**Long-Term Care Antimicrobial Stewardship**

**Program Resources**

The Core Elements of Antibiotic Stewardship for Nursing Homes adapts the CDC Core Elements of Hospital Antibiotic Stewardship into practical ways to initiate or expand antibiotic stewardship activities in nursing homes. Nursing homes are encouraged to work in a step-wise fashion, implementing one or two activities to start and gradually adding new strategies from each element over time. Any action taken to improve antibiotic use is expected to reduce adverse events, prevent emergence of resistance and lead to better outcomes for residents in this setting.

- Checklist: Core Elements of Antibiotic Stewardship for Nursing Homes
- Appendix A: Policy and Practice Actions to Improve Antibiotic Use
- Appendix B: Measures of Antibiotic Prescribing, Use and Outcomes

**Fact Sheets**

Fact sheets are an easy way of communicating information in a quick and efficient manner.

- Infographic: Antibiotic Stewardship in Nursing Homes
- Leading Antibiotic Stewardship in Nursing Homes
- Creating a Culture to Improve Antibiotic Use in Nursing Homes
- Antibiotic Stewardship in Long-term Care Facilities

**Toolkits**

The Agency for Healthcare Research and Quality (AHRQ) supported the development of four toolkits to assist nursing homes and help prescribing clinicians (physicians, nurse practitioners and physician assistants) make evidence-based decisions about whether an antibiotic is appropriate to use and which antibiotic to use. The Nursing Home Antimicrobial Stewardship Guide includes four tested, evidence-based toolkits to help optimize antibiotic use in nursing homes. The guide is intended to assist nursing homes to develop antimicrobial programs.

**Helpful Resources**

The National Nursing Home Quality Improvement Campaign has many resources available to create improvement, including:

- Assessment of Current CDI Prevention Activities: Antibiotic Stewardship
- AHRQ Improving Patient Safety in Long-term Care Facilities: Training Modules

North Carolina Statewide Program for Infection Control and Epidemiology

Deciding when to initiate antibiotics can be particularly challenging. The Development of Minimum Criteria for the Initiation of Antibiotics in Residents of Long-Term-Care Facilities: Results of a Consensus Conference is also known as the Loeb criteria.

In recognition of the differences between long-term care facilities and hospitals with regard to hosts and resources present, the Infectious Diseases Society of America first provided guidelines for evaluation of fever and infection in LTCF residents in 2000. Clinical Practice Guidelines for the Evaluation of Fever and Infection in Older Adult Residents of Long-term Care Facilities: 2008 update by the Infectious Diseases Society of America is a guideline in the second edition, updated by data generated over the intervening eight years.
The Centers for Disease Control and Prevention (CDC) released its March 2016 *Vital Signs* report focused on protecting patients from Healthcare-Associated Infections (HAIs), including those caused by antibiotic resistant bacteria.

Many of the most urgent and serious antibiotic-resistant bacteria CDC warned of in the *Antibiotic Resistance Threats in the United States, 2013* threaten patients while they are being treated in healthcare facilities for other conditions. Four Core Actions to Prevention Antibiotic Resistance is found on page 31 in the link above.

Although [national and state progress](#) has been made in preventing HAIs, more work needs to be done.

- [Kansas HAI Progress](#)
- [Nebraska HAI Progress](#)
- [North Dakota HAI Progress](#)
- [South Dakota HAI Progress](#)

Need to know how to collect cultures? Check out the [Clinician Guide for Collecting Cultures](#). [www.Stewardship-Education.org](http://www.Stewardship-Education.org) is a resource for antimicrobial stewardship training, policy and research.

The [National Action Plan to Prevent Health Care-Associated Infections: Road Map to Elimination](#) provides specifics related to the plan. [Phase three: LTC Facilities](#) is referenced. Page 201 includes specifics about antibiotic use and resistance in nursing homes. Page 211 lists:

- Priority Area 1: Enrollment in NHSN for Nursing Home Infection Surveillance Activity
- Priority Area 2: *Clostridium difficile* Infection
- Priority Area 3: Vaccination for Residents (Influenza, Pneumococcal)
- Priority Area 4: Health Care Personnel Influenza Vaccination
- Priority Area 5: Urinary Tract Infections, Catheter-Associated Urinary Tract Infections and Catheter Care Processes

Antibiotic misuse is widespread and has dire patient and public health consequences. National organizations, including the CDC and the Joint Commission, advocate for a formal *Antibiotic Timeout* to reassess empiric antibiotics 48-72 hours after their initiation. This CME/CPE activity provides a practical approach to performing “Antibiotic Timeouts” in the inpatient setting. Using short, didactic sessions, they provide examples on how to reassess antibiotic therapy started empirically using clinical, laboratory and microbiological data. The majority of this CME/CPE is high yield, interactive inpatient cases covering skin and soft tissue infections, pneumonia, CAUTIs and neutropenic fever that illustrate the timeout process and the principles of appropriate use of antimicrobials.

The [Penn CDC Prevention Epicenter Site](#) represents a broad collaboration across multiple institutions in southeastern Pennsylvania with a dual focus on adult and pediatric patient populations. Penn Epicenter investigators bring expertise in diverse fields including infectious diseases, internal medicine, pediatrics, geriatrics, critical care, pulmonary medicine, emergency medicine, epidemiology, biostatistics, bioinformatics, health economics and microbiology. It includes access to the [Penn CDC Antimicrobial Stewardship Checklist](#) (flowsheet) to document your review of an infection.

**Six Nursing Home “Bite Size” Training Sessions Now Available Online ANYTIME!**

To support nursing homes in tracking, preventing and managing *Clostridium difficile infections* and promoting antibiotic stewardship, the QIN National Coordinating Center and the [Centers for Medicare & Medicaid Services](#) developed a new series of online training sessions.
These **six sessions and accompanying resources** are designed to support “bite-sized learning,” allowing nursing home staff to review manageable amounts of content in each training. Each session includes a welcome message and overview, information on how to use the session, videos and PowerPoint presentations, interactive activities and scenarios, discussion questions, informational handouts and links to optional resources.

Trainings are available on the following topics:

- TeamSTEPPS in Long-Term Care: Communication Strategies to Promote Quality and Safety
- Exploring Antibiotics and their Role in Fighting Bacterial Infections
- Antibiotic Resistance: How It Happens and Strategies to Decrease the Spread of Resistance
- Antibiotic Stewardship
- Clostridium difficile Part One: Clinical Overview
- Clostridium difficile Part Two: Strategies to Prevent, Track, and Monitor C. difficile

Nursing home leaders are encouraged to review the content in each session to decide which components would be helpful for themselves and which to use for educating staff. The components can be shared during staff education in-services or discussion sessions, or they can be accessed by staff via the website at any time. Continuing nursing education certificates and certificates of completion for the online sessions are available through September 30, 2019.

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