



Antibiotic Stewardship Initiatives in a Long-term Care Setting

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Objectives

1. Describe strategies for implementing an antibiotic stewardship program in a rural long-term care setting.
2. Describe effective ways to promote collaboration between key stakeholders to implement best practices surrounding an effective antibiotic stewardship program.
3. Discuss how infection prevention measures and appropriate diagnostic testing can help reduce unnecessary antibiotic exposures.

Introduction

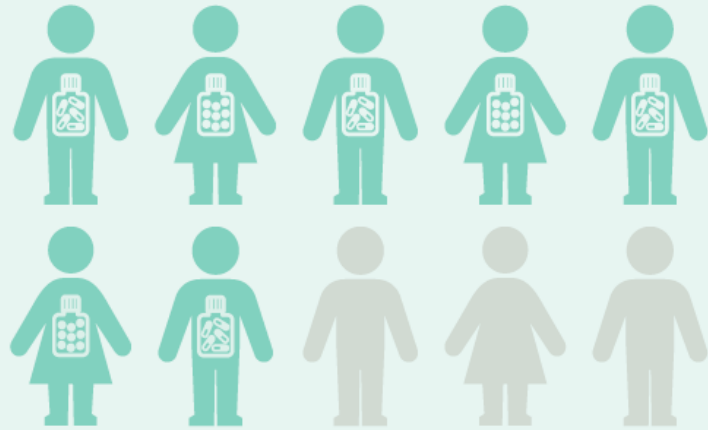
- The Minnesota Department of Veterans Affairs (MDVA) Silver Bay Veterans Home is a **54-bed facility** on the beautiful shores of Lake Superior.
- We have **four households** with two of them being secured memory care.
- We have **collaborative relationship with a local healthcare system**: A clinic and lab services within the community (Monday-Thursdays) and their critical access hospital with lab services that is 26 miles away. Clinic phlebotomist comes to the facility on a scheduled basis to obtain lab specimens.
- We have a **Certified Nurse Practitioner (CNP)** who works closely with our MDVA Medical Director and our facility rounding physician from our local healthcare system.
- We received the MDH 2024-2025 Collaboration **Gold Honor Roll Award** for our antibiotic stewardship program.

What is Antibiotic Stewardship?

“...a set of commitments and actions designed to optimize the treatment of infections while reducing the adverse events associated with antibiotic use.”

-Centers for Disease Control and Prevention

Why is antibiotic stewardship important?



UP TO **70%**
of nursing home residents
received antibiotics during a year



UP TO **75%**
of antibiotics are
prescribed incorrectly



CDC Antibiotic Resistance Threats in the U.S. Report 2021-2022

- Each year, over 2.8 million people in the United States become infected with an antibiotic-resistant (AR) bacteria. (2)
- Of those over 35K people die each year because of these antimicrobial resistant infections. (2)
- While *C. difficile* isn't usually resistant, it is associated with antibiotic use. In the U.S., it is reported in the AR Threats Report *C. diff* exceeds over 200k infections and 13K deaths annually. (2)
- The estimated national cost to treat infections caused by antimicrobial-resistant germs frequently found in health care can be more the \$4.6 billion annually. (3)

MDVA Silver Bay Veterans Home Antibiotic Resistance and our Stewardship Program

Built around the CDC Core Elements for Antibiotic Stewardship in Long-term Care

- Leadership Commitment
- Accountability
- Drug Expertise
- Action
- Tracking
- Reporting
- Education

LEADERSHIP AND ACCOUNTABILITY



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CDC Core Elements for Antibiotic Stewardship in LTC

LEADERSHIP COMMITMENT AND ACCOUNTABILITY

- MDVA provides strong leadership support of antibiotic stewardship with strong partnerships with our Medical Director, Senior Leadership, Facility Administration and Nursing Leadership.
- We have a MDVA system antibiotic stewardship program (ASP) policy that clearly identifies best practice procedures within all our MDVA facilities that supports and drives our program.
- Our facility specific ASP committee is responsible for promoting and overseeing the antibiotic stewardship activities within our facility. We meet to review our antibiotic, antiviral, and antifungal use along with our prescribing trends. Our committee membership includes our Medical Director, Infection Preventionist, CNP, Consultative Pharmacist, ADON, and DON.

DRUG EXPERTISE

CDC Core Elements for Antibiotic Stewardship in LTC

DRUG EXPERTISE

We are fortunate to have a strong provider group and consultative pharmacist to assist us in stewardship work.



Dr. Ercan-Fang, Medical Director



Paulina Chalupsky, CNP



Matt Just, Consultative Pharmacist

ACTION

CDC Core Elements for Antibiotic Stewardship in LTC

ACTION

- A strong Infection Prevention Program is critical in reducing antibiotic exposures
- Supporting staff members compliance with infection prevention measures is the key to success
- Ongoing auditing of best practices and sharing the results with frontline staff is an important strategy.
- Infection prevention auditing plans should match areas of opportunity identified in the Infection Prevention Risk Assessment process
 - Some examples of auditing opportunities: Hand Hygiene, Enhanced and Transmission Based Precautions, Medication Administration, Environmental Cleaning, Device Management, etc.....

CDC Core Elements for Antibiotic Stewardship in LTC

ACTION

- It is important that staff know what to do when they recognize something is not quite right with the resident but not clear on what is wrong?
- An assessment pause needs to be done to determine if these changes suggest a potential infection versus other possible reasons.
 - Some common examples: “Residents with confusion with dark foul-smelling urine”
 - Confusion could be related to many possible factors when caring for the elderly.
 - Dark colored odorous urine can be related to many different things (diet, dehydration, medications, etc....)
- We have recently implemented the Infection Prevention Module in our electronic medical record to optimize clinical assessments and provider communication using the McGeer’s criteria.

CDC Core Elements for Antibiotic Stewardship in LTC ACTION

Create New Case

Case

Facility*
Minnesota Veterans Home - ...

Resident*
| 🔍

Signs And Symptoms Onset Date*
03/11/2026 📅

Case Status*
⚠️ Suspected ⓘ

Infection

Infection
Unknown

Infection Category:
Other

Signs And Symptoms

Infection Site

Organism (Select up to 3)

Infection Type

Isolation and Precautions

Isolation Requirement*

Isolation Precaution

Reference Information

Etiology

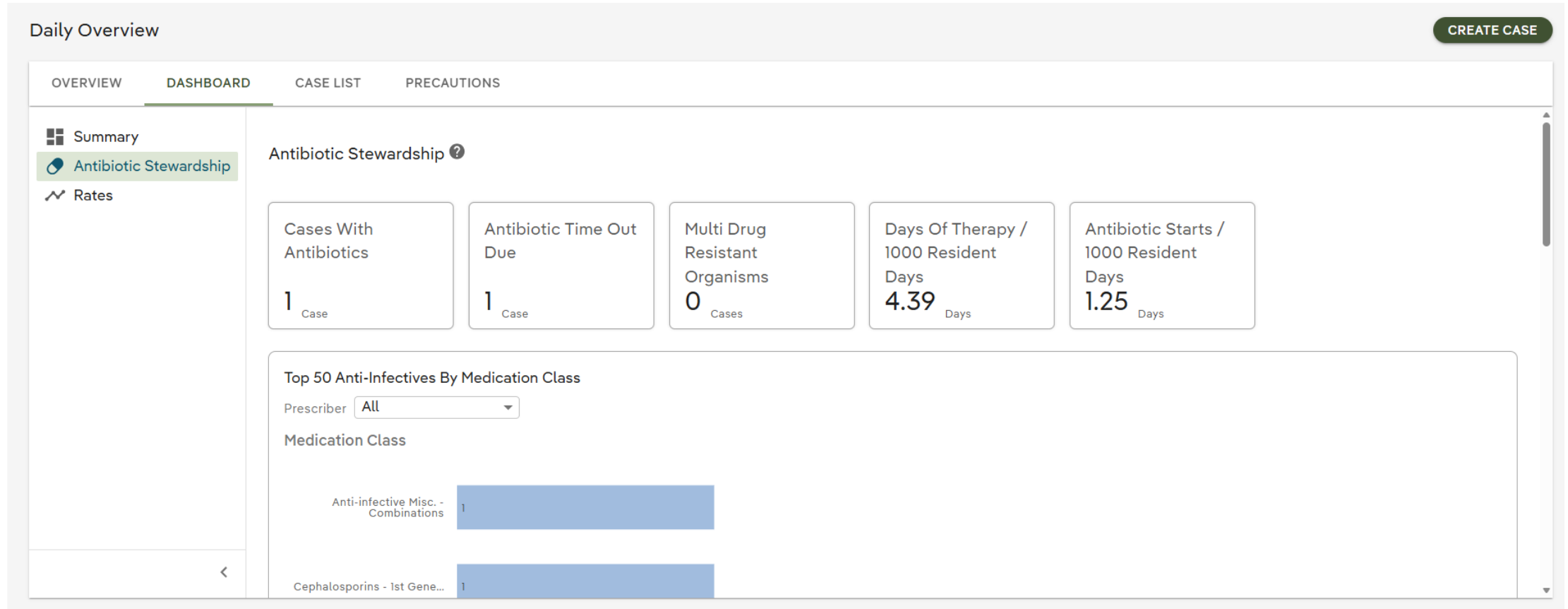
Prophylactic Treatment

Comments

0/255 * Comments entered in this field are not part of the legal record

SAVE CANCEL

CDC Core Elements for Antibiotic Stewardship in LTC ACTION



CDC Core Elements for Antibiotic Stewardship in LTC

ACTION

- If resident's clinical presentation indicates and diagnostic cultures are ordered, culture collection optimally should be obtained prior to starting antibiotics and collected appropriately to ensure your results are accurate.
- Staff education is critical for the staff obtaining cultures. This will help ensure culture results are accurate.
- Accurate culture results supports optimal utilization of antibiotics.
- Obtaining and communicating timely culture results help in adjusting antibiotics, potentially narrowing our antibiotic therapy from the usual broad-spectrum antibiotics that are often prescribed empirically.

CDC Core Elements for Antibiotic Stewardship in LTC

ACTION

When antibiotics are indicated:

- Ordering provide must ensure that the antibiotic duration is appropriate for the resident's diagnosis.
- Antibiotic orders need to include type of infection being treated, (i.e., UTI, PNE, SKIN, etc..) and the antibiotic stop date are included in every order.
- Antibiotic Review (“Time-Out”) after 2-3 days to re-evaluated resident and review diagnostic test results.
 - Are antibiotics still indicated?
 - Do we have a good bug/drug match based on culture sensitivity results?
 - Are we able to adjust antibiotics to an antibiotic with narrower spectrum or a drug with fewer side effects?

TRACKING

CDC Core Elements for Antibiotic Stewardship in LTC

TRACKING

- We use the MDH ICAR Antibiotic Tracking Tool for capturing our infection and antibiotic use data.
- We review this tracking tool along with our antifungal and antiviral tracking tool at our ASP committee meeting
- PCC IP Module can assist with tracking. We may eventually move to this tracking method as we work to successfully implement this module, and we have validated new process for accuracy. (Work in Progress)

REPORTING

CDC Core Elements for Antibiotic Stewardship in LTC

REPORTING

Our antibiotic stewardship initiatives are reported through our Quality Assurance and Performance Improvement (QAPI) Process

Data shared includes review of our Infection Prevention program goals along with our:

- Infection rates
- Infection trends
- Antibiotic starts
- Antibiotic time out completion rates
- Antibiotic utilization rate
- Total day of antibiotic therapy

EDUCATION



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EDUCATION

Education (Residents and Resident Representatives)

- Our Infection Preventionist writes an **annual education article** for our Resident/Resident representative's monthly newsletter for Antibiotic Awareness Week which is November 18-24.
 - Example: Do You Need Antibiotics? Information about antibiotics for nursing home residents and their families
- Realtime conversations happen when residents and their representatives if antibiotics are requested when not clinically indicated. We focus these **collaborative conversations** on the importance of proper antibiotic usage and the potential risks when antibiotics are not utilized correctly.

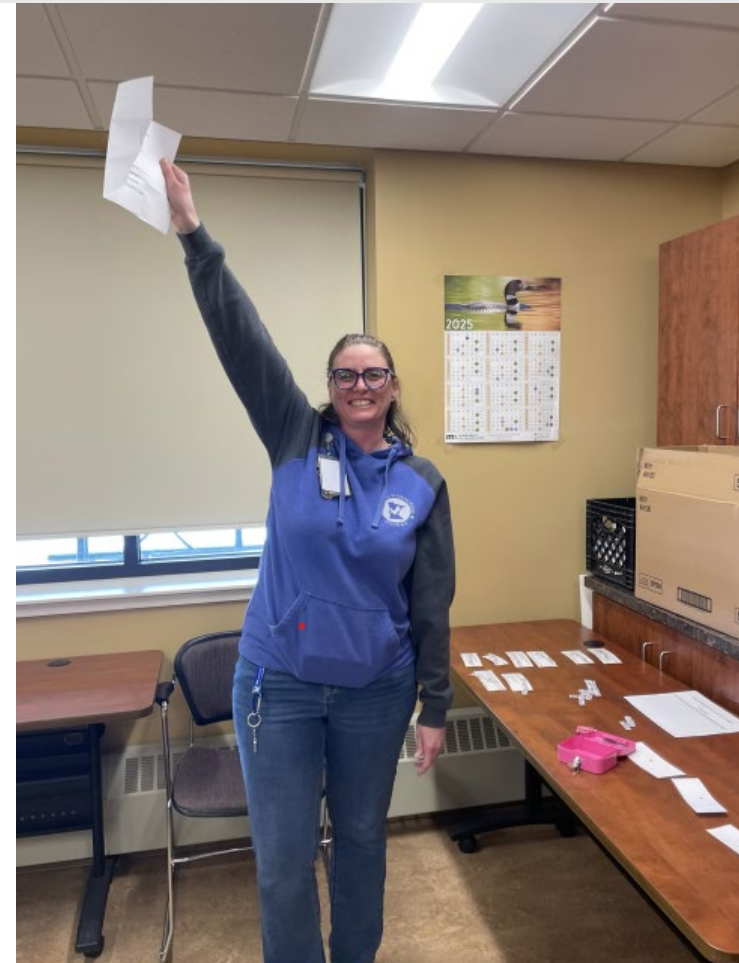
CDC Core Elements for Antibiotic Stewardship in LTC

EDUCATION

Education (MDVA Staff)

- Antibiotic Stewardship education is provided to all staff annually within our facility.
- This education includes the information surrounding the clinical decision making and utilization along with the risks related to not utilizing antibiotics correctly.
- This year we are doing an Infection Prevention Escape Room for our annual education. In our antibiotic stewardship station, staff need to look at resident clinical scenarios and work as a team to determine which scenarios should be treated with antibiotics and which ones should not be treated. If they chose correctly and figure out the code, they are then able to exit the Antibiotic Stewardship station to move to the next IP Escape Room topic.

CDC Core Elements for Antibiotic Stewardship in LTC EDUCATION



COLLABORATION IS KEY TO SUCCESS



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**Residents &
families**

**TEAMWORK
FOR SAFETY**



**Pharmaceutical
experts**

Our Antibiotic Stewardship Team Members



Direct caregivers



**Leadership
support**



LTC staff



QUESTIONS?

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Thank you!



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