

Maximizing Efforts Dedicated to Antimicrobial Leadership and Stewardship

Program for Antimicrobial Stewardship Programs

Objectives



- Describe the importance of developing and implementing an antibiotic stewardship program.
- Explain the Maximizing Efforts Dedicated to Antimicrobial Leadership and Stewardship (MEDALS) Program for Long-Term Care Facilities (LTCF).

Background

- Penicillin was discovered in 1928 by Alexander Fleming.
- Antimicrobial resistance has become a worldwide concern.
- Antimicrobial resistance is considered one of the top five health threats.
- Antibiotics are among the most frequently prescribed medications in nursing homes.
- Studies have shown that 40–75% of antibiotics prescribed in nursing homes may be unnecessary or inappropriate.
- More than 2.8 million illnesses and 35,000 deaths are related to antibiotic resistance.
- The national average for prescribing antibiotics is 709 per 1,000 population, while West Virginia has 1,184 per 1,000 population identifying West Virginia as having the highest outpatient antibiotic prescribing rate in the nation.

The Bad Side of a Good Drug

Antibiotics:

- Increase risk of getting an antibiotic-resistant infection.
- Kill healthy bacteria in the gut and allow more harmful bacteria to grow such as *Clostridium difficile*.
- Are the most frequent cause of adverse drug events leading to emergency department (ED) visits in children.
- Diminishes the function of the microbiome creating long term effects
- Adverse reactions to antibiotics cause one out of five ED visits.

Remember...

- Antibiotics are given for bacterial infections and will not cure viral infections such as colds or flu.

- The purpose of the MEDALS Program for antimicrobial stewardship is to recognize facilities that have elements in place to support an antimicrobial stewardship program (ASP) and are working to improve antibiotic use and infection prevention practices.
- ASP plays an important role in healthcare including reducing the development of multidrug-resistant organisms (MDROs).

Why participate?



- Receive recognition for commitment to antibiotic stewardship, and infection prevention and control by receiving a “Certificate of Achievement”.
- Resource manuals that include audit tools, practice guidelines, patient education, and educational curriculums.
- One-on-one consultation to provide technical assistance, etc.
- Access to stewardship expertise.

Bronze Level

Bronze level activities include:

- Commitment letter from leadership.
- Antibiotic Stewardship Committee that includes Executive level, Pharmacy Director, and physician champion.
- Participate in a preventive infection control assessment (ICAR) conducted by state HAI AR Staff.
- Conduct one facility-wide Project Firstline (PFL) training.
- Conduct one facility-wide antibiotic stewardship/ antimicrobial resistance training including healthcare personnel, residents, and families.

Silver Level

Silver level activities include:

- All Bronze level activities.
- Monthly training relative to antimicrobial resistance and/or Infection Prevention.
- Implement a hand hygiene program with competency, validation, audit, and feedback.
- Implement monitoring and tracking of antibiotic use.
 - Clinical assessment documentation (signs/symptoms, vital signs, and exam findings).
 - Prescribing documentation (dose, duration, and indication).
- Quarterly PFL training using PFL curriculum.

Gold Level

Gold level activities include:

- All Bronze and Silver activities.
- Monitor and provide feedback of antibiotic use including:
 - Rates of new antibiotic starts/1,000 resident-days.
 - Antibiotic days of therapy/1,000 resident-days.
- Monitor facility-specific outcomes and provide feedback including:
 - C- difficile rates.
 - Antibiotic-resistant organisms (CRE, CRAB, CRPA).
- One person from facility to complete the Centers for Disease and Control and Prevention's (CDC) Antibiotic Training Course on the TRAIN Website.
- One person from facility to complete CDC Infection Prevention Training.
- Conduct quarterly Infection Prevention training specific to environmental services staff.

Platinum Level

Platinum level activities include:

- All Bronze, Silver, and Gold activities.
- Review antibiotic susceptibility patterns (antibiogram).
- Distribute quarterly provider feedback for antibiotic use.
- Participate in one infection prevention/antibiotic collaborative.

Resources for Implementation



- Agency for Healthcare Research and Quality.
- CDC Antibiotic Stewardship for Nursing Homes.
- CDC Train.
- Project Firstline.
- West Virginia Office of Epidemiology and Prevention Services.

Verification of Activities

- Onsite visit with ICAR team and MEDALS coordinator.
- Supporting documents.

Registration



- Facilities will be able to request to participate in the program through an online Google form. On the form, the facility will request at which level they would like to be evaluated.
- Form is available via the OEPS MEDALS webpage.
 - <https://oeeps.wv.gov/au/Pages/medals.aspx>

Sources

- www.cdc.gov/antibiotic-use/data/report-2022.html.
- www.cdc.gov/longtermcare/prevention/antibiotic-stewardship.html.

Contact



West Virginia Department of Health
Bureau for Public Health
Office of Epidemiology and Prevention Services
Division of Healthcare Quality, Promotion, Prevention & Response
500 Summers St.
Charleston, WV 25301
Phone: 304-558-5358
Email: OEPSMDRO@wv.gov