

Antibiotic Stewardship

INTRODUCTION:

The Requirements of Participation from CMS for nursing homes have required facilities establish an antibiotic stewardship program that includes antibiotic use protocols and a system to monitor antibiotic use. The CDC has also developed the “Core Elements of Antibiotic Stewardship for Nursing Homes” and the AHRQ has published a Nursing Home Antimicrobial Stewardship Guide. These resources and other accepted best practices have been utilized to put an Antibiotic Stewardship program in place in this facility for quality and compliance. This program actively requires an interdisciplinary collaboration, including practitioners, when deciding to order antibiotics. This educational handout will provide practitioners with the facility policy and procedure information.

POLICY:

It is the policy that this facility’s antibiotic stewardship program promotes the appropriate use of antibiotics and a system of monitoring to improve resident outcomes and the reduction of antibiotic resistance. Antibiotics will be prescribed for the correct indication, dose, and duration to appropriately treat the resident while attempting to reduce the development of antibiotic-resistant organisms or other adverse consequences or outcomes. The facility will monitor antibiotic use to identify appropriate use of antibiotics to improve resident outcomes and reduce antibiotic resistance. The Antibiotic Stewardship Program will be incorporated in the overall infection prevention and control program and reviewed on an annual basis and as needed.

OBJECTIVE OF THE ANTIBIOTIC STEWARDSHIP POLICY

The objective of this requirement is for the facility to develop an Antibiotic Stewardship Program promoting appropriate use of antibiotics for quality of care, successful resident outcomes and reduce the potential for adverse consequences related to antibiotic use. A collaborative effort between the resident/resident representative, facility staff, practitioners, Medical Director, pharmacist and leadership team is essential for success of the Antibiotic Stewardship Program.

The facility practices the Core Elements of Antibiotic Stewardship, outlined by the Centers for Disease Control and Prevention to “optimize the treatment of infections while reducing the adverse events associated with antibiotic use” to include:

- Leadership Commitment
- Accountability



- Drug Expertise
- Action
- Tracking
- Reporting
- Education

PROCEDURE:

1. When the nurse suspects that the resident has an infection, the nurse will perform an evaluation of the resident that includes:
 - a. Resident signs and symptoms
 - i. Complete set of vital signs
 - ii. Interview of resident for symptoms
 - iii. Assessment
2. The Nurse will utilize the **(see attached)** infection criteria protocol to determine if it is necessary to treat with antibiotics or if adjustments in therapy need to be made.
3. Notify physician/practitioner of resident change of condition and evaluation information. The nurse to communicate to physician of infection criteria protocol to treat the respective infection.
4. When diagnostics are ordered by the practitioner, the nurse will contact the lab/radiology to notify of physician order.
 - a. Physician will be notified of results of diagnostics to ensure resident is taking the appropriate antibiotic or if antibiotic needs to be discontinued or changed.
5. If indicated, based upon (identified) criteria, an antibiotic is ordered, the practitioner will identify the diagnosis/indication, the right antibiotic, proper dose, duration and route.
 - a. In the event that the prescribing physician orders an antibiotic without identification of infection criteria, the physician will be requested to identify rationale for ordered antibiotic. The Medical Director will be contacted for further direction.
6. If the resident was admitted to the facility with an antibiotic ordered, the nurse is to identify:
 - a. Indication for use (diagnosis, lab/radiology results, symptoms, etc.)
 - b. Documentation for dose, route and duration (ensuring stop date)
7. The nurse will observe and document effectiveness of antibiotic, side effects and potential adverse consequences.
 - a. Resident evaluation, vital signs and observations for symptoms will be identified and documented

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- b. Resident will be evaluated for signs/symptoms of *C. difficile* infection
 - c. Resident will be observed for potential side effects of the antibiotic
8. The antibiotic will be discontinued when no longer necessary
9. The pharmacy consultant will review the antibiotic use for each resident on the Medication Regimen Review.
10. The Infection Preventionist will track antibiotic use and monitor adherence to evidence-based criteria, including:
- a. Documentation related to antibiotic selection and use
 - b. Tracking antibiotics used to review patterns of use and determination of the impact of the antibiotic stewardship interventions
 - c. Monitoring for clinical outcomes such as rates of *C. difficile* infections, antibiotic-resistant organisms or adverse drug events
 - d. Reporting of communicable disease per State Law (**insert State requirements**)
 - e. Provide reports related to monitoring antibiotic usage and resistance data to the QAA committee
11. During the quarterly QAA Committee Meeting, The Pharmacist, Medical Director, Infection Preventionist and IDT will analyze the antibiotic use in the facility to collaborate with nursing and clinical leaders for identification of potential QAPI process action plan related to analysis of the tracking and trending of data for quality outcomes.

The facility will need to ensure that prescribing practitioners have documentation of periodic review of antibiotic use to monitor appropriate prescribing. In addition, the facility will be providing feedback to prescribing practitioners on antibiotic use, antibiotic resistance patterns and prescribing patterns as necessary.

Attachments:

1. CDC: The Core Elements of Antibiotic Stewardship for Nursing Homes:

<https://www.cdc.gov/longtermcare/pdfs/core-elements-antibiotic-stewardship.pdf>

2. CDC: The Core Elements of Antibiotic Stewardship for Nursing Homes: Appendix A: Policy and Practice Actions to Improve Antibiotic Use:

<https://www.cdc.gov/longtermcare/pdfs/core-elements-antibiotic-stewardship-appendix-a.pdf>

Training References

- CMS State Operations Manual, Appendix PP – Guidance to Surveyors for Long Term Care Facilities. Accessed on August 28, 2017 from:
<https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Downloads/Advance-Appendix-PP-Including-Phase-2-.pdf>
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<https://www.ahrq.gov/nhguide/index.html>
- Centers for Disease Control and Prevention. (2013). Antibiotic resistance threats in the United States, 2013. Accessed on August 28, 2017 from
<https://www.cdc.gov/drugresistance/pdf/ar-threats-2013-508.pdf>
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