



**North Carolina
Clinical Antibiotic
Stewardship Partners**

**LONG-TERM CARE COMMUNITIES
ANTIBIOTIC STEWARDSHIP
SESSION #3**

April 5, 2023

CONFLICT OF INTEREST DISCLOSURES

- ▶ The views and opinions expressed in this series are those of the speakers and do not reflect the official policy or position of any agency of the U.S. or NC government or UNC.
- ▶ Our speakers have the following financial relationships with the manufacturer(s) and/or provider(s) of commercial services discussed in this activity:
 - ▶ Dr. Kistler served as a consultant for Base10, Inc on their UTI embedded clinical support tool and received funding from Pfizer to study pneumococcal carriage.
 - ▶ Dr. Willis has performed contracted research with: Pfizer (pediatric nirmatrelvir-ritonavir and maternal RSV vaccine), Novavax (pediatric COVID-19 vaccine), and Merck (monoclonal antibody for RSV prevention)
 - ▶ Ms. Cook has no conflict of interest
- ▶ The speakers do not intend to discuss an unapproved/investigative use of a commercial product/device in this series, and all COI have been mitigated.
- ▶ These slides contain materials from a variety of colleagues, Drs Philip Sloane and David Weber, as well as the CDC, WHO, AHRQ, etc.

OUTLINE OF TODAY'S SESSION

1. NC CLASP reminders
2. Clinical Case
3. CDC Core Element: Action, with a focus on Prophylactic antibiotics for UTIs
4. Community Smart Aim and discussion
5. QI Conversations
6. Small Group Discussion



SESSION REMINDERS

- ▶ This time is for you and your learning.
- ▶ Please turn on your videos!
 - ▶ Cameras on
 - ▶ Stay muted unless speaking
- ▶ Use the chat
- ▶ Let's use and share our learning, but not in a way that identifies protected information.



NC CLASP REMINDERS



- ▶ If you need to get a hold of us, please email:
 - ▶ Danielle.Doughman@unchealth.unc.edu
- ▶ We'd like to introduce Elizabeth Thomas as a co-project manager.
- ▶ Complete our survey- it will help us help you!

Mrs. Smith, who has some mild dementia and mobility issues is admitted to the nursing home. Her daughter tells everyone that her mom “gets UTIs all the time and has been on an antibiotic for years.” When you review the signs of a UTI with her, she says, “She doesn’t get any of those, she just gets confused.”

CLINICAL CASE- FROM EVENT TO OUTCOME

Clinical Event



Resident reports being on prophylactic antibiotics for at least a year.

WHAT WOULD YOU DO?

Evaluation by R.N. or M.D.



RN evaluates resident who currently has no signs or symptoms of a UTI. She informs the MD that resident is on long-term prophylaxis.

WHAT WOULD YOU DO?

Decision To Prescribe Antibiotic



MD talks to nursing staff and resident and family and discusses a trial of cessation of antibiotics, while starting aggressive preventive measures.

WHAT WOULD YOU DO?

Outcome



WHAT DO YOU WANT TO HAPPEN? WHAT DO YOU DO?

Discuss contingency plans; discuss timed toileting, continue to reassess the need

PRESCRIPTIVE

POST-PRESCRIPTIVE

CORE ELEMENT ACTION

- ▶ **Policies that support optimal antibiotic use**
 - ▶ CMS regulations for medication reconciliation
 - ▶ F880 and F881: concerns related to infection prevention and control, or related to the antibiotic stewardship program
 - ▶ Loeb criteria for suspected urinary tract infection
- ▶ **Broad interventions to improve antibiotic use**
 - ▶ Communication guides
 - ▶ Culture criteria (no reflex cultures)
 - ▶ Antibiotic time-out
- ▶ **Pharmacy interventions**
 - ▶ Standing review of type, dose, duration of antibiotics and antibiograms based on community cultures
- ▶ **Infection and syndrome specific interventions to improve antibiotic use**



INFECTION AND SYNDROME SPECIFIC ACTION TO IMPROVE ANTIBIOTIC USE

- ▶ Implementation of specific interventions to reduce UTI antibiotic prophylaxis



DEFINITION AND RED FLAGS

▶ Population:

- ▶ Prophylaxis is discussed for NH residents with recurrent UTIs
 - ▶ 2 or more episodes of a UTI (symptoms and culture +) in 6 months or
 - ▶ 3 or more episodes in the last 12 months

▶ Red Flags for Urology Referrals

- ▶ All men
- ▶ Frank hematuria (worried about cancer!)
- ▶ Residents with neurologic disease
- ▶ Suspected stone
- ▶ Obstructive uropathy

CAVEATS

▶ CAVEATS:

- ▶ Urinary cultures in the absence of lower urinary tract signs/symptoms is not helpful
- ▶ Lower urinary tract signs/symptoms with a negative culture need evaluation for cause
 - ▶ Yeast v STDs v contact dermatitis v vaginitis
- ▶ DO NOT CHECK FOR CURE (no reculture after abx)
- ▶ Do not screen or treat for asymptomatic bacteriuria



NON-PHARMACOLOGIC INTERVENTIONS FOR RECURRENT UTI

- ▶ Drink plenty of fluids
- ▶ Perineal hygiene i.e., wiping front to back, consider using non-scented wipes
- ▶ Vaseline or other barrier cream post-void
- ▶ Reduce constipation
- ▶ Timed toileting- ideally every 2 hours (consider 2 x a shift)



<https://www.auanet.org/guidelines-and-quality/guidelines/recurrent-uti#x14424>

<https://www.nottsapc.nhs.uk/media/1815/uti-prophylaxis.pdf>

<https://d56bochluxqnz.cloudfront.net/documents/full-guideline/EAU-Guidelines-on-Urological-infections-2023.pdf>

NON-PHARMACOLOGIC INTERVENTIONS FOR RECURRENT UTI

- ▶ Over-the-counter products – limited evidence but may be useful
 - ▶ D-mannose (1g twice daily. No benefit per Cochrane)
 - ▶ Cranberry tablets (Follow individual product instructions. Contraindicated in patients on Warfarin. No benefit per Cochrane)
 - ▶ Methanamine hippurate (1 gm twice daily)
- ▶ Non-antibiotic prescriptions
 - ▶ Vaginal estrogens



<https://www.auanet.org/guidelines-and-quality/guidelines/recurrent-uti#x14424>

<https://www.nottsapc.nhs.uk/media/1815/uti-prophylaxis.pdf>

<https://d56bochluxqnz.cloudfront.net/documents/full-guideline/EAU-Guidelines-on-Urological-infections-2023.pdf>

ALTERNATIVES TO PROPHYLACTIC ANTIBIOTICS FOR THE TREATMENT OF RECURRENT URINARY TRACT INFECTION IN WOMEN (ALTAR) TRIAL (AND IMPRESU TRIAL IS COMING!)

► Population:

- Women 18+ (average age 50 ± 18.6)
- Recurrent UTIs (2 in 6 mo or 3 in 1 yr)

► Intervention:

- Prophylactic antibiotic (Nitrofurantoin, Trimethoprim, or Cefalexin)
- Methenamine 1 g BID

► Study duration: 12-months

► Randomized but not blinded

► Outcome: Incidence of UTIs



ALTERNATIVES TO PROPHYLACTIC ANTIBIOTICS FOR THE TREATMENT OF RECURRENT URINARY TRACT INFECTION IN WOMEN (ALTAR) TRIAL (AND IMPRESU TRIAL IS COMING!)

- ▶ RESULTS from 102 abx v 103 methenamine participants
 - ▶ Abx treatment: 0.89 episodes per person year (95% CI, 0.65 to 1.12)
 - ▶ Methenamine hippurate: 1.38 episodes per person year (95% CI, 1.05 to 1.72)
 - ▶ 52% of cultures during symptomatic UTIs grew bacteria.
 - ▶ More participants taking daily antibiotics (46/64; 72%) demonstrated antibiotic resistance in *Escherichia coli* in the methenamine hippurate arm (39/70; 56%) (p-value = 0.05)
- ▶ TAKE HOME: Methenamine was non-inferior in this SMALL trial of non-NH women

ZOOM POLL QUESTIONS

▶ Does your community have policies around a trial of antibiotic cessation?

Yes

No

Does your community have a UTI prevention order set?

Yes

No

COMMUNITY SMART AIM

- ▶ We are very grateful for Dawn Mabe, ADON, RN from Arbor Acres for sharing her SMART aim!

<https://docs.google.com/document/d/1uY1YarnlvCdle8EgLB5P7luovjlvZWFE/edit>

What: Educate nursing staff regarding the use of Suspected UTI SBAR

How Much: 95% compliance in the use of the Suspected UTI SBAR

Decrease the Use of antibiotic for preculture by 75%

By When? 8/1/2023

For Whom? Increase nursing staff knowledge

Residents benefit by decreasing the use of antibiotics

Where? Skilled nursing and assisted living nurses

Complete Aim Statement: By 8/1/23, the nursing staff will show 95% compliance in the use of the Suspected UTI SBAR

| | | |
|---|--|--|
| NC Clinical Antimicrobial Stewardship Program | | |
| NC CLASP Work Plan | | |
| OVERALL NC CLASP Goal | | |
| To optimize antibiotic stewardship in your nursing home | | |
| Your Nursing Home Community SMART Goal | | |
| Intervention Strategy | | |
| [How you propose to reach your goal] | | |
| NC CLASP Nursing Home Community | | |
| [name of your nursing home here] | | |
| Anticipated Outcome(s): | [what concrete product or deliverable do you hope to achieve by the end of the sessions] | |
| How will you measure strategy success? | Mid-point Check-in: Session 5 Summary of progress, challenges: | Final Check-in: Session 10 Summary of progress, challenges: |
| [List how you plan to measure things] | | |

SMART AIM DISCUSSION- QUESTIONS WE MIGHT WANT TO ASK?

1. How is the SBAR used in your facility-process and person?
2. Which of the core elements does completion of the SBAR focus on?
3. Will the SBAR modify or impact prescriber practices?
 - a. If so, how?



Conversations to Prepare for Improvement

Slides from Dr. Lynn Wilson

AHRQ ECHO National Nursing Home
COVID-19 Action Network



Why Have a Conversation?



- Provides information to assist in problem solving- helps identify barriers before you hit them-
- Supports staff wellbeing- increase buy-in and commitment-
- Taps into creativity of staff- you may find a better solution
- Promotes joy in work and healthy relationships- improves retention
- Builds a more robust system- if you're gone, could the work continue?

HOW TO HAVE A CONVERSATION-FIRST TRY LISTENING.

- ▶ Listen to the lived experience of the **staff, prescribers**, and residents/families to be able to act on their concerns
- ▶ Consider short huddles, in small groups or 1:1, with each group, where you can ask:
 - ▶ What concerns do you have in completing the SBAR tool?
 - ▶ How helpful is the SBAR?
 - ▶ What concerns do you have with calling the prescriber and going thru the SBAR tool?



SUCCESSFUL STRATEGIES

Do

- ▶ Be fact-based
- ▶ Focus on what you can control
- ▶ Offer realistic hope

Steps to Try

- ▶ Show you are listening
- ▶ “Here’s what I hear you saying – do I have that right?”
- ▶ Ask
 - ▶ “What do we still need to learn”
 - ▶ “How can we do this together”
- ▶ **Keep Everyone Informed-feedback is essential**



+ Medical Team

Smart Aim Communication:

Who do you think you need to talk to, to get closer to success?

What do you want to ask them about?

What is working v not working, for whom, for your smart aim?

SMALL GROUP DISCUSSION

**PLEASE TYPE IN THE CHAT ONE POTENTIAL
INTERVENTION FOR PROPHYLACTIC ANTIBIOTICS
THAT YOU CAN TACKLE IN YOUR NURSING HOME.**

