**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Department: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Objectives**

* Describe the impact of hospital acquired catheter associated urinary tract infection
* Apply recommended evidence-based practices (bundles) for preventing hospital acquired catheter associated urinary tract infections

***Didactic video***

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| **Incidence and risk** | * More than 30% of hospital-acquired infections reported by acute care hospitals. * Caused by instrumentation of the urinary tract * Greatest risk of CAUTI is prolonged catheterization * Female gender * Catheterization outside the OR * Other active sites of infection * Diabetes * Malnutrition * Renal insufficiency |
| (CDC) video discussing incidence and prevention of CAUTI  <http://www.cdc.gov/hicpac/uti_saint_video.html> | |
| **Organisms enter the bladder in 3 ways:** | 1) At time of catheter insertion  2) Through the catheter lumen  3) Along external surface of the catheter |
| **Prevention recommendations** | * Appropriate urinary catheter use * Proper techniques for urinary catheter insertion * Proper techniques for urinary catheter maintenance * Documentation and surveillance |

**Notes:**

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| **Appropriate use** | | * Insert catheters only for appropriate indications * Leave in place only as long as needed. * Minimize urinary catheter use and duration of use in all patients |
| **Proper insertion techniques** | | * Only properly trained individuals will insert catheter * Insert catheters using aseptic technique and sterile equipment. * Perform hand hygiene immediately before and after any manipulation. * Use sterile products for insertion. * Properly secure indwelling catheters * Using the smallest bore catheter that still allows good drainage |
| **Proper maintenance techniques** | | * Maintain a closed drainage system * Maintain unobstructed urine flow * Use a dedicated, separate, clean collection container to drain the collection bag * Use Standard Precautions * Change indwelling catheters and drainage bags based on clinical indications such as infection, obstruction, or when the closed system is compromised. * Perform routine hygiene of the periurethral area * Obtain urine samples aseptically |
| **Documentation and surveillance** | | * Document the following in the patient record:   + indications for catheter insertion,   + date and time of catheter insertion,   + individual who inserted catheter, and   + date and time of catheter removal or   + daily verification of the need for catheterization. * Ensuring that documentation is accessible in the patient record. |
| **Ponderings** | * What is the cost of HA-CAUTI on our healthcare system? * How can we reduce the risk of complications associated with HA-CAUTI? | |

**Notes:**

***Simulation Video***

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| * Why would you call for a second person to assistance with indwelling urinary catheter (IUC) insertion? * What are the options for peri care prior to IUC insertion? * There are two devices that are imperative in securing of the IUC post insertion? * What is the difference in technique between male and female catheter insertion? * What do you do if you find an IUC’s tamper evident seal broken? * What is the proper way to obtain the specimen? * What type of container should be used to when emptying the IUC bag? * When you remove an IUC what patient teaching is essential? * You have received a patient that has an IUC, what elements should be included in the handoff/handover pertaining to the IUC? * At what other times do you perform a handoff/handover? |

**Notes:**

***HA-CAUTI Bundle***

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| **Appropriate Use**   * **Insert catheters only for appropriate indications**   + **Acute urinary retention or bladder outlet obstruction**   + **Frequent accurate measurements of urinary output**   + **Perioperative use for selected surgical procedures such as:**     - **Urologic surgery, including contiguous structures of the genitourinary tract**     - **Prolonged duration of surgery – Ideally catheter would be removed post-operatively**     - **Receive large-volume infusions or diuretics during surgery**     - **Need for intraoperative monitoring of urinary output**   + **Patients with open sacral or perineal wounds in incontinent patients**   + **Patient requires prolonged immobilization**   + **Improve comfort for end of life care if needed** * **Leave in place only as long as needed.** * **Minimize urinary catheter use and duration of use in all patients** * **Consider using alternatives to indwelling urinary catheters in select patient populations** * **External catheters** * **Intermittent catheterization** * **Frequent toileting** * **Bedside commodes** * **Urinals** * **Disposable adult briefs** * **Incontinence pads** * **Bladder scanning device** |
| **Proper insertion technique**   * **Only properly trained individuals will insert catheter** * **Insert catheters using aseptic technique and sterile equipment.** * **Perform hand hygiene immediately before and after any manipulation.** * **Use sterile products for insertion** * **Properly secure indwelling catheters** * **Use the smallest bore catheter that still allows good drainage** |
| **Proper maintenance techniques**   * **Maintain a closed drainage system**   + **Replace the catheter and collection system if:**     - **Break in aseptic technique**     - **Disconnection of drainage system**     - **Leakage in catheter or drainage system**   + **Recommended to use pre-connected, sealed catheter-tubing junctions** * **Maintain unobstructed urine flow**   + **Keep catheter and drainage tubing free from kinking**   + **Keep collection bag BELOW the level of the bladder AT ALL TIMES**   + **Do not rest collection bag on the floor** * **Draining the collection bag**   + **Use a separate, clean collecting container for each patient**   + **Avoid splashing of urine**   + **Prevent contact of the drainage spigot with non-sterile surfaces** * **Use Standard Precautions** * **Change indwelling catheters and drainage bags based on clinical indications such as infection, obstruction, or when the closed system is compromised.** * **Routine hygiene of the periurethral area is appropriate.**   + **Perform during daily hygiene care**   + **Use soap and water** * **Bladder irrigation or flushing is NOT recommended unless obstruction is anticipated**   + **Continuous irrigation recommended if risk for obstruction or clotting** * **If obstruction occurs due to catheter material, change the catheter** * **Obtain urine samples aseptically.**   + **For a small volume,**      - **Cleanse the port with a disinfectant.**     - **Aspirate the urine from the sampling port with a sterile syringe**   + **Obtain large volumes of urine for special analyses (not culture) aseptically from the drainage bag.** |
| **Documentation and surveillance**   * **Document the following in the patient record:**    + **indications for catheter insertion,**   + **date and time of catheter insertion,**   + **individual who inserted catheter, and**   + **date and time of catheter removal or**   + **daily verification of the need for catheterization.** * **Ensuring that documentation is accessible in the patient record.**   **Patient Education**   * **Only properly trained persons should insert and maintain a urinary catheter.** * **For at home intermittent catheterization, clean technique is acceptable.** |