



# Urinary Tract Infections and the Home Care Setting

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# Collaborative Healthcare-Associated Infection Network (CHAIN)

- Focus on developing effective approaches for reducing and preventing healthcare-associated infections in Minnesota
- Survey results from previous Home Care Matters call:
  - Please choose 5 topics related to infections that are acquired in the process of providing home care services that are of most interest to you in no particular order.” (N=195)
    - **Top 3 Responses: Urinary tract infections (181, 92.8%), Multi-drug resistant organisms (149, 76.4%), and Clostridium difficile (147, 75.4%),**
- More Resources can be found at the CHAIN website: [www.mnreducinghais.org](http://www.mnreducinghais.org)

# Overview of today's presentation

- Review Research on UTIs in Home Care
- Discuss Unique Challenges in Home Care Setting
- Share ideas and tools to improve management of UTIs in Home Care

# What is important to consider about UTIs?

- Asymptomatic bacteriuria (ASB) is very common especially among in older adults
  - 25% of individuals in study with persistent ASB had been treated with antibiotics suggesting they continued to be colonized (Rodhe et al, 2008)
- 2014 study in Finland reviewed 6,877 home care patient records (Parn, Makela, Lytikainen, 2016)
  - Within the past 30 days 4.5% of home care patients had a UTI and 5.7% were antimicrobial treatment for a UTI (Parn, Makela, Lytikainen, 2016)
- 2012 French point prevalence of 5,954 home care patients<sup>2</sup> found the most common HAI was urinary tract infection (26.6% of all infections that occurred) (Miliani et al., 2015)

# The unique challenges to addressing UTIs in Home Care

- Few external resources
- Most patient care is provided by untrained personnel
- Continuity of Care issues
- Environmental Issues
- Many more...

# What are appropriate ways to manage UTIs in Home Care?

- Antimicrobial Stewardship
- Improved methods of documenting and communicating symptoms of UTIs
- Patient and caregiver education
- UTI surveillance and monitoring

# UTI Antimicrobial Stewardship (AS)

- AS focuses on appropriate use of antibiotics in order to maximize patient outcomes and minimize microbial resistance
- Elements of AS include:
  - Waiting for culture results prior to treating with antimicrobials
  - Using criteria (Loeb, McGeer, or APIC-HICPAC) to guide appropriate use of antimicrobials
  - Create agency-wide policies and statements of commitment to antimicrobial stewardship

# UTI Communication and Documentation

- Use a standard form to document changes in a patient's urinary status
  - SBAR (Situation, Background, Assessment, Request) tool
  - Concerned-Uncomfortable-Safety (CUS) communication tool
  - Changes That Matter Tool
- Incorporate criteria (Loeb, McGeer, or APIC-HICPAC) into agency communications
  - Agency provided forms, smart phrases (for EPIC), and plan of care templates

# UTI Patient Education

- Use criteria (Loeb, McGeer, APIC-HICPAC) to teach patients what signs and symptoms indicate a true UTI
- Continue to teach patients on proper catheter care
- Teach patients and caregivers why it is important to not treat asymptomatic bacteriuria with an antibiotic
- Teach patients why it is important to review culture results if they are on an antimicrobial

# UTI surveillance and monitoring

- Identify a nurse/epidemiologist to work on infection prevention at your agency
- Instruct home care nurses to report signs or symptoms to infection control nurse/epidemiologist
- Consult an Infection Preventionist from a hospital associated with your agency
- Train staff in Infection Control and Prevention practices
  - APIC's Basic Infection Course

# Thank you!

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# Additional Resources

- Situation, Background, Assessment, and Request (SBAR) tool:
  - <http://www.health.state.mn.us/divs/idepc/dtopics/antibioticresistance/hcp/asp/ltc/apxg.pdf>
- Loeb Criteria for Initiation of Antibiotics in long-term care residents
  - <http://www.health.state.mn.us/divs/idepc/dtopics/antibioticresistance/hcp/ltcabxcard.html>
- MN Antimicrobial Stewardship Program Toolkit for Long-term Care Facilities
  - <http://www.health.state.mn.us/divs/idepc/dtopics/antibioticresistance/hcp/asp/ltc/index.html>
- Antibiotic Use and Antibiotic Resistance: Answers for patients
  - <http://www.health.state.mn.us/divs/idepc/dtopics/antibioticresistance/basics/abxusefs.pdf>
- APIC—HICPAC Surveillance Definitions for Home Health Care and Home Hospice Infections
  - [http://www.apic.org/Resource\\_/TinyMceFileManager/Practice\\_Guidance/HH-Surv-Def.pdf](http://www.apic.org/Resource_/TinyMceFileManager/Practice_Guidance/HH-Surv-Def.pdf)

# References

- Miliani, K., Miguères, B., Verjat-Trannoy, D., Thiolet, J.M., Vaux, S., & Astagneau, P. (2015). National point prevalence Survey of healthcare-associated infections and antimicrobial use in French home care settings, May to June 2012. *Euro Surveill*, 20(27). <https://doi.org/10.2807/1560-7917.ES2015.20.27.21182>
- Parn, T., Makela, M., & Lyytikainen, O. (2016). Urinary tract infections and antimicrobial use among Finnish home care clients, April-September 2014. *American Journal of Infection Control*, 44(11): 1390-1392. <https://doi.org/10.1016/j.ajic.2016.05.002>
- Rhinehart, E. (2001). Infection control in home care. *Emerging Infectious Diseases*, 7(2): 208-211.

- Rodhe N, Lofgren S, Matussek A, et al. (2008). Asymptomatic bacteriuria in the elderly: high prevalence and high turnover of strains. *Scandinavian Journal of Infectious Diseases*, 40(10):804–10. [PubMed: 18609196]
- Rowe, T.A. & Juthan-Mehta, M. (2014). Diagnosis and management of urinary tract infection in older adults. *Infectious Disease Clinics of North America*, 28(1): 75-89.  
<https://doi.org/10.1016/j.idc.2013.10.004>