

## Antibiotic Stewardship Policy

### POLICY:

This facility's antibiotic stewardship program promotes the appropriate use of antibiotics and a system of monitoring to improve resident outcomes and reduce 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 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 facility will develop an Antibiotic Stewardship Program that promotes appropriate use of antibiotics for quality of care, successful resident outcomes and reduction of potential adverse consequences related to antibiotic use. A collaborative effort between the resident/resident representative, interdisciplinary team, 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

### DEFINITIONS:

**"Antibiotic"**: a medication used to treat bacterial infections. They are not effective for infections caused by viruses (e.g., influenza or most cases of bronchitis).

**"Antibiogram"**: "Antibiograms are important tools for health care professionals involved in prescribing empiric antibiotics for suspected bacterial infections. These tools utilize microbiologic data from resident specimens from a nursing facility to estimate prevalence of

antibiotic susceptibilities for common bacterial pathogens. They are also an important component of monitoring trends in antimicrobial resistance within a nursing home.”

“**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. This can be accomplished through improving antibiotic prescribing, administration, and management practices thus reducing inappropriate use to ensure that residents receive the right antibiotic for the right indication, dose, and duration.

“**Clostridium difficile infection (C. difficile or CDI)**”: an infection from a bacterium that causes colitis, an inflammation of the colon, causing diarrhea.

“**Colonization**”: the presence of microorganisms on or within body sites without detectable host immune response, cellular damage, or clinical expression.

“**Methicillin-resistant Staphylococcus aureus (MRSA)**” (a.k.a. Oxacillin-resistant Staphylococcus aureus): Staphylococcus aureus bacteria that are resistant to treatment with one of the semi-synthetic penicillins (e.g., Oxacillin/Nafcillin/Methicillin).

“**Multidrug-Resistant Organisms (MDROs)**”: microorganisms, predominantly bacteria, that are resistant to one or more classes of antimicrobial agents. Although the names of certain MDROs describe resistance to only one agent, these pathogens are frequently resistant to most available antimicrobial agents and include multidrug-resistant gram negative bacteria (GNB), Carbapenem-resistant Enterobacteriaceae (CRE), and extended spectrum beta-lactamase-producing Enterobacteriaceae (ESBLs).

“**Vancomycin resistant enterococcus (VRE)**”: species of enterococcus which have developed resistance to the antibiotic, vancomycin.

#### **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 **(Insert facility identified/approved tools: i.e. Loeb Minimum Criteria, McGeer Contitutional Criteria, AHRQ-UTI SBAR, etc.)** 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 appropriate 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
  - 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. Assist prescribing practitioners in choosing the right antibiotic using antibiograms (**Recommend using AHRQ Toolkit: <https://www.ahrq.gov/nhguide/toolkits/help-clinicians-choose-the-right-antibiotic/index.html> )**
  - f. 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.

## References

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