The Core Elements of Antibiotic Stewardship for Nursing Homes

National Center for Emerging and Zoonotic Infectious Diseases
Division of Healthcare Quality Promotion

CS273578-A

The Core Elements of Antibiotic Stewardship for Nursing Homes is a publication of The National Center for Emerging and Zoonotic Infectious Diseases within the Centers for Disease Control and Prevention.

Centers for Disease Control and Prevention
Thomas R. Frieden, MD, MPH, Director

National Center for Emerging and Zoonotic Infectious Diseases
Beth P. Bell, MD, MPH, Director

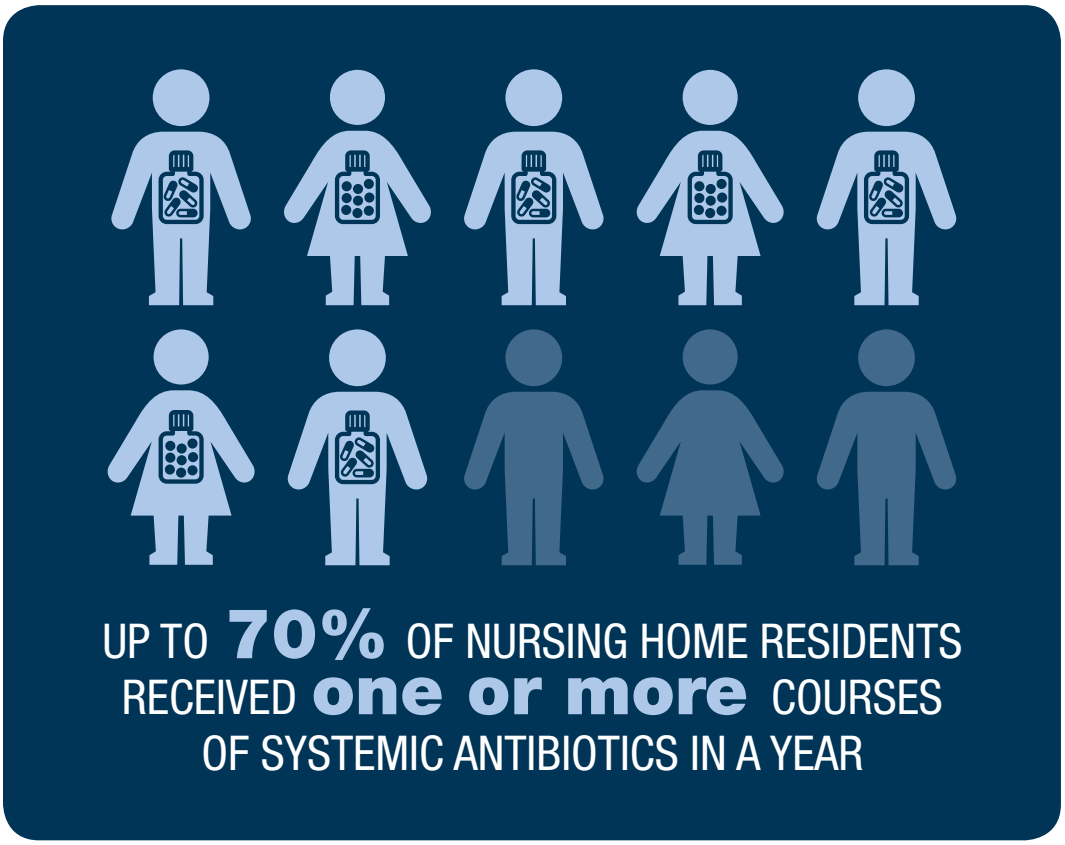
Suggested citation:

CDC. The Core Elements of Antibiotic Stewardship for Nursing Homes. Atlanta, GA: US Department of Health and Human Services, CDC; 2015. Available at: **http://www.cdc.gov/longtermcare/index.html**

Introduction

Improving the use of antibiotics in healthcare to protect patients and reduce the threat of antibiotic resistance is a national priority.[1] Antibiotic stewardship refers to a set of commitments and actions designed to "optimize the treatment of infections while reducing the adverse events associated with antibiotic use."[2] The Centers for Disease Control and Prevention (CDC) recommends that all acute care hospitals implement an antibiotic stewardship program (ASP) and outlined the seven core elements which are necessary for implementing successful ASPs.[2] CDC also recommends that all nursing homes take steps to improve antibiotic prescribing practices and reduce inappropriate use.

Antibiotics are among the most frequently prescribed medications in nursing homes, with up to 70% of residents in a nursing home receiving one or more courses of systemic antibiotics when followed over a year.[3,4] Similar to the findings in hospitals,[5,6] studies have shown that 40–75% of antibiotics prescribed in nursing homes may be unnecessary or inappropriate.[3,4] Harms from antibiotic overuse are significant for the frail and older adults receiving care in nursing homes. These harms include risk of serious diarrheal infections from *Clostridium difficile,* increased adverse drug events and drug interactions, and colonization and/or infection with antibiotic-resistant organisms.



This document adapts the **CDC Core Elements of Hospital Antibiotic Stewardship** into practical ways to initiate or expand antibiotic stewardship activities in nursing homes. While the elements are the same for both hospitals and nursing homes, the implementation of these elements may vary based on facility staffing and resources. 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.

Antibiotic stewardship refers to a set of commitments and activities designed to *"optimize the treatment of infections while reducing the adverse events associated with antibiotic use."*

Summary of Core Elements for Antibiotic Stewardship in Nursing Homes

Leadership commitment
Demonstrate support and commitment to safe and appropriate antibiotic use in your facility

Accountability
Identify physician, nursing and pharmacy leads responsible for promoting and overseeing antibiotic stewardship activities in your facility

Drug expertise
Establish access to consultant pharmacists or other individuals with experience or training in antibiotic stewardship for your facility

Action
Implement **at least one** policy or practice to improve antibiotic use

Tracking
Monitor **at least one process** measure of antibiotic use and **at least one outcome** from antibiotic use in your facility

Reporting
Provide regular feedback on antibiotic use and resistance to prescribing clinicians, nursing staff and other relevant staff

Education
Provide resources to clinicians, nursing staff, residents and families about antibiotic resistance and opportunities for improving antibiotic use

Leadership Commitment

Nursing home leaders commit to improving antibiotic use. Facility leadership, both owners and administrators, as well as regional and national leaders if the facility is part of a larger corporation, can demonstrate their support in the following ways:

Write statements in support of improving antibiotic use to be shared with staff, residents and families

Include stewardship-related duties in position descriptions for the medical director, clinical nurse leads, and consultant pharmacists in the facility

Communicate with nursing staff and prescribing clinicians the facility's expectations about use of antibiotics and the monitoring and enforcement of stewardship policies

Create a culture, through messaging, education, and celebrating improvement, which promotes antibiotic stewardship

Accountability

Nursing homes identify individuals accountable for the antibiotic stewardship activities who have the support of facility leadership:

Empower the medical director to set standards for antibiotic prescribing practices for all clinical providers credentialed to deliver care in a nursing home and be accountable for overseeing adherence. To be effective in this role, the medical director should review antibiotic use data (see Tracking and Reporting section) and ensure best practices are followed in the medical care of residents in the facility.[10]

Empower the director of nursing to set the practice standards for assessing, monitoring and communicating changes in a resident's condition by front-line nursing staff. Nurses and nurse aides play a key role in the decision-making process for starting an antibiotic. The knowledge, perceptions and attitudes among nursing staff of the role of antibiotics in the care of nursing home residents can significantly influence how information is communicated to clinicians who are deciding whether to initiate antibiotic therapy. Therefore the importance of antibiotic stewardship is conveyed by the expectations set by nursing leadership in the facility.

Engage the consultant pharmacist in supporting antibiotic stewardship oversight through quality assurance activities such as medication regimen review and reporting of antibiotic use data.

Nursing home antibiotic stewardship leads utilize existing resources to support antibiotic stewards' efforts by working with the following partners:

Infection prevention program coordinator

Infection prevention coordinators have key expertise and data to inform strategies to improve antibiotic use. This includes tracking of antibiotic starts, monitoring adherence to evidence-based published criteria[12,13] during the evaluation and management of treated infections, and reviewing antibiotic resistance patterns in the facility to understand which infections are caused by resistant organisms. When infection prevention coordinators have training, dedicated time, and resources to collect and analyze infection surveillance data, this information can be used to monitor and support antibiotic stewardship activities.

Consultant laboratory

Nursing homes contracting laboratory services can request reports and services to support antibiotic stewardship activities. Examples of laboratory support for antibiotic stewardship include developing a process for alerting the facility if certain antibiotic-resistant organisms are identified, providing education for nursing home staff on the differences in diagnostic tests available for detecting various infectious pathogens (e.g., EIA toxin test vs. nucleic amplification tests for *C. difficile*), and creating a summary report of antibiotic susceptibility patterns from organisms isolated in cultures. These reports, also known as antibiograms, help inform empiric antibiotic selection (i.e., before culture results are available) and monitor for new or worsening antibiotic resistance.[14]

State and local health departments

Nursing homes benefit from the educational support and resources on antibiotic stewardship and infection prevention which are provided by the Healthcare-Associated Infection (HAI) Prevention programs at state and local health departments.

Drug Expertise

Nursing homes establish access to individuals with antibiotic expertise to implement antibiotic stewardship activities. Receiving support from infectious disease consultants and consultant pharmacists with training in antibiotic stewardship can help a nursing home reduce antibiotic use and experience lower rates of positive *C. difficile* tests.[11] Examples of establishing antibiotic expertise include:

Work with a consultant pharmacist who has received specialized infectious diseases or antibiotic stewardship training. Example training courses include the Making a Difference in Infectious Diseases (MAD-ID) antibiotic stewardship course (http://mad-id.org/antimicrobial-stewardship-programs/), and the Society for Infectious Diseases Pharmacists antibiotic stewardship certificate program (http://www.sidp.org/page-1442823).

Partner with antibiotic stewardship program leads at the hospitals within your referral network.

Develop relationships with infectious disease consultants in your community interested in supporting your facility's stewardship efforts.

Take Action through Policy and Practice Change to Improve Antibiotic Use

Nursing homes implement prescribing policies and change practices to improve antibiotic use. The introduction of new policies and procedures which address antibiotic use should be done in a step-wise fashion so staff become familiar with and not overwhelmed by new changes in practice. Prioritize interventions based on the needs of your facility and share outcomes from successful interventions with nursing staff and clinical providers. Below are brief descriptions of policy and practice changes. For more details, see *Appendix A: Policy and practice actions to improve antibiotic use.*

Policies that support optimal antibiotic use

Ensure that current medication safety policies, including medication regimen review, developed to address Centers for Medicare and Medicaid Services (CMS) regulations[15–17] are being applied to antibiotic prescribing and use.

Broad interventions to improve antibiotic use

Standardize the practices which should be applied during the care of any resident suspected of an infection or started on

an antibiotic. These practices include improving the evaluation and communication of clinical signs and symptoms when a resident is first suspected of having an infection, optimizing the use of diagnostic testing, and implementing an antibiotic review process, also known as an "antibiotic time-out," for all antibiotics prescribed in your facility. Antibiotic reviews provide clinicians with an opportunity to reassess the ongoing need for and choice of an antibiotic when the clinical picture is clearer and more information is available.

Pharmacy interventions to improve antibiotic use

Integrate the dispensing and consultant pharmacists into the clinical care team as key partners in supporting antibiotic stewardship in nursing homes. Pharmacists can provide assistance in ensuring antibiotics are ordered appropriately, reviewing culture data, and developing antibiotic monitoring and infection management guidance in collaboration with nursing and clinical leaders.

Infection and syndrome specific interventions to improve antibiotic use

Identify clinical situations which may be driving inappropriate courses of antibiotics such as asymptomatic bacteriuria or urinary tract infection prophylaxis[18,19] and implement specific interventions to improve use.

Tracking and Reporting Antibiotic Use and Outcomes

Nursing homes monitor both antibiotic use practices and outcomes related to antibiotics in order to guide practice changes and track the impact of new interventions. Data on adherence to antibiotic prescribing policies and antibiotic use are shared with clinicians and nurses to maintain awareness about the progress being made in antibiotic stewardship. Clinician response to antibiotic use feedback (e.g., acceptance) may help determine whether feedback is effective in changing prescribing behaviors. Below are examples of antibiotic use and outcome measures. For more details, see *Appendix B: Measures of antibiotic prescribing, use and outcomes*.

Process measures: Tracking how and why antibiotics are prescribed

Perform reviews on resident medical records for new antibiotic starts to determine whether the clinical assessment, prescription documentation and antibiotic selection were in accordance with facility antibiotic use policies and practices. When conducted over time, monitoring process measures can assess whether antibiotic prescribing policies are being followed by staff and clinicians.

Antibiotic use measures: Tracking how often and how many antibiotics are prescribed

Track the amount of antibiotic used in your nursing home to review patterns of use and determine the impact of new stewardship interventions. Some antibiotic use measures (e.g., prevalence surveys) provide a snap-shot of information; while others, like

nursing home initiated antibiotic starts and days of therapy (DOT) are calculated and tracked on an ongoing basis.[20,21] Selecting which antibiotic use measure to track should be based on the type of practice intervention being implemented. Interventions designed to shorten the duration of antibiotic courses, or discontinue antibiotics based on post-prescription review (i.e., "antibiotic time-out"), may not necessarily change the rate of antibiotic starts, but would decrease the antibiotic DOT.

Antibiotic use data from nursing homes to improve antibiotic stewardship efforts is important both for individual facility improvements and for public health action. Expansion of electronic health records in nursing homes will allow for facilities to obtain systems which integrate pharmacy and laboratory data and make antibiotic use and resistance data to inform stewardship efforts more accessible to facility staff and leadership. CDC is working closely with many nursing home partners including providers, long-term care pharmacies, and professional organizations, to develop an Antibiotic Use (AU) reporting option for nursing homes within the CDC's National Healthcare Safety Network (NHSN). The NHSN AU option allows for standardized antibiotic use data, submitted electronically, to be aggregated and summarized for developing facility-adjusted national benchmarks.

Antibiotic outcome measures: Tracking the adverse outcomes and costs from antibiotics

Monitor clinical outcomes such as rates of *C. difficile* infections, antibiotic-resistant organisms or adverse drug events to demonstrate that antibiotic stewardship activities are successful in improving patient outcomes. Nursing homes already tracking these clinical outcomes for their infection prevention program can submit data on *C. difficile* and selected antibiotic-resistant bacteria, such as methicillin-resistant *Staphylococcus aureus* (MRSA) and carbapenem-resistant *Enterobacteriaceae* (CRE) into the CDC's NHSN Laboratory-identified event reporting module for long-term care facilities.

Education

Nursing homes provide antibiotic stewardship education to clinicians, nursing staff, residents and families. Effective educational programs address both nursing staff and clinical providers on the goal of an antibiotic stewardship intervention, and the responsibility of each group for ensuring its implementation.[3,22] There are a variety of mechanisms for disseminating antibiotic education to nursing home staff including flyers, pocket-guides, newsletters or electronic communications; however, interactive academic detailing (e.g., face-to-face interactive workshops) has the strongest evidence for improving medication prescribing practices.[23]

Nursing homes sustain improvements by incorporating both education and feedback to providers. One nursing home antibiotic stewardship intervention demonstrated a sustained reduction in antibiotic use for two years after the intervention by linking education with feedback on physician prescribing practices.[24] Another study showed a 64% reduction in inappropriate antibiotic use (i.e., prescriptions which did not adhere to guidelines), by providing feedback on individual physician prescribing practices and adherence to the guidelines over 12 months.[25]

Nursing homes engage residents and their family members in antibiotic use and stewardship educational efforts to ensure clinicians have their support to make appropriate antibiotic use decisions. Working with residents and families will reduce the perception that their expectations may be a barrier to improving antibiotic use in nursing homes.[26,27]

Conclusion

The core elements of antibiotic stewardship are the same for both hospitals and nursing homes. This guide provides examples of how these elements can be applied by nursing home leadership, clinicians and staff to monitor and improve antibiotic use. Nursing homes are encouraged to select one or two activities to start with and over time, as improvements are implemented, expand efforts to add new strategies to continue improving antibiotic use. Commit now to ensure antibiotic stewardship policies and practices are in place to protect patients and improve clinical care in nursing homes.

References

1. The White House. NATIONAL STRATEGY FOR COMBATING ANTIBIOTICRESISTANT BACTERIA. 2014; **http://www.whitehouse.gov/sites/default/files/docs/carb_national_strategy.pdf** Accessed 9/30/2014.

2. Centers for Disease Control and Prevention. Core Elements of Hospital Antibiotic Stewardship Programs. Atlanta, GA: US Department of Health and Human Services, CDC; 2014 **http://www.cdc.gov/getsmart/healthcare/implementation/core-elements.html** Accessed 9/30/2014

3. Lim CJ, Kong DCM, Stuart RL. Reducing inappropriate antibiotic prescribing in the residential care setting: current perspectives. Clin Interven Aging. 2014; 9: 165-177

4. Nicolle LE, Bentley D, Garibaldi R, et al. Antimicrobial use in long-term care facilities. Infect Control Hosp Epidemiol 2000; 21:537–45.

5. Dellit TH, Owens RC, McGowan JE, Jr., et al. Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America guidelines for developing an institutional program to enhance antimicrobial stewardship. Clinical infectious diseases. 2007;44(2):159-177.

6. Fridkin SK, Baggs J, Fagan R, et al. Vital Signs: Improving antibiotic use among hospitalized patients. MMWR. Morbidity and mortality weekly report. 2014;63.

7. Gerwitz JH, Field TS, Harrold LR. Incidence and preventability of adverse drug events among older persons in the ambulatory settting. JAMA 2003;289: 1107–11.

8. Loeb MB, Craven S, McGeer A, et al. Risk factors for resistance to antimicrobial agents among nursing home residents. Am J Epidemiol 2003;157:40–7.

9. Centers for Disease Control and Prevention. Antibiotic resistance threats in the United States, 2013 Atlanta, GA: CDC; 2013.

10. Centers for Medicare and Medicaid Services. Summary of Requirements for Medical Director- 501 State Operations Manual (SOM); Appendix PP; Rev 107, 04-04-2014 Pages 626 – 633: **https://cms.gov/manuals/Downloads/som107ap_pp_guidelines_ltcf.pdf** Accessed 9/30/2014.

11. Jump RLP, Olds DM, Seifi N et al. Effective antimicrobial stewardship in a long-term care facility through an infectious disease consultation service:Keeping a LID on antibiotic use. Infect Control Hosp Epidemiol 2012;33(12):1185-1192

12. Stone ND, Ashraf MS, Calder J, Crnich CJ, et al. Surveillance definitions of infections in long-term care facilities: revisiting the McGeer criteria. Infect Control Hosp Epidemiol 2012; 33: 965-977.

13. Loeb M, Bentley DW, Bradley S, et al. Development of minimum criteria for the initiation of antibiotics in residents of long-term care facilities: Results of a consensus conference. Infect Control Hosp Epidemiol 2001; 22: 120-4.

14. Furuno JP, Comer AC, Johnson JK, et al. Using antibiograms to improve antibiotic prescribing in skilled nursing facilities. Infect Control Hosp Epidemiol. 2014;35 (Suppl 3):S56-61.

15. Centers for Medicare and Medicaid Services. Summary of Requirements for Unnecessary Drugs - F329 State Operations Manual (SOM); Appendix PP; Rev 107, 04-04-2014 Pages 563–588: **https://cms.gov/manuals/Downloads/som107ap_pp_guidelines_ltcf.pdf** Accessed 9/30/2014.

16. Centers for Medicare and Medicaid Services. Summary of Requirements for Medication Errors- F332 and 333 State Operations Manual (SOM); Appendix PP; Rev 107, 04-04-2014 Pages 430–439: **https://cms.gov/manuals/Downloads/som107ap_pp_guidelines_ltcf.pdf** Accessed 9/30/2014.

17. Centers for Medicare and Medicaid Services. Summary of Requirements for Drug Regimen Review- F428 State Operations Manual (SOM); Appendix PP; Rev 107, 04-04-2014 Pages 539–548: **https://cms.gov/manuals/Downloads/som107ap_pp_guidelines_ltcf.pdf** Accessed 9/30/2014.

18. Benoit SR, Nsa W, Richards CL et al. Factors associated with antimicrobial use in nursing homes: A multilevel model. J Am Geriatr Soc 2008; 56:2039–2044

19. Latour K, Catry B, Broex E et al. Indications for antimicrobial prescribing in European nursing homes: results from a point prevalence survey. Pharmacoepidem and drug safety. 2012; 21: 937–944

20. Mylotte JM. Antimicrobial prescribing in long-term care facilities: Prospective evaluation of potential antimicrobial use and cost indicators. Am J Infect Control. 1999; 27(1): 10-19.

21. Mylotte JM, Keagle J. Benchmarks for antibiotic use and cost in long-term care. J Am Geriatr Soc 2005; 53:1117-1122.

22. Nicolle LE. Antimicrobial stewwardship in long-term care facilities: what is effective?. Antimicrob Resist Infect Contr 2014; 3:6. **http://www.aricjournal.com/content/3/1/6** Accessed 12/3/14

23. Loganathan M, Singh S, Franklin BD, Bottle A, Majeed A. Interventions to optimise prescribing in care homes: systematic review. Age Aging 2011; 40: 150-162

24. Schwartz DN, Abiad H, DeMarais PL. et al. An educational intervention to improve antimicrobial use in a hospital-based long-term care facility. J Am Geriatr Soc. 2007; 55(8), 1236-1242.

25. Monette J, Miller MA, Monette M, et al. Effect of an educational intervention on optimizing antibiotic prescribing in long-term care facilities. J Am Geriatr Soc. 2007; 55(8), 1231-1235

26. Lim CJ, Kwong MW, Stuart RL Antibiotic prescribing practice in residential aged care facilities--health care providers' perspectives. Med J Aust. 2014; 201(2):98-102.

27. Lohfeld L, Loeb M, Brazil K. Evidence-based clinical pathways to manage urinary tract infections in long-term care facilities: a qualitative case study describing administrator and nursing staff views. J Am Med Dir Assoc. 2007; 8(7):477-84.

Checklist for Core Elements of Antibiotic Stewardship in Nursing Homes

The following checklist is a companion to the Core Elements of Antibiotic Stewardship in Nursing Homes. The CDC recommends that all nursing homes take steps to implement antibiotic stewardship activities. Before getting started, use this checklist as a baseline assessment of policies and practices which are in place. Then use the checklist to review progress in expanding stewardship activities on a regular basis (e.g., annually). Over time, implement activities for each element in a step-wise fashion.

LEADERSHIP SUPPORT	ESTABLISHED AT FACILITY	
1. Can your facility demonstrate leadership support for antibiotic stewardship through one or more of the following actions?	❑ Yes	❑ No

If yes, indicate which of the following are in place (select all that apply)
- ❑ Written statement of leadership support to improve antibiotic use
- ❑ Antibiotic stewardship duties included in medical director position description
- ❑ Antibiotic stewardship duties included in director of nursing position description
- ❑ Leadership monitors whether antibiotic stewardship policies are followed
- ❑ Antibiotic use and resistance data is reviewed in quality assurance meetings

ACCOUNTABILITY

2. Has your facility identified a lead(s) for antibiotic stewardship activities?	❑ Yes	❑ No

If yes, indicate who is accountable for stewardship activities (select all that apply)
- ❑ Medical director
- ❑ Director or assistant director of nursing services
- ❑ Consultant pharmacist
- ❑ Other:_____

DRUG EXPERTISE

3. Does your facility have access to individual(s) with antibiotic stewardship expertise?	❑ Yes	❑ No

If yes, indicate who is accountable for stewardship activities (select all that apply)
- ❑ Consultant pharmacy has staff trained/is experienced in antibiotic stewardship
- ❑ Partnering with stewardship team at referral hospital
- ❑ External infectious disease/stewardship consultant
- ❑ Other:_____

ACTIONS TO IMPROVE USE

4. Does your facility have policies to improve antibiotic prescribing/use?	❑ Yes	❑ No

If yes, indicate which policies are in place (select all that apply)
- ❑ Requires prescribers to document a dose, duration, and indication for all antibiotic prescriptions
- ❑ Developed facility-specific algorithm for assessing residents
- ❑ Developed facility-specific algorithms for appropriate diagnostic testing (e.g., obtaining cultures) for specific infections
- ❑ Developed facility-specific treatment recommendations for infections
- ❑ Reviews antibiotic agents listed on the medication formulary
- ❑ Other:_____

5. Has your facility implemented practices to improve antibiotic use?	❑ Yes	❑ No

If yes, indicate which practices are in place (select all that apply)
- ❑ Utilizes a standard assessment and communication tool for residents suspected of having an infection
- ❑ Implemented process for communicating or receiving antibiotic use information when residents are transferred to/from other healthcare facilities
- ❑ Developed reports summarizing the antibiotic susceptibility patterns (e.g., facility antibiogram)
- ❑ Implemented an antibiotic review process/"antibiotic time out"
- ❑ Implemented an infection specific intervention to improve antibiotic use
  Indicate for which condition(s):_____

6. Does your consultant pharmacist support antibiotic stewardship activities? ❑ Yes ❑ No

If yes, indicate activities performed by the consultant pharmacist (select all that apply)
- ❑ Reviews antibiotic courses for appropriateness of administration and/or indication
- ❑ Establishes standards for clinical/laboratory monitoring for adverse drug events from antibiotic use
- ❑ Reviews microbiology culture data to assess and guide antibiotic selection

TRACKING: MONITORING ANTIBIOTIC PRESCRIBING, USE, AND RESISTANCE

7. Does your facility monitor one or more measures of antibiotic use? ❑ Yes ❑ No

If yes, indicate which of the following are being tracked (select all that apply)
- ❑ Adherence to clinical assessment documentation (signs/symptoms, vital signs, physical exam findings)
- ❑ Adherence to prescribing documentation (dose, duration, indication)
- ❑ Adherence to facility-specific treatment recommendations
- ❑ Performs point prevalence surveys of antibiotic use
- ❑ Monitors rates of new antibiotic starts/1,000 resident-days
- ❑ Monitors antibiotic days of therapy/1,000 resident-days
- ❑ Other:_____

8. Does your facility monitor one or more outcomes of antibiotic use? ❑ Yes ❑ No

If yes, indicate which of the following are being tracked (select all that apply)
- ❑ Monitors rates of *C. difficile* infection
- ❑ Monitors rates of antibiotic-resistant organisms
- ❑ Monitors rates of adverse drug events due to antibiotics
- ❑ Other:_____

REPORTING INFORMATION TO STAFF ON IMPROVING ANTIBIOTIC USE AND RESISTANCE

9. Does your facility provide facility-specific reports on antibiotic use and outcomes with clinical providers and nursing staff? ❑ Yes ❑ No

If yes, indicate which of the following are being tracked (select all that apply)
- ❑ Measures of antibiotic use at the facility
- ❑ Measures of outcomes related to antibiotic use (i.e., *C. difficile* rates)
- ❑ Report of facility antibiotic susceptibility patterns (within last 18 months)
- ❑ Personalized feedback on antibiotic prescribing practices (to clinical providers)
- ❑ Other:_____

EDUCATION

10. Does your facility provide educational resources and materials about antibiotic resistance and opportunity for improving antibiotic use? ❑ Yes ❑ No

If yes, indicate which of the following are being tracked (select all that apply)
- ❑ Clinical providers (e.g., MDs, NPs, PAs, PharmDs)
- ❑ Nursing staff (e.g., RNs, LPNs, CNAs)
- ❑ Residents and families
- ❑ Other:_____