PURPOSE:
To allow for urinary drainage externally while maintaining skin integrity and prevention of urinary tract infection.

CONSIDERATIONS:
1. External catheters (also known as condom or Texas catheters, urinary sheath) may be applied and changed as deemed necessary by the nurse or physician.
2. External catheters are easy to apply, reduce risk of infection by not providing direct access to urinary tract and promote skin integrity by keeping the area dry and clean.
3. A catheter too tightly applied or incorrectly sized may impair circulation. It is important to have the correct size. Each manufacturer provides a sizing and measurement guide.
4. Wear time for an external catheter varies from 24 to 72 hours, depending on the product design, patient tolerance and manufacturer's specifications.
5. Never use adhesive tape (other than the tapes provided by the manufacture) to secure a condom/external catheter since circulation to the penis can be cut off, even if the urine flow is not impaired.

EQUIPMENT:
- Condom/External catheter
- Drainage bag and tubing
- Velcro or elastic sheath holder (optional, depends on type of catheter)
- Scissors
- Hypoallergenic tape
- Non-sterile gloves
- Soap, water and basin
- Washcloth/towel
- Skin barrier (optional)

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Prepare equipment at bedside.
4. Assist patient to a supine position. Place towel or waterproof pad underneath buttocks.
   [Note: Patient may learn to do this himself so a comfortable sitting or standing position may be necessary.]
5. Cleanse penis using mild soap (avoid soaps with moisturizes as may affect adhesion of device) and water, dry. If patient is not circumcised, retract the foreskin and cleanse meatus. Rinse and dry. It is imperative that the foreskin is returned into position and not left retracted, as this will impair circulation to penis. Drape the patient for privacy.
6. Apply skin barrier wipe to the penis, if used, and allow to air dry. Be sure that all hair has been clipped or shaved from the area as this will interfere with adherence.
7. Follow manufacturer’s direction about specific application, but generally the external/condom catheter is rolled onto the penis. The head of the penis should fit in the cone of the sheath but not rub against the bulb.
8. As the external catheter is unrolled, gently squeeze the sheath all around the penis to seal adhesive to the skin. This will secure the catheter in place.
   [Note: A few air bubbles may remain. This is normal.]
9. If there is extra loose material in the sheath, pinch it together so that it sticks to itself. If there are too many wrinkles on the sheath, try a smaller size.
10. Connect the drainage system to the external catheter. Be careful that it is connect tightly. An extension tubing attached to a leg or drainage bag is an option. Secure with leg strap as appropriate.
11. Assess color of penis to insure good circulation.
12. Be sure that the system is connected so there is no “tugging” as this will decrease wear time by causing leaking.
13. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Procedure and observations.
   b. Patient's response to procedure.
   c. Instructions given to patient/caregiver.
2. Instruct caregiver to check for patency, edema, swelling and circulation. Ensure the catheter is intact and functioning properly.
PURPOSE:
To keep catheter patent and to irrigate bladder with continuous antibacterial fluid to prevent infection or an obstruction.

CONSIDERATIONS:
1. Clean technique is required for irrigation.
2. Physician orders are needed for solution to be used, rate of infusion and how long continuous irrigation will be needed.
3. Note expiration date of irrigant solution.
4. Irrigation tubing should be changed every 48 hours.
5. Be sure that irrigation tubing fits correctly into irrigation solution container.

EQUIPMENT:
- Irrigation solution
- Irrigation tubing
- Sterile catheter plug
- Catheter tray (optional)
- Gloves
- Impervious trash bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Assemble equipment.
4. Insert 3-way catheter, if it is not already in place, and plug smallest lumen with sterile catheter plug.
6. Take catheter plug out of smallest lumen; take irrigation tubing cover off and insert tubing into smallest lumen. Open clamp and set rate of infusion.
7. To replace irrigation solution container:
   a. Clamp tubing.
   b. Remove tubing spike from old container.
   c. Remove cover from new container.
   d. Insert spike into new container.
   e. Hang new container and set rate of infusion.
   f. Container should be marked with date and time hung.
8. If continuous irrigation is discontinued, the lumen can be plugged with sterile catheter plug.
9. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Irrigation solution, type and amount infused and returned.
   b. Excess amount returned is counted as urine output.
   c. Patient's response to procedure.
   d. Instructions given to patient/caregiver.
PURPOSE:
To empty bladder regularly, completely and easily; to maintain urine sterility with no stone formation.

CONSIDERATIONS:
1. Neurogenic bladder is any bladder disturbance due to a lesion of the nervous system.
2. Causes may include spinal cord injury, disease, such as multiple sclerosis, tabes dorsalis, diabetes mellitus, spinal cord tumor or herniated intervertebral discs, congenital anomalies, i.e., spina bifida, myelomeningocele.
3. Types of neurogenic bladder:
   a. Spastic (Reflex or Automatic) bladder - due to upper motor neuron lesion, loss of conscious sensations and cerebral motor control, reduced bladder capacity and marked hypertrophy of bladder wall.
   b. Flaccid (Atonic, Non-reflex, Autonomous) bladder - due to lower motor neuron lesion. Bladder continues to fill until it becomes greatly distended, bladder musculature does not contract forcefully at any time, when pressure reaches breakthrough point small amounts of urine dribble from urethra as bladder continues to fill resulting in overflow incontinence.
4. Sensory loss may accompany flaccid bladder; patient is not aware of discomfort.
5. Extensive distention causes damage to bladder musculature, infection of stagnant urine and kidneys by back pressure of urine.
6. Bladder training is indicated for spastic bladder.
7. Parasympathetic drugs, with physician order, are given to increase contraction of the detrusor muscle.
8. Instruct patient and family in prevention, signs and symptoms and treatment of autonomic dysreflexia.

EQUIPMENT:
None

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Offer an opportunity to void every 1 to 2 hours, even if urge to void is not felt. Intervals may be based on a shorter time than exist in continent voiding.
4. Initiate voiding by manual stimulation, i.e., apply pressure with hands over suprapubic area or bend patient over to increase intra-abdominal pressure.
5. Record time and amount of voiding.
6. Record time and amount of fluid intake. If no fluid restriction, encourage daily intake of 2000-2500 mL per day. Limit in evening.
7. Repeat voiding by manual compression every 2 hours to prevent over-distention.
   a. Set alarm clock for 2-hour intervals during the day.
   b. Have the patient void twice during the night.
8. Instruct patient to do vaginal and rectal contractions to strengthen periurethral tissue (Kegel exercises).
   a. Tighten the rectum and pelvis muscles.
   b. Hold the contraction while counting slowly to 10, relax to count of 10.
   c. Continue relaxing and tightening 10 times (a relaxation and tightening count as 1).
   d. Perform these exercises 10 times daily over a 6 to 8 week period.
   e. Evaluation of exercise program is then done.
   f. During the program, bed and clothing may be padded to protect them from becoming wet, avoid diapering, since this further demeans the person and may give “permission” to be incontinent.

AFTER CARE:
1. Document in patient’s record:
   a. Procedure and observations.
   b. Patient’s response to procedure.
   c. Instructions given to patient/caregiver.
   d. Communication with physician when necessary.
Urinary – Bladder Training: Non-Neurogenic Bladder

SECTION: 11.05

Strength of Evidence Level: 3

PURPOSE:
To keep the patient dry and free from odor; to prevent urinary tract infections and preserve renal function; to help the patient maintain social acceptance.

CONSIDERATIONS:
1. The following are important to patient teaching and planning a bladder training program:
   a. Patient’s emotional attitude and motivation to be dry.
   b. Patient’s ability to cooperate.
   c. Patient’s understanding of his/her responsibilities in the training program.
2. During the training period, it is suggested that fluids be spaced throughout the day and limited in the evening. Serve small amounts (100-150 mL) frequently. Vary the flavor, color, temperature, container and beverage.
3. Fluid intake should total 1500-2500 mL a day unless the patient is on a fluid restriction. If the patient has been drinking less than 250 mL a day, do not expect him/her to start drinking this amount immediately.
4. Regularity is the key to success.
5. The nurse should evaluate the feasibility of instructing the patient in self-catheterization in conjunction with bladder training.
6. Obtain physician order for frequency of evaluation for residual.

EQUIPMENT:
Bladder scanner (optional)
Intermittent catheter kit (optional)
Toilet hats

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Instruct patient to void every 1 to 2 hours, the interval may be lengthened as control is gained.
4. Give patient a measured amount of fluid to drink (100-150 mL).
5. Instruct the patient to wait 30 minutes and then ask patient to attempt to void.
   a. Position patient with thighs flexed, feet and back supported.
   b. Instruct patient to press or massage over bladder area or increase intra-abdominal pressure by leaning forward, which helps to initiate evacuation of bladder.
   c. Have the patient move around on the toilet to change position and attempt to void a second time.
6. Have the patient keep a voiding calendar - a continuous record of time and amount of fluid ingested and time and amount of each voiding.
7. Encourage the patient to hold urine until specified voiding time if possible.
8. Assess for signs of urinary retention, test (bladder scan or catheterize) for residual urine, as directed.
9. Encourage patient to continue self-care and exercise programs. Encourage patient to wear own clothing to promote normal activities.

Patient with Indwelling Catheter:
1. Remove catheter.
2. Proceed with bladder training.

Bladder Training:
1. Teach Kegel Exercises.
2. Have patient keep a voiding diary for 3 days, during the day only. Record: Time voided, amount voided, whether patient was dry at voiding, if wet at voiding, and precipitating factors (running water, sneeze, etc.).
3. Review diary with patient to discern shortest period patient is able to remain dry. Initiate bladder training program.
   a. Patient voids upon arising.
   b. Patient voids again at shortest interval able to stay dry per voiding diary (e.g. 15 minutes, 30 minutes).
4. Patient voids at shortest intervals (daytime only) until able to stay dry for 3 days.
5. Patient increases voiding interval by 15 minutes and continues to increase by 15 minutes in order to stay dry for that interval for 3 days. DO NOT rush this voiding increase, continue for 3 days.
6. Teach patient relaxation exercises to promote continence.

Relaxation Exercises:
1. When you get the urge to urinate, DO NOT stand immediately.
2. Take two deep breaths while quickly squeezing your rectum.
3. When the urge passes, stand up and SLOWLY walk to the bathroom.
4. As you walk, subtract 7 from 100 (100 - 7 = 93 -7 = 86 -7 = 79, etc.). This will occupy your mind and help prevent your bladder from emptying.

AFTERCARE:
1. Document in patient’s record:
   a. Procedure and observations.
   b. Instructions given to patient/caregiver.
   c. Response to procedure.
PURPOSE:
To obtain voided, uncontaminated specimen for laboratory analysis.

CONSIDERATIONS:
1. It is preferable to obtain early morning specimen due to concentration of sediment.
2. Keep specimen refrigerated to prevent chemical changes if unable to transport specimen to the lab immediately.
4. Transport specimen to the lab as soon as possible. Generally, microscopic examination should be done within 1 hour after collection to prevent bacterial growth.
5. A “clean catch” urine specimen (one that contains no outside bacteria) is necessary for an accurate urine culture. Make sure that you or patient does not touch the inside of the specimen cup.

EQUIPMENT:
Cleansing solution
Gauze sponges
Sterile specimen container
Gloves
Impervious trash bag

PROCEDURE:

Male patient:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Position patient to use toilet or urinal. Clean penis and area around meatus with cleansing solution cleaning from urethra out to surrounding meatus.
4. Allow initial urinary flow to escape into toilet or urinal.
5. Collect midstream urine specimen in the sterile container.
6. Avoid collecting the last few drops of urine that may contain prostatic secretions.
7. Place the lid on the specimen container and write patient's name, identification number, date and time of collection on label.
   [Note: Some have to transfer the urine into a special tube. Follow the manufacturer’s directions.]
8. Discard soiled supplies in appropriate containers.

Female patient:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Position patient to use toilet or bedpan.
4. Separate labia to expose the meatus and cleanse each side of labia using a downward stroke with cleansing solution. Use 3 front to back cleansing pads/swabs.
5. Instruct patient to void forcibly while continuing to keep labia separated.

6. Allow the initial urine to flow into the toilet or bedpan then catch the midstream specimen in a sterile container. DO NOT let specimen cup touch skin.
7. Place the lid on the specimen container and write patient's name, identification number, date and time of collection on label.
   [Note: Some have to transfer the urine into a special tube. Follow the manufacturer’s directions.]
8. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Instruct caregiver to take specimen to the designated laboratory immediately or deliver directly to the lab yourself.
2. Instruct laboratory personnel regarding specimen.
3. Document in patient's record:
   a. Procedure and observations.
   b. Laboratory where specimen is taken.
   c. Instructions given to patient/caregiver.
PURPOSE:
To protect the skin, contain the urine and odor.

CONSIDERATIONS:
1. When the bladder has to be removed or urine flow diverted from the bladder, a urinary diversion is created. There are many techniques used to create these, such as cutaneous ureterostomy, transureterostomy, ileal conduit, etc. For the purpose of this procedure, we refer to these as urostomies. Generally, the care and placement of an ostomy appliance is the same.
2. There are a variety of products that are used for urostomies. There are 1-piece, 2-piece or nonadherent appliances. Manufacturer’s directions should be followed when applying these devices.
3. The other factor in choosing an appliance is the appearance of stoma and its location. There are flat appliance wafers and convex appliance wafers. Convex is usually used with flat stomas or stomas located in creases.
4. Karaya is generally never to be used with urostomy. It does not hold up well to liquid drainage. Use of extended wear wafers are generally used for urostomies such as Durahesive, Flextend, Extended Wear depending on manufacturer.
5. Generally, a bedside drainage system is used for nocturnal use.

EQUIPMENT:
Correct size of wafer and corresponding pouch for 2-piece system or correct wafer size for 1-piece system.
Paste or barrier rings/ strips (optional)
Washcloth/gauze
Paper/Cloth tape (optional)
Skin prep (optional)
Tampon or rolled up paper towel (optional)
Gloves
Impervious trash bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Prepare equipment at bedside. Whenever possible, have all equipment ready and prepared to apply.
4. Measure stoma at largest area.
   [Note: New stomas will need to be measured frequently for about 8 to 12 weeks, as they will decrease in size.]
5. After the size has stabilized, then a precut size wafer may be used. Create a pattern to cut the wafer. Generally, the wafer is cut approximately to 1/8 (one-eighth) inch larger than stoma. Remove paper backing from the wafer and set aside.
6. Drain and remove existing appliance from the patient. Save the valve cover/adaptor, if one is used. If the physician has placed stents or other tubes into the stoma be careful not to pull on or dislodge these tubes.
7. Use a clean washcloth or gauze to cleanse skin around stoma with warm water and mild soap. If soap is used, remember soap can build up on skin interfering with adhesion.
   [Note: Be cautious using “baby wipes” or soaps with moisturizer in them, as they will interfere with wafer adhesion to skin.]
8. Rinse and pat dry. A tampon or rolled piece of paper towel may be used as wick to absorb urine while applying water, hold it over top of stoma.
9. Skin protectant/barrier wipes is not usually recommended by many manufacturers, as it may interfere with adhesion.
10. Apply stoma adhesive paste or barrier rings/strip at this time, if they will be used. It can be applied in a small bead around the stoma or to the back of the wafer around cut opening for stoma. Allow to set up about 1 minute.
   [Note: These products are to act as a barrier to protect skin and/or a “caulking” to decrease leakage. It does not help the wafer to stick to skin. If it is spread around on skin or wafer it will interfere with adhesion to the skin.]
11. Apply wafer, making sure the skin is dry and no urine has dripped onto the skin. Gently smooth all areas of the wafer.
12. Apply urostomy pouch (if using a 2-piece system) making sure pouch is secure by gently pulling on pouch after application. Position of pouch is dependent on facilitation of drainage.
13. Confirm that the valve at bottom of urostomy pouch is turned in the off position, unless it is being connect to a drainage bag system. Apply cover cap if needed.
14. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient’s record:
   a. Amount, color and consistency of urine.
   b. Condition of skin.
   c. Condition of stoma.
   d. Patient’s response to procedure.
   e. Instructions given to patient/caregiver.
**PURPOSE:**
To provide a safe, effective and inexpensive procedure for decontaminating urinary drainage bags.

**CONSIDERATIONS:**
1. Generally, a patient with an indwelling catheter should have two bags of each type - leg and bedside drainage. These provide for a rotation of bags during cleaning periods and an extra bag in case of damage.
2. Leg and bedside bags should be decontaminated daily after use.
3. Usually bags that are decontaminated daily may be reused for 4 weeks. As a rule, when the catheter is changed so should the drainage bags.
4. Cleaning products that can be used to decontaminate are sold at medical supplies stores but usually a 1:10 concentration (150 mL of cold tap water and 15 mL of bleach) of household bleach (sodium hypochlorite 5.25% only) or a 1:3 concentration of white vinegar only (1 quart of white vinegar and 3 quarts of cold tap water; store in a clean gallon container).
   
   [Note: Bleach (sodium hypochlorite) solution should be mixed daily because it will lose its strength quickly and not be effective.]
5. Bleach solution is preferred because it decrystalizes sediment and inhibits bacterial growth. Safe handling of bleach must be taught. It bleach cannot be used safely then vinegar solution is the alternative solution.
6. Instruct patient/caregiver regarding the proper handling of bleach, including measures to prevent inhalation or contact with the skin, eyes and clothing. Avoid bleach contact with stainless steel, chrome and other bathroom fixtures because it will cause rust or corrosion.

**EQUIPMENT:**
Household bleach 1:10 solution or white vinegar 1:3 solution
Cold tap water
Graduated irrigating bottle, 60 mL syringe, turkey baster or funnel
Gloves

**PROCEDURE:**
1. Adhere to Standard Precautions.
2. Obtain the prepared decontamination solution (bleach or white vinegar), approximately 200 mL.
3. Empty all urine from bag into the toilet.
4. Fill the bag with cold tap water. If it is a leg bag, fill it through the connector and extension tubing. If it is a bedside bag, fill it through the top tubing with 200 mL cold tap water.
5. Vigorously agitate water in the bag for 10 seconds.
6. Empty the water through the bag's drainage spigot into the toilet.
7. Repeat Steps 4-5 and 6. Rinsing must be done twice.
8. Instill the decontamination solution into the drainage bag using the irrigation bottle, funnel, turkey baster or 60 mL syringe. For bleach solution: Agitate the solution in the bag for 30 seconds, ensuring that the solution touches all inner surfaces of the bag. For white vinegar solution, fill bag about 1/2 full of solution, close the tubing cap and drain and allow to dwell for 30 minutes.
9. If using bleach solution, drain the solution into the toilet, avoiding contact with metal fixtures. DO NOT rinse bag.
10. If using white vinegar solution, drain the solution, then rinse entire system with tap water, and drain again.
11. Hang bag with all caps and spouts open over shower/towel rail to air dry. Protect surface under where drying to prevent damage from any dripping decontamination solution, especially bleach.
12. Discard soiled supplies in appropriate containers.

**AFTER CARE:**
1. Document in patient's record:
   a. Procedure and observations.
   b. Instructions given to patient/caregiver.
   c. Patient's/caregiver's response.
PURPOSE:
To collect urine by a one-piece external disposable system.

CONSIDERATIONS:
1. The pouch, designed to be worn externally, is made from odor-barrier film and features a foam-backed synthetic skin.
2. If needed, the pre-cut opening in the barrier may be enlarged to accommodate the anatomy of the patient.
3. The pouch outlet connects to tubing and may be attached to a bedside receptacle for continuous or nighttime collection.
4. The pouch is primarily used for incontinent patients in which an indwelling catheter is contraindicated.
5. The pouch may be used to collect a clean urine specimen.
6. The pouch should be changed every 3-5 days.
7. Use of this product may not be advisable for women with active genital herpes or chronic urinary retention.
8. Discontinue use of this product if any of the following symptoms appear: swelling, severe redness, itching, pain, fever or abnormal vaginal discharge.

EQUIPMENT:
1 female urinary pouch, e.g., Hollister®
One 0.5 oz. tube paste, e.g., Hollister Premium Paste®
Microporous adhesive
1 packet skin-gel wipes
Bedside drainage system (optional)
Waterproof, absorbent underpad
Skin cleanser, e.g., soap, Pericare®
Impervious trash bag
Scissors
Basin
Warm water
Towel
Gloves
Ruler

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Place patient in supine position with knees flexed and separated with a waterproof, absorbent pad under buttocks.
4. Cleanse the external genitalia with soap and water; dry.
5. Separate the labia (minora and majora) and push back firmly to expose the urethral meatus, periurethral floor and vaginal introitus. (Refer to manufacturer's instructions.)
6. Approximate the size of the vulva opening, and then release the labia.
7. Using scissors enlarge the pouch opening so that it corresponds with the measurement obtained. DO NOT cut beyond the line indicated in the backing paper.
8. Wipe the genital area with the skin-gel wipe and air dry.
9. Close the convenience drain cap on the pouch.
10. Remove the protective paper from the skin barrier; apply a thin coat of paste around the opening of the pouch.
11. Leaving the labia in a normal position, apply the pouch to the barrier to the perineum at the distal end. Gently press the barrier material against the skin until it is contacting the skin at all points.
12. Press the barrier material against the skin for 1 full minute, then allow the patient to assume a normal, comfortable position.
13. Apply the strips of microporous adhesive on the rim of the pouch for added security.
14. Draining the pouch: Remove the cap on the convenience drain and empty the urine into an appropriate receptacle; replace the cap.
15. For continuous or nighttime collection: Remove the cap on the convenience drain at the bottom of the pouch and attach the tubing from the bedside receptacle.
16. Removing the pouch:
   a. Empty the pouch before removing it.
   b. If the pouch is connected to a bedside drainage bag, disconnect tubing and replace the convenience drain cap.
   c. Remove the strips of tape.
   d. Ease the skin barrier away from the skin in the direction of hair growth. A water-based jelly may be used.
   e. DO NOT discard into the toilet.
17. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Procedure and observations.
   b. Condition of perineal area.
   c. Patient's response to procedure.
   d. Instructions given to patient/caregiver.
POTUSE:
To protect the skin and contain the drainage and odor.

CONSIDERATIONS:
1. Depending on the type of pouch available, all appliances should be worn with a skin barrier, e.g., Stomahesive® Holihesive® skin prep (check manufacturer’s recommended skin barrier).
2. Karaya is never to be used with a urinary diversion, as it is water-soluble.

EQUIPMENT:
Correct size of Stomahesive® wafer and corresponding urostomy pouch
Stomahesive® paste
Paper tape
Bedside drainage system
Gloves
Impervious trash bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Prepare equipment at bedside.
4. Pattern Stomahesive® wafer to 1/8 inch larger than stoma. Remove paper backing and set aside. [Note: If durahesive is used, it should be cut to fit snugly against stoma.]
5. Drain and remove existing appliance from the patient, saving the valve adaptor, if one is used. Be careful not to pull on tubes.
6. Cleanse stoma and peristomal skin with warm water. Rinse and pat dry.
7. Apply Stomahesive® paste to base of stoma, moistening gloved finger when applying paste.
8. Apply wafer, ensuring that the skin is dry and no urine has dripped onto the skin.
9. Apply urostomy pouch. Position of pouch is dependent on ambulatory status. If the patient is remaining in bed the majority of the day, position appliance to side of bed, allowing for easier flow of urine. If ambulatory, position the appliance in a perpendicular position.
10. Apply paper tape to all edges of pouch overlapping 1/4 inch onto skin surface (picture-frame).
11. Cap bottom of bag or connect to continuous drainage system.
12. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Amount, color and consistency of drainage.
   b. Condition of skin.
   c. Condition of stoma.
   d. Patient's response to procedure.
   e. Instructions given to patient/caregiver.
**PURPOSE:**
To provide continuous urinary drainage through an indwelling catheter.

**CONSIDERATIONS:**
1. The Centers for Disease Control and Prevention (CDC) and the Agency for Healthcare Research and Quality (AHRQ) have identified four situations for the long-term use of indwelling catheters, as appropriate:
   a. Urinary retention that cannot otherwise be managed.
   b. Management of terminally ill or severely ill patients.
   c. Management of patients with stage 3 or 4 pressure ulcers on trunk until the ulcers are healed.
   d. Management of urinary incontinence in home bound patient who is incapable or self-toileting and whose caregiver is unable to manage the incontinence effectively any other way.
2. Indwelling catheters must be ordered by a physician and should indicate:
   a. If there is a frequency of change and size.
   b. If a specialty catheter, e.g., silicone or silver coated, then a specific order should be obtained.
   c. If catheter is to be irrigated, with what solution and frequency of irrigation.
3. Small diameter catheters are preferred because the goal is to minimize the distortion of urethra. Size of catheter for an adult is typically 14 to 18 French, unless patient has blood clots or sediment that frequently occludes the lumen.
4. Evidence does not support routine monthly catheter changes. Rather, nurses should monitor patients closely for signs of blockage or encrustations and should change based on specific patient needs. Generally, the accepted frequency has been monthly but with frequency shorter or longer depending on patient situation, verified with a physician order.
5. Patency can be maintained and prolonged by absence of infection. High intake of fluids, correct placement, handling and securing of catheter with a strap or securement device will help reduce risk of infection.
6. Generally, at least one spare catheter should be left in the home at all times.
7. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections.

**EQUIPMENT:**
- Catheter insertion tray
- Sterile gloves
- Prepping balls
- Antimicrobial solution
- Waterproof, absorbent underpad
- Fenestrated drape
- Sterile lubricating jelly
- Pre-filled 10 mL syringe of sterile water
- Plastic forceps
- Graduated basin
- Sterile catheter of prescribed size
- Drainage bag
- Catheter strap/or other securing device
- Sterile extension tubing (optional)
- Gloves
- Impervious trash bag

**PROCEDURE:**
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Position patient on back with knees flexed. Wash the perineal area with soap and water.
4. Open the catheterization tray and place the waterproof, absorbent underpad under the buttocks extending forward between the legs.
5. Place drainage receptacles on towel between patient's thighs.
6. Open all sterile packets.
7. Put on sterile gloves using sterile technique.
8. Place the fenestrated drape over the patient, exposing only the urethral meatus.
9. Pretesting the catheter balloon is not recommended any longer, especially with silicone catheters, because the balloon does not return to original shape and may traumatize the urethra during catheter insertion.
10. Squeeze liberal amount of sterile lubricating jelly on the catheter.
11. Separate the labia so that the meatus is exposed, and using prepping balls and antimicrobial solution swab each side of the labia with a downward stroke from pubic area to the anus. Use a fresh prepping ball for each stroke.
12. With the third prepping ball, cleanse the meatus with a single stroke. Once the meatus is cleaned, the labia must not be allowed to close over the meatus.
13. Gently insert catheter tip into meatus, being careful not to touch the surrounding areas with the catheter.
14. When urine starts to flow, insert catheter about 1 inch further into the bladder. Remain in home until urine is noted. If after one hour no urine is noted, MD to be notified.
15. Inflate balloon with indicated amount of sterile water. Inflation of the balloon inside the urethra results in severe pain, gross hematuria, and possibly urethral tear. [Note: Check manufacturer recommendations for amount of fluid to be inserted in the balloon. Generally, a 5 mL balloon will need
10 mL of sterile water to make sure the balloon is symmetrical.

16. Cleanse perineal area of lubricant.
17. Connect catheter to extension tubing and/or drainage bag.
18. Secure catheter to thigh with catheter strap and/or other securing device. Be sure that there is enough slack to avoid traction to the bladder neck.
20. Discard soiled supplies in appropriate containers.

AFTER CARE:

1. Document in patient's record:
   a. Procedure and observation.
   b. Type and size of catheter inserted, size of balloon and amount of sterile water instilled.
   c. Characteristics of urine, color, odor and amount.
   d. Patient's response to procedure.
   e. Instructions given to patient/caregiver.
   f. Communicate with physician, when necessary.
PURPOSE:
To provide for continuous urinary drainage through an indwelling catheter.

CONSIDERATIONS:
1. The Centers for Disease Control and Prevention (CDC) and the Agency for Healthcare Research and Quality (AHRQ) have identified 4 situations for the use of long term use of indwelling catheters as appropriate.
   a. Urinary retention that cannot be otherwise managed.
   b. Management of terminally ill or severely ill patients.
   c. Management of patients with stage 3 or 4 pressure ulcers on trunk until the ulcers are healed.
   d. Management of urinary incontinence in home bound patient who is incapable or self-toileting and whose caregiver is unable to manage the incontinence effectively any other way.
2. Indwelling catheters must be ordered by a physician and should indicate:
   a. Frequency of change and size.
   b. If a specialty catheter, i.e., silicone or silver coated, then a specific order should be obtained.
   c. If catheter to be irrigated, with what solution and frequency of irrigation.
3. Size of catheter for an adult typically is 14-18 French, unless patient has blood clots or sediment that frequently occludes the lumen. Small diameter catheters are preferred because the goal is to minimize the distortion of urethra.
4. Older men or patients with prostate enlargement may benefit from the use of a Coude-tipped catheter to aide in the passage of catheter through the prostate. Obtain a physician order.
5. Evidence does not support routine monthly catheter changes. Rather, nurses should monitor patients closely for signs of blockage or encrustations and should change based on specific patient needs. Generally, the accepted frequency has been monthly, but with frequency shorter or longer depending on patient situation verified with a physician order.
6. Patency can be maintained and prolonged by absence of infection. High intake of fluids, correct placement, handling and securing of catheter with a strap or securement device will help reduce risk of infection.
7. Generally, at least 1 spare catheter should be left in the home at all times.
8. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections.

EQUIPMENT:
- Catheter insertion tray
- Sterile gloves
- Prepping balls
- Antimicrobial solution
- Waterproof, absorbent underpad
- Fenestrated drape
- Sterile lubricating jelly
- Prefilled 10 mL syringe of sterile water
- Plastic forceps
- Graduated basin
- Sterile catheter of prescribed size
- Drainage bag
- Catheter strap/or other securing device
- Sterile extension tubing (optional)
- Lidocaine jelly 2% (physician ordered)
- Gloves
- Impervious trash bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Position patient on back and wash the perineal area and penis thoroughly with soap and water, being careful to retract the foreskin and cleanse the area underneath.
4. Open the catheterization tray and place the waterproof, absorbent underpad under the buttocks extending forward between legs.
5. Place drainage receptacles on towel between patient's thighs.
6. Open all sterile packets.
7. Put on sterile gloves, using sterile technique.
8. Place the fenestrated drape from the sterile catheter pack over the patient's penis.
9. Pretesting the catheter balloon is not recommended any longer, especially with silicone catheters, because the balloon does not return to original shape and may traumatize the urethra during catheter insertion.
10. Adequate lubrication of catheter is necessary to prevent urethral trauma and pain and to aid in passage of catheter. Use a water-based lubricant along the entire length of catheter, or very large mound of lubricant to the tip of penis, or inject 10ml of water-soluble lubricant directly into the male urethra. (Some insert kits have this premade in the insertion kit.)
11. Lidocaine jelly 2% injected directly into the urethra is used to reduce discomfort and prevent urethral spasm, inject syringe tip into the urethra and inject jelly. Then place your finger tip over the urethral opening for 2 to 5 minutes so that the jelly will not
come out and to allow time from the lidocaine jelly to work.

12. Expose the tip of penis. If the patient is uncircumcised then gently retract the foreskin before cleansing the tip of penis and urethra opening. Using prepping balls and antimicrobial solution, swab in outward circle from urethra opening the entire tip of penis. Do this 3 times using a different prepping ball.

13. Grasp the penis with a slight tension, elevating it at a right angle to the patient’s abdomen.

14. Insert the tip of the catheter into the urethral opening, being careful to keep the distal end on the sterile field. If inserting a coude-tipped catheter insert with the tip of coude catheter up at the 12 o’clock position throughout the insertion.

15. Continue to gently insert the catheter. Have the patient breath deeply or bear down, if resistance is felt, DO NOT force against resistance. Continue to insert catheter until the bifurcation of catheter, even if you have urine return.

16. Lower penis and place the distal end of the catheter in the collection basin.

17. Inflatable balloon after visualization of urine return through the cuff inflation port with indicated amount of sterile water. Remain in home until urine is noted. If after one hour no urine is noted, MD to be notified. **[Note: Inflation of the balloon inside the urethra results in severe pain, gross hematuria and possibly urethral tear. Check manufacturer recommendations for amount of fluid to be inserted in the balloon. Generally, a 5 mL balloon will need 10 mL of sterile water to make sure the balloon is symmetrical.]**

18. Gently pull the catheter to seat the balloon at the bladder neck.

19. Connect to drainage bag.

20. Replace foreskin, as indicated.

21. Secure tubing to patient’s upper thigh or lower abdomen; position the penis with a slight upward curve and slack in the catheter to decrease pressure of bladder neck and penis. Use a catheter strap and/or other securing device.

22. Hang bag for gravity drainage.

23. Discard soiled supplies in appropriate containers.

**AFTER CARE:**

1. Document in patient's record:
   a. Procedure and observation.
   b. Type and size of catheter inserted, size of balloon and amount of sterile water instilled.
   c. Characteristics of urine, color, and amount.
   d. Patient's response to procedure.
   e. Instructions given to patient/caregiver.
   f. Communicate with physician when necessary.
PURPOSE:
To provide drainage of the urinary bladder and to check for retention.

CONSIDERATIONS:
1. If the patient is to be catheterized for residual volume, it must be done immediately after voiding.
2. When limiting the amount of urine to be drained or if clamping is necessary, contact patient's physician.
3. Secure an order regarding the frequency and times.
4. The patient should be instructed to have at least one spare catheter in the home at all times.
5. (Refer to Urinary - Insertion of Indwelling Catheter: Female.)

EQUIPMENT:
Catheter insertion tray
Sterile gloves
Prepping balls
Antimicrobial solution
Waterproof, absorbent underpad
Fenestrated drape
Sterile lubricating jelly
Plastic forceps
Graduated basin
Sterile catheter of prescribed size
Gloves
Impervious trash bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Position patient on back with knees apart and flexed or on side with upper leg flexed. Wash the perineal area thoroughly with soap and water.
4. Open the catheterization tray and place the waterproof, absorbent underpad under the buttocks extending forward between the legs.
5. Open sterile packets.
6. Place drainage receptacles on towel between patient's thighs.
7. Open all sterile packets.
8. Put on sterile gloves using sterile technique.
9. Place the fenestrated drape over the patient, exposing only the urethral meatus.
10. Squeeze a liberal amount of sterile lubricating jelly on the catheter.
11. Separate the labia so that the meatus is exposed, and using a prepping ball with antimicrobial solution, swab each side of the labia with a downward stroke. Use a fresh prepping ball for each stroke.
12. With the third prepping ball, cleanse the meatus with a single stroke.
13. Gently insert catheter tip into meatus with sterile, gloved hand, being careful not to touch the surrounding areas with the catheter.
14. When urine starts to flow, insert catheter about 1 inch further into the bladder.
15. Allow the urine to flow until the bladder is empty.
16. When the bladder is empty, gently remove the catheter.
17. Cleanse the perineal area of any lubricant.
18. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Procedure and observation.
   b. Type and size of catheter inserted, size of balloon and amount of sterile water instilled.
   c. Characteristics of urine, odor, color and amount.
   d. Patient's response to procedure.
   e. Instructions given to patient/caregiver.
Urinary – Intermittent Catheterization: Male  
SECTION: 11.15  
Strength of Evidence Level: 3

PURPOSE:
To provide drainage of the urinary bladder and to check for retention.

CONSIDERATIONS:
1. If the patient is to be catheterized for residual volume, it must be done immediately after voiding.
2. When limiting the amount of urine to be drained or if clamping is necessary, contact patient's physician.
3. If catheterization is to be intermittent, secure an order regarding the frequency and times.
4. The patient should be instructed to have at least one spare catheter in the home at all times.
5. (Refer to Urinary - Insertion of Indwelling Catheter: Male.)

EQUIPMENT:
Catheter insertion tray  
Sterile gloves  
Prepping balls  
Antimicrobial solution  
Waterproof, absorbent underpad  
Fenestrated drape  
Sterile lubricating jelly  
Plastic forceps  
Graduated basin  
Sterile catheter of prescribed size  
Gloves  
Impervious trash bag
Lidocaine jelly 2% (if prescribed)

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Position patient on back and wash the perineal area and penis thoroughly with soap and water, being careful to retract the foreskin and cleanse the area underneath.
4. Open the catheterization tray and place the waterproof, absorbent underpad under the buttocks extending forward between the legs.
5. Open sterile packets.
6. Put on sterile gloves using sterile technique.
7. Place the fenestrated drape from the sterile catheter tray over the patient's penis.
8. Adequate lubrication of catheter is necessary to prevent urethral trauma and pain and to aid in passage of catheter. Use a water-based lubricant along the entire length of catheter, or very large mound of lubricant to the tip of penis, or inject 10ml of water-soluble lubricant directly into the male urethra. (Some insert kits have this premade in the insertion kit.)
9. Lidocaine jelly 2% injected directly into the urethra is used to reduce discomfort and prevent urethral spasm, inject syringe tip into the urethra and inject jelly. Then place your fingertip over the urethral opening for 2 to 5 minutes so that the jelly will not come out and to allow time from the lidocaine jelly to work.
10. Expose the tip of penis. If the patient is uncircumcised then gently retract the foreskin before cleansing the tip of penis and urethra opening. Using prepping balls and antimicrobial solution, swab in outward circle from urethra opening the entire tip of penis. Do this 3 times using a different prepping ball.
11. Grasp the penis with a slight tension, elevating it at a right angle to the patient's abdomen. Insert the tip of the catheter into the urethral opening, being careful to keep the distal end on the sterile field. If inserting a coude-tipped catheter insert with the tip of coude catheter up at the 12 o'clock position throughout the insertion.
12. Continue to insert the catheter. Have the patient breath deeply or bear down, if resistance is felt. DO NOT force against resistance. Continue to insert catheter until the bifurcation of catheter, even if you have urine return.
13. Lower penis and place the distal end of the catheter in the collection basin. The end of the catheter must be lower than the level of the patient's bladder to allow for gravity outflow.
14. It may take several minutes for the urine to flow as the body temperature melts the lubricant, which may be blocking the catheter lumen.
15. Allow urine to flow until the bladder is empty.
16. When the bladder is empty, pinch off and gently remove the catheter. If there is a large amount of residual after post void, you may want to inflate balloon instead of pulling catheter and consult with the physician.
17. Replace the foreskin, as indicated.
18. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Procedure and observation.
   b. Type and size of catheter inserted, size of balloon and amount of sterile water instilled (if applicable).
   c. Characteristics of urine, odor, color and amount.
   d. Patient's response to procedure.
   e. Instructions given to patient/caregiver.
PURPOSE:
To completely empty the urinary bladder on a regular, intermittent basis. To relieve bladder distention. To promote self-care in the home.

CONSIDERATIONS:
1. Clean technique is used. Patients do not need to wear gloves but good hand hygiene must be performed to reduce the incidence of infection.
2. Catheterization should be performed on a scheduled basis to prevent over distension of the bladder. Generally, it should be done every 4 to 6 hours while patient is awake. The frequency should be enough to maintain urine volume at no greater than 500 mL.
3. It is important to maintain adequate fluid intake generally 2000–2500 mL daily fluid intake, unless contraindicated. As important as volume is the type of fluids. Avoid bladder irritant such as carbonated drinks, caffeine, artificial sweeteners, etc. Water is the best fluid to intake.
4. Catheters can be reused many times, usually until soap residue causes them to become opaque (about 7 to 10 days); however a catheter can be used until it becomes too difficult to use, e.g., either too soft, too stiff.
5. Instruct the patient to protect the water-soluble lubricant from becoming contaminated.
6. For a patient with reduced mobility, dexterity or both, the nurse must determine the optimal position for catheterization and ascertain the patient's ability to manipulate clothing and adequately expose the urethral meatus for catheter insertion.

EQUIPMENT:
Urinary catheter of prescribed size
Water-soluble lubricant/individual packets are recommended
Receptacle for urine (bedpan/toilet)
Carrying case/baggie
Impermeable trash bag
Gloves

PROCEDURE:
1. Adhere to Standard Precautions.
2. Instruct procedure to patient.
3. Have patient wash hands thoroughly.
4. Instruct and assist patient to assemble and arrange equipment on clean surface. Prepare catheter and lubricant.
5. Cleaning meatus is not necessary but if prone to infections patient may cleanse meatus with an antimicrobial wipe or soap and water prior to catheter insertion.
6. Instruct patient to sit on the toilet or assume a position that they can perform the catheterization such as, a semi-sitting position on a low chair or lie or sit down with the knees flexed.
7. Use a mirror to identify labia, clitoris, urethral meatus and vagina.
   a. FEMALE: Separate vaginal folds with one hand.
   b. MALE: Pull back foreskin.
   [Note: Patients conducting their own self-catheterization procedure do not need to wear gloves.]
8. Pick up catheter 3 to 4 inches from tip and hold as if it were a pencil. Lubricate the catheter thoroughly.
9. Insert the catheter into the urethral meatus until urine flows into the toilet or container. Use mirror, if necessary, to visualize meatus.
   a. FEMALE: Insert catheter approximately 3 inches.
   b. MALE: Insert catheter approximately 7 to 10 inches.
10. Allow urine to flow until it stops flowing. It might be necessary to massage lower abdomen to be assured all urine has been emptied from the bladder.
11. Withdraw the catheter slowly to allow complete urine drainage; bend or kink the catheter before final withdrawal to prevent urine drips, dry area around meatus.
12. Replace foreskin forward, if uncircumcised male patient.
13. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Instruct patient to wash the catheter and hands with soap and water; sudsing for 10 to 15 seconds; rinse well and allow catheter to air dry (such as on paper towel).
2. Place catheter in a clean plastic bag; a clean, dry covered container, or roll in clean, dry towel for use at next catheterization.
3. Document in patient's record:
   a. Procedure and observation.
   b. Patient's response to procedure.
   c. Instructions given to patient/caregiver.
PURPOSE:
To flush mineral deposits and mucous shreds preventing constant drainage of urine from the catheter tube.

CONSIDERATIONS:
1. Disconnection of tubing increases the risk of infection.
   a. Aseptic technique is to be used for irrigating.
   b. Attempt to restore urine flow by inspecting the drainage system for obstructions, or by very gently "milking" the tubing to clear possible blockage, milk toward the bag.
   c. Irrigate only when the catheter is obstructed and as a last resort.
   d. Assess the possible cause of plugging: infection, inadequate fluid intake, alteration of pH of urine.
2. Irrigation can damage the bladder mucosa.
   a. Instill irrigating solution by gravity or with gentle pressure. A bulb syringe is preferable to a piston-type syringe.
   b. Use gravity drainage for return of irrigant.
   c. Use a very gentle "milking" motion on tubing if this method is used at all.
   d. Irrigant should be at room temperature. The Centers for Disease Control and Prevention (CDC) recommends that sterile saline and a sterile syringe be used.
   e. No air should be injected with solution.
   f. Never instill more than 30-50 mL at one time.
3. An order by the physician is required to irrigate the catheter and must include type of irrigating solution, amount of solution, time and frequency of irrigation.
4. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections.

EQUIPMENT:
Irrigation solution and sterile container
Asepto/Bulb syringe
Gauze pads
Irrigation solution
Antimicrobial solution (such as Betadine or alcohol swabs/pads)
Drape
Drainage tube protective sheath
Drainage basin
Gloves
Waterproof, absorbent underpad
Impervious trash bag
Sterile gloves

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Assemble equipment.
4. Pour sterile irrigant (100-200 mL) into solution sterile container.
5. Place patient in semi-reclining position with a waterproof, absorbent pad under buttocks and a drape over pubic area to avoid exposure.
6. Put on clean gloves.
7. Cleanse junction of catheter and drainage tube thoroughly with antimicrobial-soaked pad.
8. Carefully disconnect tubing from catheter, holding the catheter upright, cap the drainage tube with sterile protective sheath. Secure drainage tubing close to patient on the bed.
9. Draw up approximately 30-50 mL of irrigant in syringe and gently instill into the catheter.
10. Remove syringe, position catheter over drainage basin, allow draining by gravity, collecting irrigation return in basin. Note appearance and amount.
11. Repeat irrigation procedure until the debris is cleaned from lumen of catheter. [Note: If fluid fails to return, stop irrigation. An obstruction or air pocket may be present. Try gently rotating the catheter or turn the patient from side to side to clear the catheter.]
12. Cleanse the end of the catheter and the end of the tubing with antimicrobial solution after removing the protective cap.
13. Reconnect the catheter and tubing.
15. Discard any unused irrigation solution that was poured into the container.
16. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Type, amount of irrigant used.
   b. Color and characteristic of the returning fluid.
   c. Patient's response to procedure.
   d. Instructions given to patient/caregiver.
   e. Communication with physician.
PURPOSE:
To obtain a clean urine sample for culture and sensitivity.

CONSIDERATIONS:
1. The ileal urostomy should be catheterized using aseptic technique.
2. DO NOT take a urine sample from the bottom of the drainage bag. The sample from the bottom will not give you an accurate reading due to bacteria collecting at the bottom of the pouch.
3. Please make sure patient information for labeling specimens is correct and updated.

EQUIPMENT:
Clean gloves
Sterile 4x4 sponges
Towels
Urethral catheterization tray
#14 French red rubber catheter

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain the procedure to the patient.
3. Perform hand hygiene and put on clean gloves.
4. Remove ostomy pouch.
5. Clean the stoma site with clean water and 4x4 sponges.
6. Open the catheterization tray and don sterile gloves.
7. Squeeze lubricant into the bottom of the tray.
8. Be sure to force urine out before inserting catheter.
9. Lubricate the #14 French red rubber catheter and gently insert the catheter into the center of the stoma about 7 cm or 2 1/4 inches. Be sure to not touch the catheter to the periphery of the stoma.
10. If the catheter is met with resistance, do not force it into the stoma, but rotate the catheter until it will slide in.
11. Ask patient to change positions if urine will not flow into the catheter. The patient may have to turn to the right side, or cough, or both. If patient does have to reposition, make sure to hold the catheter in place.
12. Place the end of the catheter into sterile container to collect urine. Once enough has been collected, remove the catheter and cap the specimen container.
13. Reapply the ostomy pouch.
14. Make sure to note the specimen container with proper patient identification, and per agency collection information. Make sure to note that specimen was obtained through an ileal conduit, and any antibiotics the patient is taking.
15. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Procedure and observations.
   b. Disposition of specimen.
   c. Appearance of stoma and urine.
   d. Patient's response to procedure.
   e. Instructions given to patient/caregiver.
   f. Communicate with physician, when necessary.

REFERENCES:
PURPOSE:
To maintain a patient catheter providing drainage of urine from the kidney when flow of urine through a ureter is not possible or desirable and to prevent infection.

CONSIDERATIONS:
1. Maintaining a sterile system is of utmost importance in preventing serious consequences of kidney infection.
2. The catheter is either taped, sutured or a securement device is used to keep it (catheter) securely in place.
3. The catheter should not be kinked or plugged to assure continuous drainage. Bending or shaping in a "C" shape will provide some give and help the tube not to be pulled out. Prevent kinking or bending of the catheter by careful dressing of site or taping.
4. If the positioning, manipulation of tube, or irrigation does not remove an obstruction and allow flow of urine, notify physician immediately.
5. The catheter is never clamped unless otherwise ordered by a physician.
6. Removal of a nephrostomy catheter is be done by the physician. After removal, a 4x4 sterile gauze dressing or other appropriate dressing is placed over the catheter insertion site and changed daily or as needed.
7. If there remains too much drainage after removal of nephrostomy tube, a small urostomy appliance may be placed over this site until drainage is minimized.
8. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections.
9. Staff should emphasize to all patients the importance of contacting a clinician for assistance when there is an identified need to disconnect or reconnect devices.

EQUIPMENT:
- Sterile irrigation set if needed
- 10 mL sterile syringe
- Gauze pads
- Antimicrobial solution
- Drainage basin
- Gloves
- Sterile irrigation solution (normal saline or prescribed solution)
- Waterproof, absorbent underpad
- Impervious trash bag
- Sterile gauze dressing as appropriate
- Drainage bag
- Catheter leg straps (as necessary)
- Stabilizing device (if nephrostomy not sutured in place)
- Antiseptic wipes
- Adhesive remover pads
- Sterile water
- Sterile cotton applicators
- Transparent dressing (optional)
- Paper tape/cloth tape
- Gloves – sterile and clean

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Place patient in a position of comfort that allows observation and access to the nephrostomy catheter. Protect the area beneath the patient with a waterproof, absorbent underpad and cover the patient's lower body with a drape (towel, sheet) to prevent exposure.
4. General care to be performed as ordered.
   (Depending on the type of dressing used, it may not be needed to be done as often.)
   a. Adhere to Standard Precautions.
   b. Remove old dressing carefully. Care must be taken not to pull on the tube. Use adhesive remover if necessary.
   c. Anchor the catheter to skin with one hand while removing tape with the other hand to ensure catheter is not pulled out.
   d. If there is residual adhesive on the skin, it can be removed with adhesive remover pads. Clean adhesive remover thoroughly with normal saline.
   e. Cleanse around nephrostomy tube with antiseptic wipes. Cleanse thoroughly, beginning at the catheter site and moving outward. Repeat cleansing. Allow to thoroughly dry.
   [Note: Some of the new securement devices do not allow cleansing the site until changed. Check with the manufacturer or physician.]
   (See Urinary - Irrigation of Indwelling Foley Catheter.)
   f. Inspect catheter for kinks, check for leakage of urine or (bile only if it is a biliary tube) from catheter.
   g. Examine catheter exit site. Report signs of redness or infection to physician as needed.
   h. Place appropriate dressing over or around catheter and secure in place. A transparent dressing may be applied to provide a waterproof barrier.
5. For an occluded or plugged catheter, irrigate if ordered by physician:
   a. Most tubes are connected to a stop cock system. Be sure to turn the stop cock off to drainage bag (closed) when instilling solution and turn stop cock on to syringe to allow flow of urine into syringe or bag.
   b. Using sterile technique, gently irrigate catheter with 5 mL normal saline or ordered irrigation
solution a luer lock or luer tip syringe without
the needle, never forcing the irrigant. (See
Urinary - Irrigation of Indwelling Foley Catheter.)

c. Gently allow irrigant to flow back per gravity
drainage. Only aspirate with physician's order.
Never re-instill used irrigant into tube.

d. If unable to get a return of irrigant, assess
catheter for kinks; if none found, notify the
physician.

e. Discard any unused irrigating solution and
collected irrigation solution from drainage basin
in toilet.

f. Cleanse and dry drainage basin.

g. Instruct patient/caregivers regarding preparation
of sterile equipment and container, if disposable
equipment is not used.

6. Instruct patient to:

a. Apply catheter strap and use a leg bag to
prevent pulling on the catheter.

b. Use continuous gravity drainage bag at
nighttime.

7. Discard soiled supplies in appropriate containers.

AFTER CARE:

1. Document in patient's record:

a. Color and characteristics of urine, e.g.,
sediment or odor.

b. Urinary output.

c. Condition of catheter, patency of tube.

d. Any drainage from around catheter site. Note
color, amount, odor and consistency.

e. Condition of skin under tape. Note any blisters
and/or rash.

f. Interventions performed, e.g., dressing change,
irrigation.

g. Patient's response to procedure.

h. Instructions given to patient/caregiver.

2. Communicate with physician, when necessary.
PURPOSE:
To provide for urinary drainage through a suprapubic wound.

CONSIDERATIONS:
1. Suprapubic catheters may be changed as ordered by the physician, provided there are no sutures in place and tract is well established (about 4 weeks). [Note: The first change should be performed by the physician or special training if a Pezzer or Malecot catheter is in place as it requires the use of a stylet for removal.]
2. Insertion site will not remain open for long, so preparation for insertion of a new catheter should be made before removal of the catheter that is in place.
3. Advantages of suprapubic catheter over urethral catheter:
   a. Lower rate of urinary tract infections (UTIs).
   b. Ease in evaluating patient's ability to void normally.
   c. Increased comfort for the patient.
4. Potential problems associated with suprapubic catheters:
   a. Catheter dislodgement.
   b. Obstruction or failed insertion.
   c. UTI.
   d. Bladder spasms.
   e. Leakage around the catheter and difficult removal.
   f. Bladder stone formation is possible.
5. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections.

EQUIPMENT:
- Catheter insertion tray
- Sterile gloves
- Prepping balls
- Antimicrobial solution
- Waterproof, absorbent underpad
- Fenestrated drape
- Sterile lubricating jelly
- Plastic forceps
- Graduated basin
- Prefilled 10 mL syringe of sterile water
- Catheter with balloon
- Normal saline, sterile water or prescribed solution
- 4x4 gauzes
- 10 mL syringe
- Device, which secures (tape, statlock, tube holder device)
- Skin barrier (optional)
- Drainage bag/leg bag
- Catheter strap (optional)
- Gloves
- Impervious bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Assemble equipment. It is important to have all supplies ready before removing catheter.
5. Remove present dressing (as appropriate), assess skin and note any drainage or odor. [Note: Not all suprapubic catheters use a dressing over the site after it is healed.]
6. Gently pull catheter to seat the balloon on the anterior bladder wall. Observe the angle of catheter as it leaves the abdomen and the length of catheter protruding from the abdomen. A non-toxic marker or tape may be used on old catheter before removal as a guide to help ensure that the new catheter and the balloon are in the bladder before inflating.
7. Cleanse around cystostomy opening (subrapubic site opening) with 4x4 gauzes using normal saline, wound cleanser or a mild soap and water or any prescribed solutions.
8. Connect the 10 mL syringe (Luer-lock or Luer tip) to balloon port. (Use same procedure in Removal of a Foley Catheter.)
9. to remove water from the balloon by gravity return; DO NOT aspirate.
10. Remove catheter by pulling, firmly if necessary, the catheter from the subrapubic site. [Note: It is not uncommon for it to be difficult to remove these catheters. To aid in the removal, insert lubricating jelly around the opening and catheter, rotate the catheter 360 degree before removal and have patient take a deep breath to enhance relaxation.]
11. Prepare catheter tray as for sterile catheterization. Remove gloves. Don sterile gloves. [Note: This must be done quickly as a delay of only a few minutes may result in a partial closure of the tract.]
12. Cleanse suprapubic opening with circular motion, using at least three prepping balls soaked with antimicrobial cleansing solution.
13. Lubricate the tip at least to the depth of insertion plus 1-2 inches more and insert catheter in tract to depth determined prior to insertion, pointing toward patient's spine and angling toward symphysis pubis.
14. Inflate balloon according to manufacture recommendations, unless otherwise ordered. [Note: As a rule, a 5 mL balloon will be filled with 10 mL of sterile water to ensure symmetry of balloon to prevent leaking and dislodgement.]
15. Connect catheter to tubing from drainage bag or leg bag.
16. Apply dressing to skin around catheter, if indicated. It is not recommended that dressings or ointments be used after tract has healed because they are unnecessary and can lead to bacterial colonization and infection. Remove secretions from around insertion site during routine care of showers using plain water. Skin barriers can be applied to the area to protect the area from secretions.

17. Use tape or other device to secure catheter to the abdomen. Be sure that the balloon is gently against the anterior wall of bladder.

18. If applicable, secure tubing to patient's thigh with catheter strap.


20. Discard soiled supplies in appropriate containers.

AFTER CARE:

1. Document in patient's record:
   a. Procedure and observations.
   b. Catheter size and balloon size and amount of water added to balloon.
   c. Patient's response to procedure.
   d. Instructions given to patient/caregiver.
   e. Communication with physician, as indicated.
PurPOSE:
To remove a Foley catheter from the urinary bladder.

CONSIDERATIONS:
1. The Foley catheter is removed without trauma when the balloon at the catheter tip is completely deflated.
2. The balloon port should not be clipped off to deflate the balloon.
3. A syringe should be used to remove water from the balloon using gravity return whenever possible and ascertain that all of the water has been removed.

EQUIPMENT:
- 10 mL syringe, Luer-lock or Luer tip
- Waterproof, absorbent underpad
- Gloves
- Impervious trash bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Place the patient in semi-reclining position with waterproof, absorbent pad under the buttocks.
4. Loosen the plunger of the syringe by moving it up and down in the syringe barrel.
5. Withdraw the plunger of the syringe 0.5 mL from the end of the syringe.
6. Attach the syringe to the valve of the catheter balloon.
   [Note: Luer-lock syringes insert and twist into valve, whereas Luer tip syringes seat firmly into the valve but do not twist or force.]
7. Allow water to come back by gravity from the balloon. It may take up to 30 seconds for the balloon to deflate.
   [Note: DO NOT aspirate on the plunger as this may damage the valve and not allow full deflation of the balloon. Also, DO NOT cut off balloon port.]
8. If water will not return gently, instill 3-5 mL of sterile water into the balloon port, this will generally clear any debris lying against the valve and/or open a stuck valve.
9. After the fluid has been injected, the empty syringe should be reattached to the port with the plunger positioned 0.5 mL from the end of the syringe.
   [Note: It may take up to 30 minutes for the fluid to return.]
10. If the above maneuvers do not allow the balloon to empty, then the balloon port valve can be cut off. If the problem was a defective valve, the water will run out and the balloon will deflate.
11. If these measures are ineffective and the balloon is still inflated, the physician should be called.
12. After the balloon is empty, have patient take a deep breath to enhance relaxation. With an even pressure, gently pull out the catheter. If the catheter resists removal, the physician should be called.
13. Inspect the balloon area of the catheter to assure it is intact and no part has been left in bladder.
14. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient's record:
   a. Procedure and observations.
   b. Time catheter removed and amount of urine in collection bag.
   c. Patient's response to procedure.
   d. Instructions given to patient/caregiver.
   e. Communication with physician, when necessary.
Urinary – Sterile Urine Specimen Collection from a Foley Catheter

Strength of Evidence Level: 3

PURPOSE:
To obtain a urine specimen from a patient with a Foley catheter for laboratory analysis.

CONSIDERATIONS:
1. The only way to get an uncontaminated sterile urine specimen from a urinary catheter is to remove old catheter and insert new catheter. This is the recommended method for obtaining a culture and sensitivity.
2. Some catheters are not re-sealable and you risk introducing bacteria into the system if punctured to obtain a specimen.
3. It is preferable to obtain early morning specimen due to concentration of sediment.
4. Keep urine specimen refrigerated to prevent chemical changes, if unable to transport specimen to the lab immediately.
5. The urine should be withdrawn from a port on the tubing if available. If not available, the catheter may be punctured with syringe and needle only if the catheter is rubber and is self-sealing.
6. Silastic, silicone or plastic catheters are not self-sealing and should not be punctured with a needle.

EQUIPMENT:
Sterile syringe 30 mL
Sterile needle 23- or 25-gauge
Foley catheter
Antimicrobial swabs
Sterile specimen container
Catheter clamp (optional)
Gloves
Impervious trash bag

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Assemble equipment and attach needle to syringe.
4. Clamp off drainage tubing distal to, or just below, the connection junction of the catheter and drainage bag tubing for 20-30 minutes. This will provide an accumulation of urine from which a specimen can be drawn.
5. Thoroughly cleanse the Foley catheter at port, if available, or close to point of connection to drainage tubing with antimicrobial swabs.
6. Insert the needle gently into Foley catheter (if the catheter is a self-sealing type) at a 45 degree angle, or if Luer-lock connection, twist on a sterile syringe to the port and slowly withdraw 20-30 mL of urine.
7. Remove needle from Foley catheter and push urine into sterile specimen container. Cover container.
8. Swab needle entrance site with antimicrobial swab.
9. If clamp is used, it is IMPERATIVE that the clamp be removed.
10. Write patient's name, date and time of collection on label; place on container.
11. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Deliver specimen to designated laboratory immediately or instruct caregiver to deliver specimen.
2. Instruct laboratory personnel regarding specimen.
3. Document in patient's record:
   a. Procedure and observations.
   b. Laboratory where specimen is taken.
   c. Patient's response to procedure.
   d. Instructions given to patient/caregiver.
   e. Communication with physician when necessary.
PURPOSE:
To maintain access to the intraperitoneal cavity via an indwelling catheter.

CONSIDERATIONS:
1. The Tenckhoff catheter is inserted into the abdominal cavity for purposes of chemotherapy or peritoneal dialysis or management of ascites.
2. The patient or a family member is usually taught to perform the daily care.

EQUIPMENT:
Gloves (2 pairs)
Impervious trash bag
3 antimicrobial swabs
Sterile 4×4 gauze pads
Sterile applicators
Hibiclens®
Sterile water
Hydrogen peroxide
Paper tape

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure to patient.
3. Don gloves and remove old dressing from exit site and discard in appropriate container.
4. Observe the exit site for signs of infection, including redness, swelling or drainage. Observe the catheter for signs of cuff erosion.
5. Palpate at the site of insertion, the cuff site and the implanted tunnel site to determine signs of infection such as tenderness or pain. Remove gloves.
6. Don fresh gloves and gently scrub area around catheter exit site with Hibiclens® and water for 2 minutes.
7. Rinse with water.
8. Use hydrogen peroxide and applicator to remove any crust not removed by Hibiclens® wash. Dry exit site and catheter with 4×4 gauze pads.
9. In a semi-circular motion from inside out, wipe around one half of the exit site with one antimicrobial swab. Use a second swab for the other half. Use a third swab from the exit site up the “tail” of the catheter, including the catheter cup.
10. Fold the two gauze pads in half and position one at each side of the catheter. Tape securely.
11. Cover catheter and gauze pads with a 4×4 gauze pad and tape in place using picture frame technique.
12. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient’s record:
   a. Appearance of catheter, catheter site, patient’s temperature.
   [Note: A temperature of 101 degrees Fahrenheit is reported to the physician.]
   b. Patient’s response to procedure.
   c. Instructions given to patient/caregiver.
PURPOSE:
To prevent bladder infection.

CONSIDERATIONS:
1. Maintain the closed drainage system. If leg bag is to be used during the day to maintain a closed system, it is recommended that on insertion under sterile conditions the extension tubing and leg bag be connected and never separated. During the night, the bedside drainage bag will be attached at the drainage port of leg bag. This is the only place there would be a separation of the system. If separation of the catheter must happen, it should be done using aseptic technique.
2. Avoid raising drainage bag above bladder level to prevent reflux of urine.
3. Tubing of drainage bag should be maintained in a straight line without kinks or loops. Remember that tubing should not have loops of tubing that fall below the drainage bag.
4. Bedside drainage bags should be kept off of the floor. Use of a plastic trash can or bin can be used to allow bag to be positioned correctly.
5. Leg bags or bedside drainage bags should be emptied when 1/2-2/3 full to avoid traction on the catheter.
6. When emptying the drainage bag or leg bag, DO NOT allow the drainage spout to contact the collection container or floor. Ensure that each patient has an individual collection container and that they are cleaned and disinfected after each use.
7. Encourage patients whose fluid intake is not restricted to drink 2000-2500 mL of fluid daily. Water is the recommended fluid. Cranberry juice may have a beneficial affect on the urine. Limit use of fluids with caffeinated and/or carbonated products (diet and regular) as they promote alkaline urine.
8. Acidification of urine is also recommended to inhibit bacterial growth. (Sometimes patients are instructed to take Vitamin C.)
9. Prevent urethral lumen trauma or bladder wall trauma by avoiding any pulling on the catheter and drainage and leg bags. Disconnect collection bag and tubing from linens, frames, chairs, etc., when transferring patient and also use catheter leg straps or tape if bedbound.
10. Routine perineal care is recommended, catheter manipulation should be avoided. It is recommended that the area be cleansed gently to minimize manipulation of the catheter. Use of providone-iodine and antibacterial ointments are not recommended.
11. Per Joint Commission recommendations, all tubes and catheters should be labeled to prevent the possibility of tubing misconnections.

EQUIPMENT:
Gloves
Basin of water soap and water
Towels/wash clothes
Tape (optional)
Catheter strap/securement device

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain procedure and purpose to patient.
3. Inspect the catheter for any problems. Inspect the urinary drainage for mucous shreds, clots, sediment and turbidity.
4. Inspect catheter where it enters the meatus for encrusted material and suppurative drainage.
5. Remove any tape or catheter strap securing catheter in place. Inspect area for signs of adhesive burns, redness, tenderness or blisters.
6. Cleaning the perineum:
   a. Cleanse perineal area with warm water and soap, rinse and pat dry.
      (1) For female patient, separate labia and gently wash around urethral opening. Remember to wash from front to back.
      (2) For male patient, retract foreskin to wash, then return foreskin over head of penis.
   b. Secure catheter with catheter strap or retape catheter. Provide enough slack before securing the catheter to prevent tension on the tubing that could injure the urethral lumen or bladder wall. It is recommended that the catheter be secured to the thigh of women and to the upper thigh or lower abdomen on men.
   c. Discard soiled supplies in appropriate containers.
7. Emptying the drainage bag:
   a. Empty the bag at least every 8-12 hours or when the bag is 1/2–2/3 full.
   b. Remove the drainage spout from the protective sleeve of the drainage bag. Be sure not to touch the tip of the spout or allow contact with the inside of collection container or floor.
   c. Drain the urine into a toilet (seat up) or other clean container after unclamping the drainage spout.
   d. Reclamp the drainage spout.
   e. Replace the end of the drainage spout into the protective sleeve. Again, avoid the tip of drainage spout being touched. If it is, cleanse with antimicrobial wipe.
   f. Clean and disinfect the collection container, if used.
8. Changing from one drainage system to another (bedside⇒leg ⇒bedside):
   a. Empty the drainage bag. (See Step 7 above.)
   b. Clamp the catheter.
c. Clean connection between catheter and drainage system with an antimicrobial pad.
d. Remove the end of the drainage tube from the catheter. Be sure not to touch the tips of the catheter or the drainage tube.
e. Attach the catheter to the drainage tube of the desired drainage bag, ensuring that the emptying (drainage) spout on the bag is clamped. Again, be sure not to touch the tips of the catheter or drainage tube.
e. Unclamp the catheter.

9. Cleaning the drainage bag: *(See Decontamination of Vinyl Urinary Drainage Bag.)*

**AFTER CARE:**

1. Document in patient's record:
   a. Procedure and observations.
   b. Urinary output and appearance.
   c. Patient's response to procedure.
   d. Instructions to patient/caregiver.
   e. Communication with physician when necessary.

**RESOURCES:**

<table>
<thead>
<tr>
<th>Green Zone = “All Clear”</th>
<th>Green Zone Means:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Urine is clear yellow with out any odor</td>
<td></td>
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<tr>
<td>- There is at least 1/4 cup of urine every hour</td>
<td></td>
</tr>
<tr>
<td>- There is no pain, itching, burning or drainage near or at the Foley exit site</td>
<td></td>
</tr>
<tr>
<td>- Temperature is 98.6° or less by mouth</td>
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</tr>
<tr>
<td>- Continue with good personal hygiene</td>
<td></td>
</tr>
<tr>
<td>- Clean and / or change the Foley bags and tubing as your Home Care Nurse instructs</td>
<td></td>
</tr>
<tr>
<td>- Keep Home Care Nurse appointments</td>
<td></td>
</tr>
<tr>
<td>- Keep physician appointments</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Yellow Zone = “Caution”</th>
<th>Yellow Zone Means:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The Foley has fallen out</td>
<td></td>
</tr>
<tr>
<td>- Urine is cloudy and / or has a slight odor</td>
<td></td>
</tr>
<tr>
<td>- Increased pain, itching, burning and / or drainage near or at the Foley exit site</td>
<td></td>
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<tr>
<td>- A feeling of bladder fullness and / or little or no urine in the drainage bag</td>
<td></td>
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<tr>
<td>- Urine is leaking, bed and / or clothes are wet</td>
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<tr>
<td>- The color of the urine is dark and looks like tea</td>
<td></td>
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<tr>
<td>- Temperature is 100.5° by mouth</td>
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<tr>
<td>- Your symptoms indicate that you may have an urinary tract infection</td>
<td></td>
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<tr>
<td>- Call your Home Health Nurse and / or your physician</td>
<td></td>
</tr>
<tr>
<td><strong>Agency Name</strong>: 24 hour phone number is:</td>
<td></td>
</tr>
<tr>
<td><strong>Agency Phone Number</strong>:</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Red Zone = “Medical Alert”</th>
<th>Red Zone Means:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Urine is very cloudy and / or has a strong foul odor</td>
<td></td>
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<tr>
<td>- There is constant pain, itching, burning and / or drainage near the Foley exit site</td>
<td></td>
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<tr>
<td>- There is pain and / or a feeling of bladder fullness in the lower part of your stomach</td>
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<tr>
<td>- There is no urine in the bag</td>
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<tr>
<td>- There is blood in your urine</td>
<td></td>
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<tr>
<td>- Temperature is above 100.5 ° by mouth</td>
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<tr>
<td>- This indicates that you need to be evaluated by a physician right away</td>
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<tr>
<td><strong>Primary MD</strong>: ____________________________</td>
<td></td>
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<tr>
<td><strong>Phone Number</strong>: ____________________________</td>
<td></td>
</tr>
<tr>
<td>(Please notify your Home Care Nurse if you contact or go see your MD)</td>
<td></td>
</tr>
</tbody>
</table>

**Agency Name** (ZONE tool utilized by HomePlus Elkins, WV)

Self Management Plan for Foley Catheters

Name:________________________________________________      Date:________________________
REFERENCES


