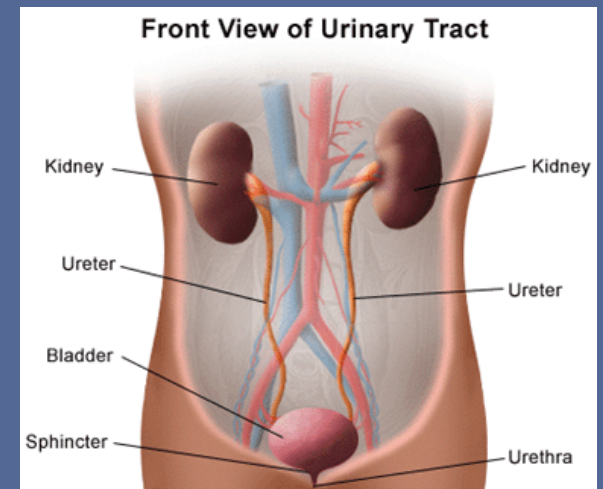


CAUTI Initiative: Nurse Driven Protocol for Assessment and Removal of Unnecessary Urinary Catheters

Charlene Earnhardt, RN, MSN, CNS
Clinical Nurses Specialist 7ICU, Cardiothoracic

Elise Martin, MD
Infectious Diseases Fellow



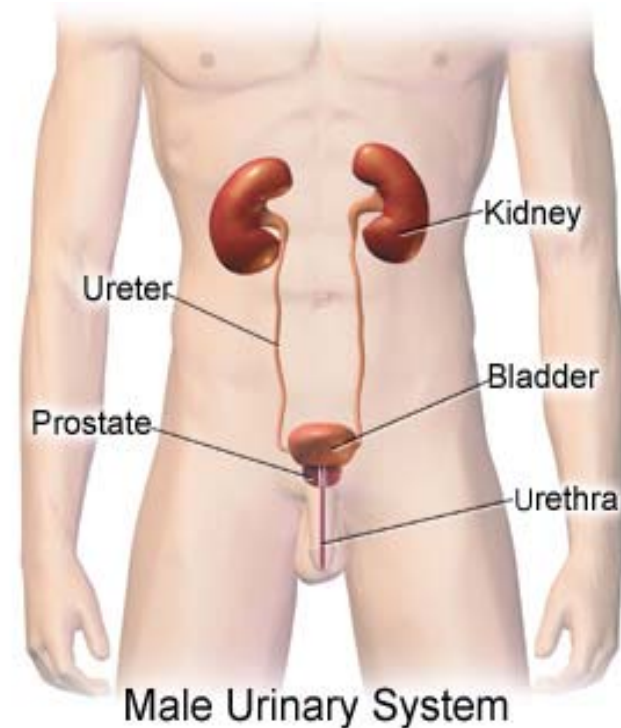
UTI : Etiology and Patient Risks

About 95% of UTIs occur when bacteria **ascend the urethra to the bladder**

Up to 69% of CAUTI may be **PREVENTABLE**

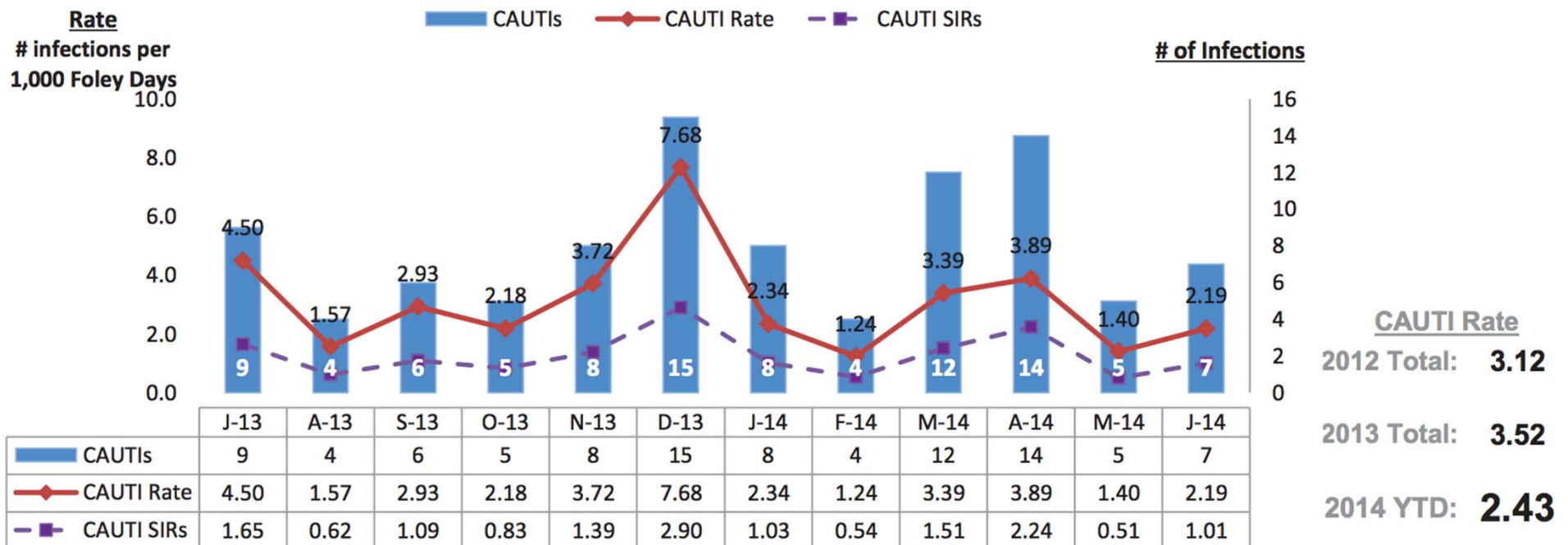
CAUTI is the leading cause of secondary hospital-acquired blood stream infections

The risk of a UTI increases **5%** each day the urinary catheter remains in place



CAUTI Rates at RR-UCLA

Hospital Total - All Units

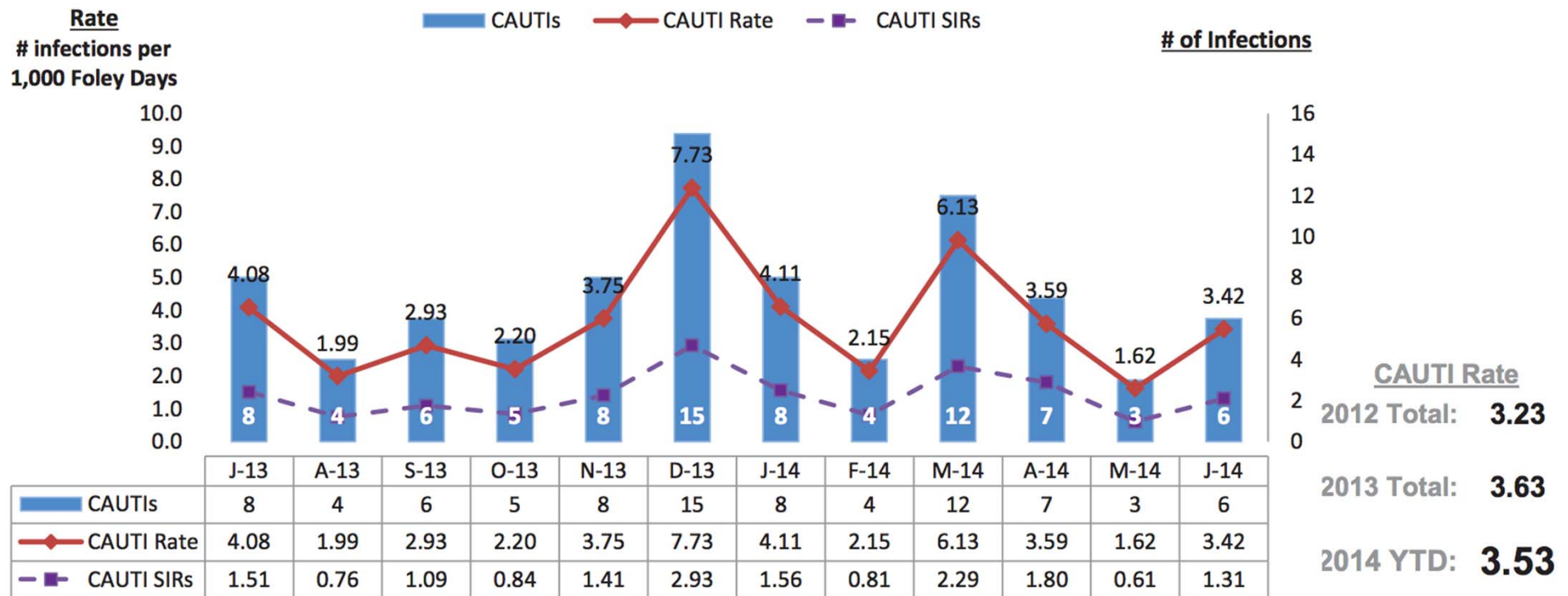


Data Source: NHSN
NHSN SIRS ratio: # infections / # of expected infections

Revised by Infection Prevention: 7/18/2014

CAUTI Rates at RR-UCLA

Intensive Care Units

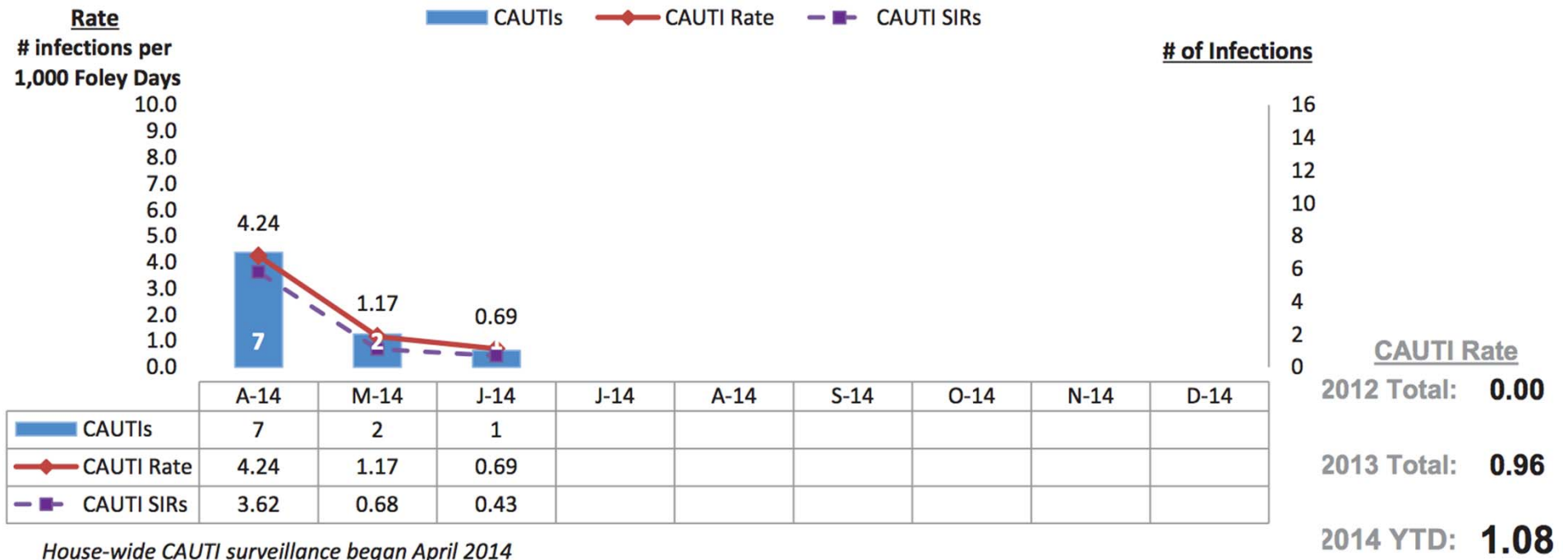


Data Source: NHSN
NHSN SIRS ratio: # infections / # of expected infections

Revised by Infection Prevention: 7/18/2014

CAUTI Rates at RR-UCLA

Acute Care Units



Data Source: NHSN
NHSN SIRS ratio: # infections / # of expected infections

Revised by Infection Prevention: 7/18/2014

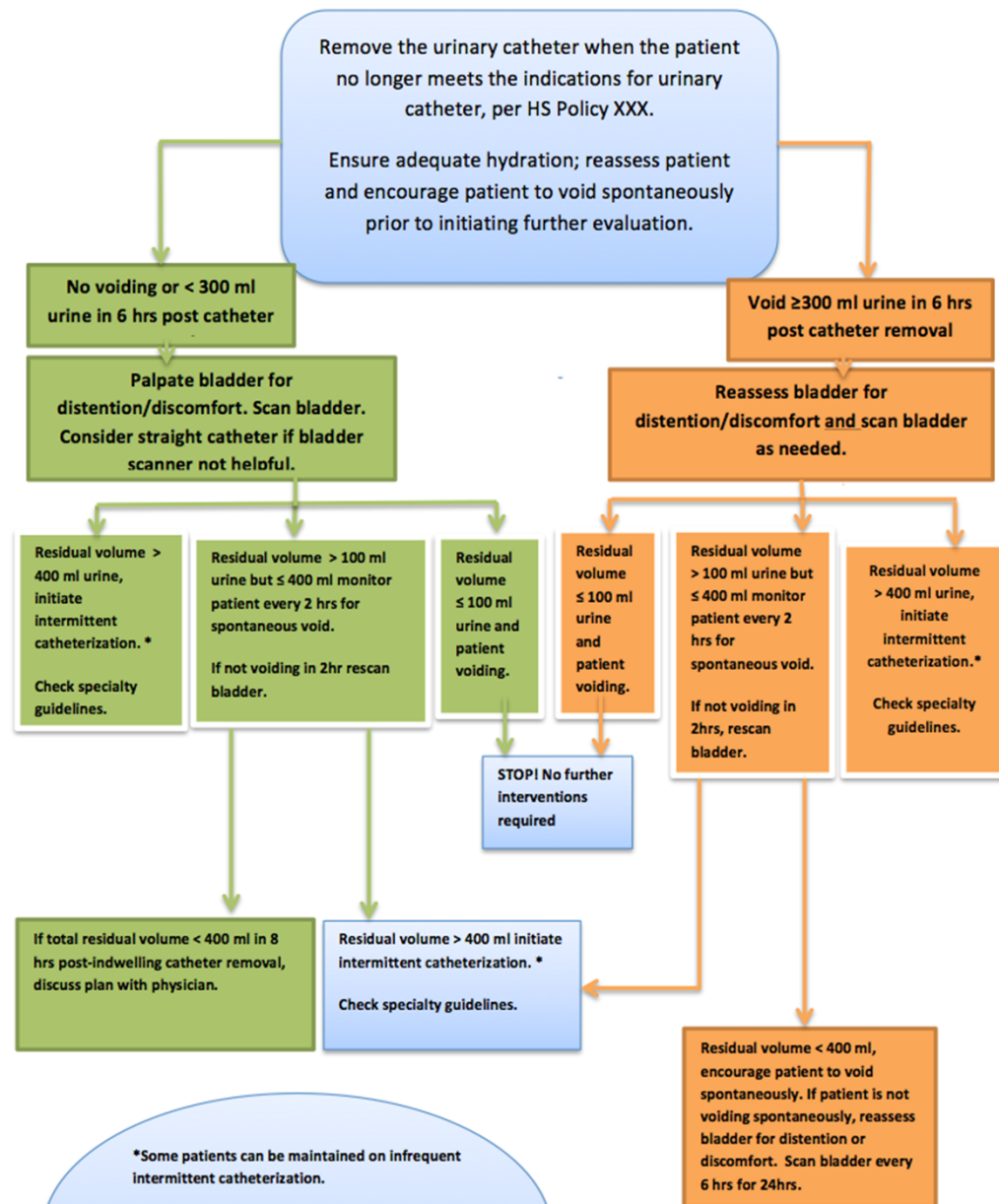
Nurse Driven Protocol for Assessment and Removal of Unnecessary Urinary Catheters

- When physician orders a catheter in care connect → default will enter patient in nurse driving protocol for removal
 - Physician may opt out
- Daily nursing assessment of need for urinary catheter
- Protocol allows for removal without additional physician order if the indications for urinary catheter are no longer present
- Protocol will assist with:
 - SCIP compliance
 - Allows for earlier removal
 - Frees up physician time
 - Decreases healthcare associated infections

Nurse Driven Foley Catheter Removal Protocol

- **Indications for an indwelling urinary catheter:**
 - Acute urinary **retention or obstruction**
 - **Perioperative use** for selected surgical procedures
 - Accurate measurement of urinary output in **unstable patients** (ICU patients)
 - To assist in healing of **stage 3 or 4 open sacral or perineal** patients
 - Advanced **terminal illness and comfort care**
- **If the indication is no longer present, the catheter can be removed without an additional order**

How the Protocol Works



*Some patients can be maintained on infrequent intermittent catheterization.

However, if patient is requiring frequent intermittent catheterization, contact physician &, reassess indications for indwelling urinary catheter.

Step 1 – Remove the catheter if indications are no longer met

Remove the urinary catheter when the patient no longer meets the indications for urinary catheter, per HS Policy 174.

Ensure adequate hydration; reassess patient and encourage patient to void spontaneously prior to initiating further evaluation.

- **Indications:**
- Acute urinary retention or obstruction
- Perioperative use
- Hourly I/O for unstable patients
- Stage 3 or 4 open sacral or perineal patients
- Comfort care

Step 2 –

Ensure the patient can void after removal of the catheter

Step 3

Depends on patients ability to void within 6 hours



No voiding or < 300 ml
urine in 6 hrs post catheter

Palpate bladder for
distention/discomfort. Scan bladder.
Consider straight catheter if bladder
scanner not helpful.

Residual volume >
400 ml urine,
initiate
intermittent
catheterization. *

Check specialty
guidelines.

Residual volume > 100 ml
urine but ≤ 400 ml monitor
patient every 2 hrs for
spontaneous void.

If not voiding in 2hr rescan
bladder.

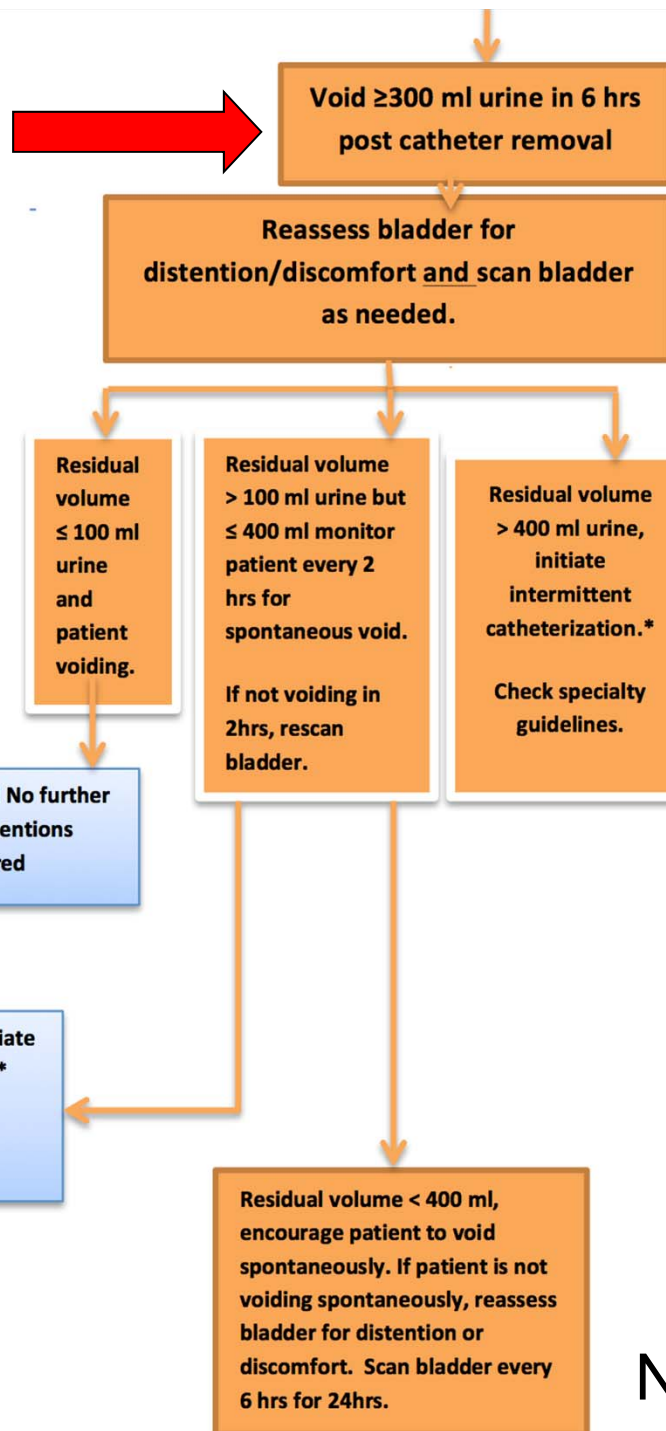
Residual
volume
≤ 100 ml
urine and
patient
voiding.

STOP! No further
interventions
required

If total residual volume < 400 ml in 8
hrs post-indwelling catheter removal,
discuss plan with physician.

Residual volume > 400 ml initiate
intermittent catheterization. *

Check specialty guidelines.



***Some patients can be maintained on infrequent intermittent catheterization.**

However, if patient is requiring frequent intermittent catheterization, contact physician &, reassess indications for indwelling urinary catheter.

Nursing's Role: CAUTI

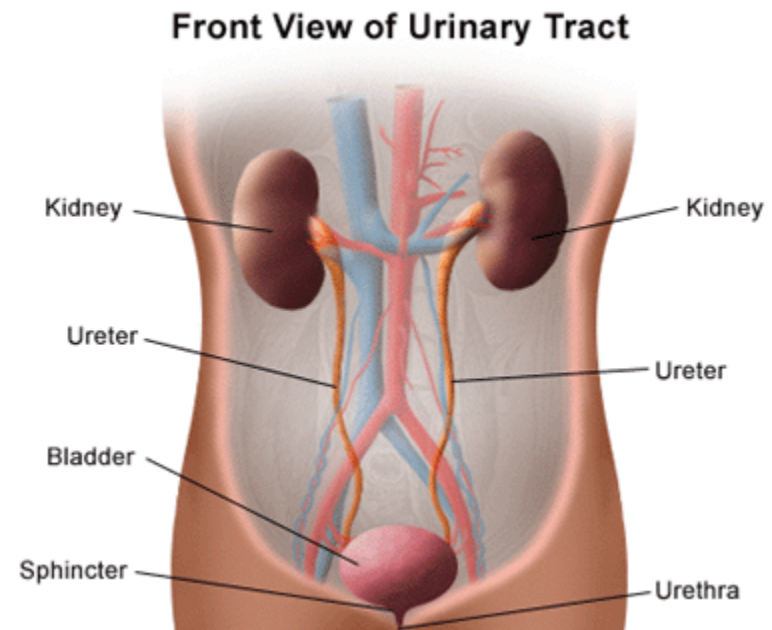
Consider alternatives to indwelling urethral catheters, such as:

- **Intermittent catheterization**
 - Spinal cord injury
 - Bladder emptying dysfunction
- **Condom Catheter** for male patients
- **Female Urinals**
- Use portable ultrasound **bladder scanners** to detect residual urine amounts

Nursing's Role: CAUTI (cont.)

Proper Insertion

- **Hand hygiene** before and after contact with catheter or site
- Use **aseptic insertion technique** with appropriate hand hygiene and gloves
- Allow **only trained** healthcare providers to insert catheter
- Use **smallest bore possible** to achieve drainage
- Properly **secure catheters** after insertion to prevent movement and urethral traction, do not attach to movable parts of the bed



Nursing's Role: CAUTI (cont.)

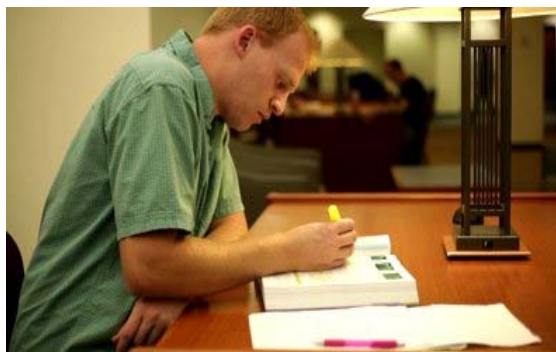
Proper Maintenance

- Use **standard precautions and hand hygiene** when handling catheter or drainage system.
 - Meatal care with soap and water every shift and PRN
 - Start from meatal area outward towards catheter
 - Perineal care after each bowel movement
- **Maintain unobstructed urinary flow**
 - Check for kinks and dependent loops in catheter tubing
 - Maintain drainage bag below level of bladder at all times
- **Maintain a sterile closed drainage system**
- **Do not change** indwelling catheters or urinary drainage bags at arbitrary fixed intervals, change based on clinical indicators: infection, obstruction or compromise of closed system

Nursing's Role: CAUTI (cont.)

Proper Maintenance and Removal

- Use indwelling catheters **only when medically necessary**
- **Document indication** for urinary catheter on each day of use
- **Reassess the need** for continue use of an indwelling catheter ever shift, and **if the patient does not meet criterial to maintain the urinary catheter, remove catheter promptly** according to the Nurse-Driven Protocol for Assessment and Removal of Unnecessary Urethral Urinary Catheters (see protocol - ASSESSMENT AND REMOVAL OF UNNECESSARY URINARY CATHETERS NUR- HS 174)



BLADDER BUNDLE

- **A- Aseptic insertion and proper maintenance is paramount.**
- **B- Bladder ultrasound may avoid indwelling catheterization.**
- **C- Condom or intermittent catheterization in appropriate patients.**
- **D- Do not use the indwelling catheter unless you must!**
- **E- Early removal of the catheter using reminders or stop orders appears warranted**

For further information please see:

- The [Society of Urological Nurses and Associates \(SUNA\)](#) clinical practice guideline, "Care of the Patient with an Indwelling Catheter".
- [Association for Professionals in Infection Control and Epidemiology](#)

How Can You Help?

- **Raise awareness in your unit**
- **Post information about the policy in the bathrooms and on your huddle board**
- **Share the information over an email to your unit**
- **Announce the new protocol on a day that you are working to everyone in the huddle (both 7am and 7pm if possible)**
- **Communicate with your CNS if you find opportunities for ongoing improvement**

What's next...



**Take out the foley and
pass the guacamole!!!**

