tract problems, neurologic conditions causing neurogenic bladder problems, previous UTIs, previous and/or current abnormal voiding patterns, current catheter history, incontinence, comorbid conditions such as diabetes, and immunosuppression (Staff Development, 2009). This is a lengthy list of general risks. There are also patient centered issues of chronic catheters and patients with poor hygiene. The staff centered issues revolve around poor insertion techniques and breaking sterile field on insertion. A lot of the indwelling catheters come in kits, in which the bag is connected to the catheter itself and sealed to create a closed system. If the system is disconnected where the tubing and the catheter meet, this creates an open system and opens the patient up for infection risks. While a patient has a catheter in place, good perineal care is essential. Keeping the area clean and cleaning the catheter will help in the prevention of CAUTI.</p>
<p>3. Discuss nursing evidence-based interventions for CAUTI prevention and management.</p>	<p>Due to the risk of CAUTI, healthcare facilities have specific policies and procedures in place to prevent CAUTI. Nurse driven protocols that are based off of evidenced based practices can help the frontline staff to be proactive in the removal of the indwelling catheters. An example is to give them indications when a catheter should be used or remain in place. Some of those examples are urology patients, patients with stage 3 or 4 sacral/perineal area wounds, acute patients such as patients who need to receive Alteplase, gynecological surgeries, or the provider ordered it with a stated reason. If the patient does not meet the criteria for insertion and there is not a provider order to continue use, the nurse may remove the catheter. If there is an indication for the catheter, the nurse will use proper bundles (evidenced based practices) for insertion and maintenance of the catheter. Upon insertion, the nurse will utilize the proper equipment and maintain sterile technique. There should be two staff members, one being the nurse during the insertion. This assists with managing the patient and being a runner if they break sterility. Following the proper procedures for all aspects of catheter insertion, care and discontinuance should be guided by Lippincott or whatever evidenced based procedural clearing house the facility uses. The Agency for Healthcare</p>

	<p>Research and Quality (AHRQ) provides standards and an overview of CAUTI prevention strategies, in which include proper hand hygiene, placement of urinary bag, avoid kinks and dependent loops of tubing, and proper perineal care (AHRQ, 2017).</p>
<p>4. Identify selection criteria for appropriate indwelling catheter size.</p>	<p>Catheter sizes range from 10 French (Fr) to 28 Fr with using a 14 Fr to 16 Fr for adults (Moore &amp; Franklin, 2016). The size used depends on the needs of the patient. There are three way catheters for continuous bladder irrigations if the patient is having hematuria and needs irrigation. Coude catheters are stiffer and are used for patients who have prostate issues or have other constrictions that need a firmer catheter to pass. There are various types of materials and coatings that make up or come on catheters. Each catheter type has a specific use and indication. According to Moore &amp; Franklin (2016), silicone is for latex sensitive patients and less expensive also used long term, red rubber latex is flexible and used for intermittent catheterizations. PVC is firm that softens with body temperature and used short term, and antimicrobial with usually silver reduce infection and great for indwelling uses. It is dependent on facility what is stocked and available. There are kits with silicone 14 and 16 french catheter kits available. The kits have each step labeled when you open the package. This streamlines the use from one nurse to the next. You cannot do the next step without doing the one before as it is a layered kit. Selecting the appropriate size to ensure trauma is not done, the correct type for the need, and the materials that the catheter is composed of for other needs.</p>
<p>5. Differentiate between a urinary tract infection and colonization.</p>	<p>A urinary tract infection (UTI) is defined as an infection anywhere in the urinary tract. While colonization refers to the “presence of a microorganism on/in a host, with growth and multiplication of the organism, but without interaction between host and organism (no clinical expression, no immune response)” (Louisiana Office of Public Health, 2017). To clarify, the UTI produces signs and symptoms of infection while the colonization does not.</p> <p>Biofilms are created when microorganisms attach to the surface of a catheter. Once there is a grouping of biofilm organisms, they are protected by a matrix of extracellular polymeric substances that are impenetrable to antibiotics</p>

	<p>(Moore &amp; Franklin, 2016). According to Moore &amp; Franklin (2016), there has been a lot of research into ways of how to eradicate biofilm but none have been effective. Infection risks are reduced by using sterile technique with insertion of the catheter and proper maintenance of the catheter. The longer a catheter is in place, the higher the risk for infection and collection of biofilm. Patients should be evaluated continuously to establish need of the catheter. As soon as the catheter is not needed or does not meet the criteria for keeping the catheter, it should be removed.</p>
<p>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.</p>	<p>Agency for Healthcare Research and Quality (AHRQ). (2017). Urinary catheter types and care for residents with catheters. <a href="https://www.ahrq.gov/hai/quality/tools/cauti-ltc/modules/implementation/education-bundles/indwelling-urinary-catheter-use/catheter-insertion/unlicensed-staff/unlicensed-catheter-slides.html">https://www.ahrq.gov/hai/quality/tools/cauti-ltc/modules/implementation/education-bundles/indwelling-urinary-catheter-use/catheter-insertion/unlicensed-staff/unlicensed-catheter-slides.html</a></p> <p>Centers for Disease Control and prevention (CDC). (2020). Catheter-associated urinary tract infections (CAUTI). <a href="https://www.cdc.gov/hai/ca_uti/uti.html">https://www.cdc.gov/hai/ca_uti/uti.html</a></p> <p>Center for Medicare and Medicaid Services (CMS). (2020). The hospital value-based purchasing program. <a href="https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HVBP/Hospital-Value-Based-Purchasing">https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HVBP/Hospital-Value-Based-Purchasing</a></p> <p>Louisiana Office of Public Health. (2017). Infection vs. colonization (p.1). <a href="https://ldh.la.gov/assets/oph/Center-PHCH/Center-CH/infectious-epi/HAI/MDRO2017/handouts/ColonizationvInfection.pdf">https://ldh.la.gov/assets/oph/Center-PHCH/Center-CH/infectious-epi/HAI/MDRO2017/handouts/ColonizationvInfection.pdf</a></p> <p>Moore, K., Franklin, L. (2016). Indwelling and intermittent catheterization. In D. Doughty &amp; K. Moore (Eds.), Wound Ostomy and Continence Nurses Society core curriculum: Continence management (pp. 233-234). Wolters Kluwer.</p> <p>Staff Development Weekly (February, 2009). Insight on Evidence-Based Practice in Education. <a href="http://www.hcpro.com/NRS-228910-975/Tips-from-TSE-Identify-risk-factors-to-reduce-catheter-associated-urinary-tract-infections.html">http://www.hcpro.com/NRS-228910-975/Tips-from-TSE-Identify-risk-factors-to-reduce-catheter-associated-urinary-tract-infections.html</a></p>

	<p>Umscheid, C., Mitchell, M., Agarwal, R., Williams, K., Brennan, P. (April 2008). Mortality from reasonably-preventable hospital acquired infections. Included in written testimony by the society of healthcare epidemiology of America for the committee on oversight and government reform hearing on healthcare-associated infections: A preventable epidemic, chaired by Henry A. Waxman. Washington, DC. [Congressional testimony].</p>
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**Points criteria:**

<b>Criteria</b>	<b>Under performance &lt;3 points per criteria</b>	<b>Basic 3 - 3.9 points per criteria</b>	<b>Proficient 4.0 - 4.4 points per criteria</b>	<b>Distinguished 4.5 - 5 points per criteria</b>
<b>Required content objectives</b>	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.
<b>Academic writing standards</b>	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.
<b>APA formatting</b>	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.