Reducing Urinary Tract Infections in Nursing Homes

UTI reduction is possible
Concepts

- UTIs are the most common bacterial infection in long-term care facilities.
- Diagnosis of UTI is complicated.
- Up to 80% of older women have bacteria in urine but are asymptomatic for UTI.
- Antibiotics may be prescribed when not needed, which contributes to antibiotic resistant organisms.

This communication does not constitute medical advice or care and is no way intended to substitute for clinical judgement in individual cases. Always talk your provider about any health questions or concerns.

Information presented in this deck is general education and does not replace your facility’s protocols, policies or procedures, nor does it replace federal or state mandates or guidelines. Participants should follow their facilities’ respective protocols, policy and procedures and comply with federal and state mandates and guidelines at all times.
Diagnosis of UTI is complicated

- Residents may not be able to communicate symptoms well
- Delirium from a UTI may be attributed to dementia
- E. coli is the most common organism causing UTI
- Other gastrointestinal organisms can cause UTI
- Immune compromise can cause a UTI from Candida, a yeast type fungi
- Bacteria in the urine does not necessarily need to be treated with antibiotics
Risk factors for UTI

- Age
- History of UTI
- Diabetes and other comorbidities
- Immune compromise
- Cognitive factors
- Dehydration
- Impaired mobility
- Infrequent toileting
- Incontinence
- Poor perineal hygiene
- Inadequate or no handwashing
Risk factors for UTI in Women

• Short urethra
• Proximity of urethra to rectum
• Postmenopausal
  – Vaginal dryness
• Pelvic Organ Prolapse

Risk factors for UTI in Men

• Prostate enlargement (benign or cancer related)
• External catheters
Risk factors for CAUTI (Catheter Associated UTI)

- Indwelling catheters tend to be used for longer periods of time in nursing homes than other settings
- Indwelling catheter use can lead to infection including sepsis
- **CAUTI risk increases if:**
  - Improper technique when performing catheter care or emptying the drainage bag
  - Failing to observe and remove kinks in catheters
  - Allowing drainage bag to be on the floor
  - Not emptying drainage bag timely
Symptoms of UTI

- Frequent urination
- Pain when urinating
- Sudden urge to urinate
- Odorous urine
- Cloudy or red tinged urine

Other indications of UTI

- Delirium
- Fever greater than 100F (38.0C)
- Chills
- Abdominal, Flank or Back pain
- Nausea or vomiting
- Weakness
Use Criteria to Determine CAUTI or UTI Reportable Events

- Fever; Temp. >100°F or 38.0°C
- Pain or other symptoms of UTI
- Positive Urine Culture with organism identified
- Diagnosis of UTI
- Treatment with an antibiotic
- Documentation in Medical Record
Follow Your Facility’s and Other Required CAUTI or UTI Reportable Event Protocols

- **Federal**: CMS- Minimum Data Set for Medicare and Medicaid residents and other required reporting such as CASPER
- **State**: NM DOH Annual Survey - Health Inspection for compliance with Federal standards
- **Facility**: Infection Tracking Logs
- **Other**: CDC NHSN National Healthcare Safety Network surveillance
Reporting CAUTI or UTI

• The CMS Five-Star Quality Rating System includes key quality measures which are used to determine the STAR rating.

• Quality measures include:
  • UTI
  • Indwelling catheter use
  • The rating of nursing homes can be viewed on the Nursing Home Compare website:
    • https://www.medicare.gov
Reducing UTIs

- Provide timed toileting to decrease episodes of incontinence.
- Support perineal hygiene.
- Teach residents to wipe front to back.
- If resident is unable, assist, cleaning front to back.
- Assess dietary triggers for incontinence such as dairy or spices.
- Encourage hydration.
- Consider evaluation by PT or OT.
- Improved mobility through exercise can help prevent falls and incontinent episodes.
- Walking, squats and Kegels are exercises that can strengthen the legs and pelvic floor.
An extended care team approach may improve resident quality of life, meet cultural or spiritual needs and improve well-being.

- Behavioral Health for support.
- Dietitian for poor intake or incontinence triggers such as dairy or spices.
- Pharmacist for antibiotic stewardship or other medication issues.
- Speech Therapist for cognition.
- Therapy pets to lessen loneliness.
**Hand Hygiene is a Best Practice**

- Perform hand hygiene after giving personal care or handling soiled items.
- Dispose of used gloves.
- Hand wash with soap for 20 seconds, rinse and dry hands.
- May use 60% alcohol-based hand cleaner.
- Assist residents to hand wash after toileting or if resident touches secretions or body fluids.
- **Important** - Must hand wash with soap and water if C. difficile or Norovirus.
Management and Empowering a Culture of Care and Quality

- What is the culture at your facility?
- Evaluate for adequate staff to address resident needs and supplies to keep staff and residents safe.
- Review infection control practices.
- Ensure tracking and reporting of CAUTI and UTI events.
- Provide training that supports UTI and CAUTI reduction practices.
- Show that you value residents and all staff, especially those providing direct resident care.
- Be willing to make changes.
CNAs, Nurses, Housekeeping, Dietary, Therapists, Medical and other staff Empowerment of a Culture of Caring and Quality

- What is your impression of the nursing home where you work?
- How do you influence this?
- Is there adequate staff to address resident needs and supplies to keep you and the residents safe?
- What role do you have in preventing UTI.
- Be the positive influence.
References

- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3573848/
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5449832/
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3878051/
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7357682/
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6502981/
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5557395/
References continued

- https://medlineplus.gov/urinarytractinfections.html
- https://www.cdc.gov/handwashing/when-how-handwashing.html
- https://www.niddk.nih.gov/health-information/urologic-diseases/urinary-tract-how-it-works
- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5557395/
- https://www.cdc.gov/longtermcare/training.html

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