

Antimicrobial Stewardship in Long-Term Care Facilities Maryland Train the Trainer Program

A collaboration between

*University of Maryland School of Pharmacy, Peter Lamy Center on Drug Therapy and Aging,
and Maryland Department of Health*

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Summit Objectives

- ✓ Provide a general overview of the CDC Core Elements of Antibiotic Stewardship in Long-Term Care Facilities
- ✓ Introduce the Maryland Train the Trainer program – review goals and expected outcomes of program participation
- ✓ Understand challenges to effective stewardship in long-term care facilities (LTCFs) and describe potential solutions to overcome these challenges
- ✓ Discuss strategies for program implementation for an antimicrobial stewardship intervention
- ✓ Describe collaborative strategies for health care professionals to optimize antimicrobial stewardship outcomes in LTCFs

Summit Agenda

8:45 – 9:00: Welcome & Introduction to the Antimicrobial Stewardship in LTCF Maryland Collaborative

- *Nicole Brandt, PharmD, MBA*

9:00 – 10:00: The CDC Core Elements for Antimicrobial Stewardship in LTCFs and Building the Stewardship Dream Team

- *Lucy Wilson, MD, ScM; Nicole Brandt, PharmD, MBA; Sarah Kabbani, MD, MSc*

10:00 – 11:00: Regulatory Issues and LTCF Survey Implications

- *Bill Vaughan, RN; Jennifer Hardesty, PharmD*

11:00 – 12:15: Clinical Overview: Microbiology, Antibigrams and Anti-Infective Basics 101

- *J. Kristie Johnson, PhD; Kim Claeys, PharmD; Emily Heil, PharmD*

12:15 – 1:00: Lunch/ Break

1:00 – 1:45: Clinical Overview: Urinary Tract Infections and Asymptomatic Bacteriuria

- *Surbhi Leekha, MBBS, MS*

1:45 – 2:30: Adverse Drug Events and Trigger Tool Prototype Introduction

- *Barbra Zarowitz, PharmD*

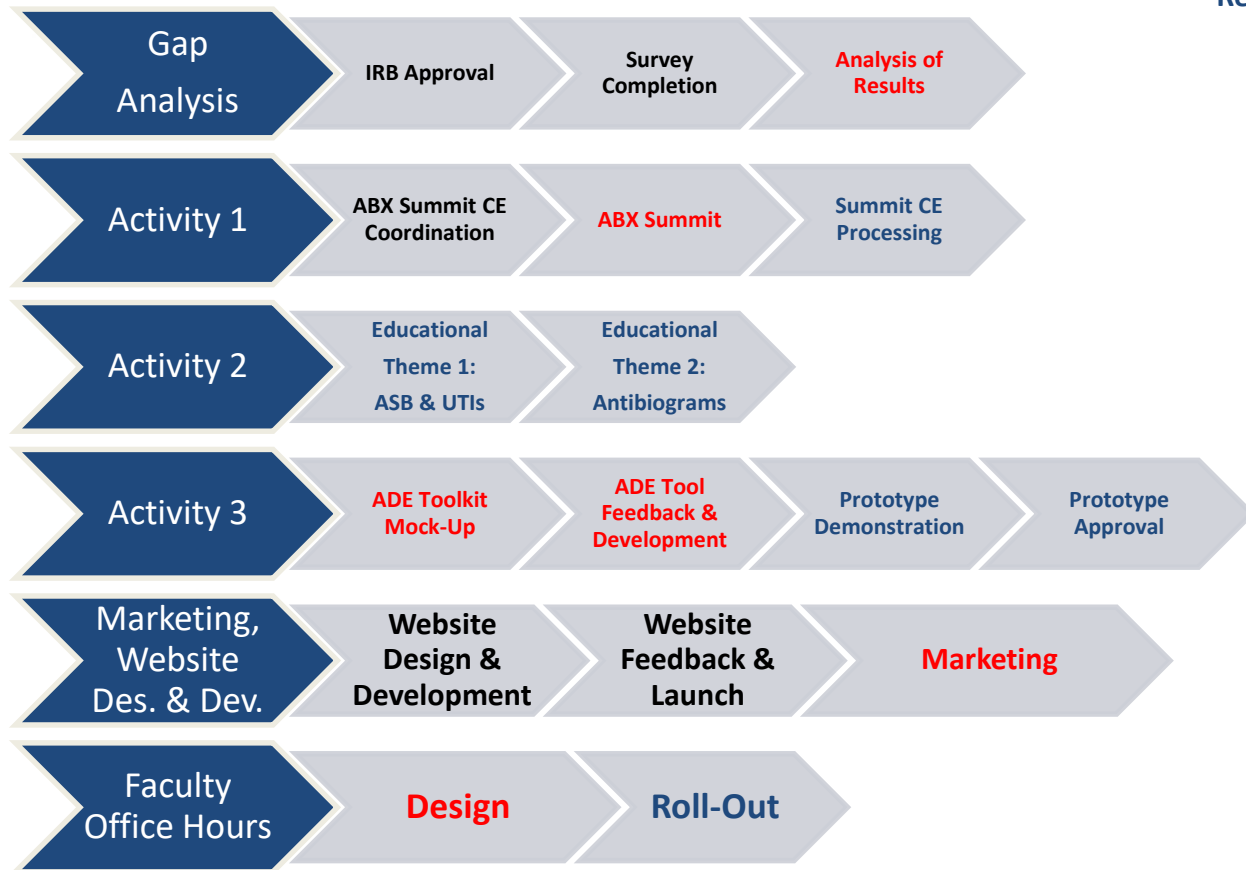
2:30 – 4:00: Getting Started: Implementation Strategies Workshop

- *Group Facilitators*

4:00: Closing announcements and next steps

Grant Activities

- In Progress
- Completed Activities
- Remaining Activities



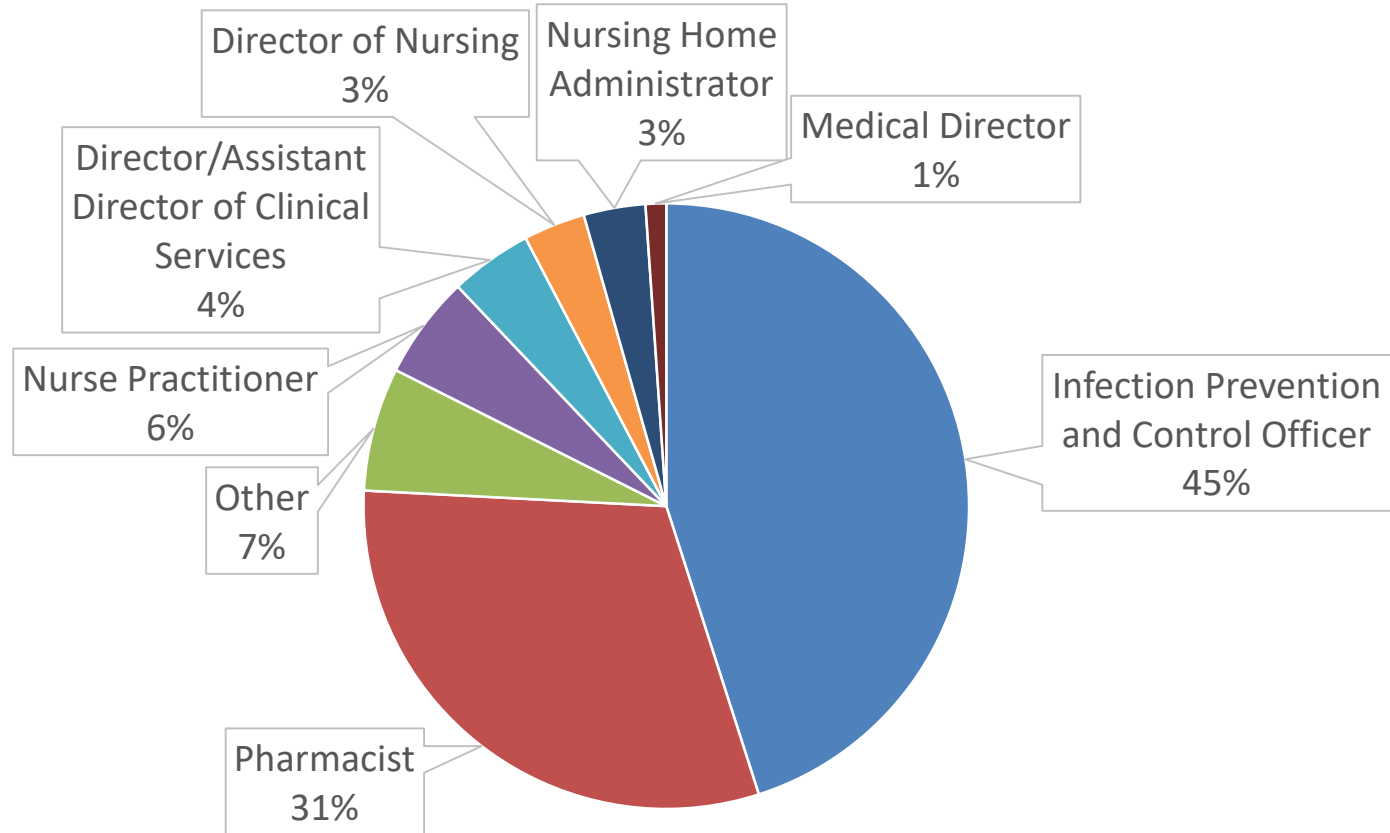
TEAM MEMBERS

- **Special THANK you to:**
 - Maryland Department of Health
 - Centers for Disease Control
 - Health Quality Innovators
 - Think Research
 - University of Maryland Team &
 - All of You

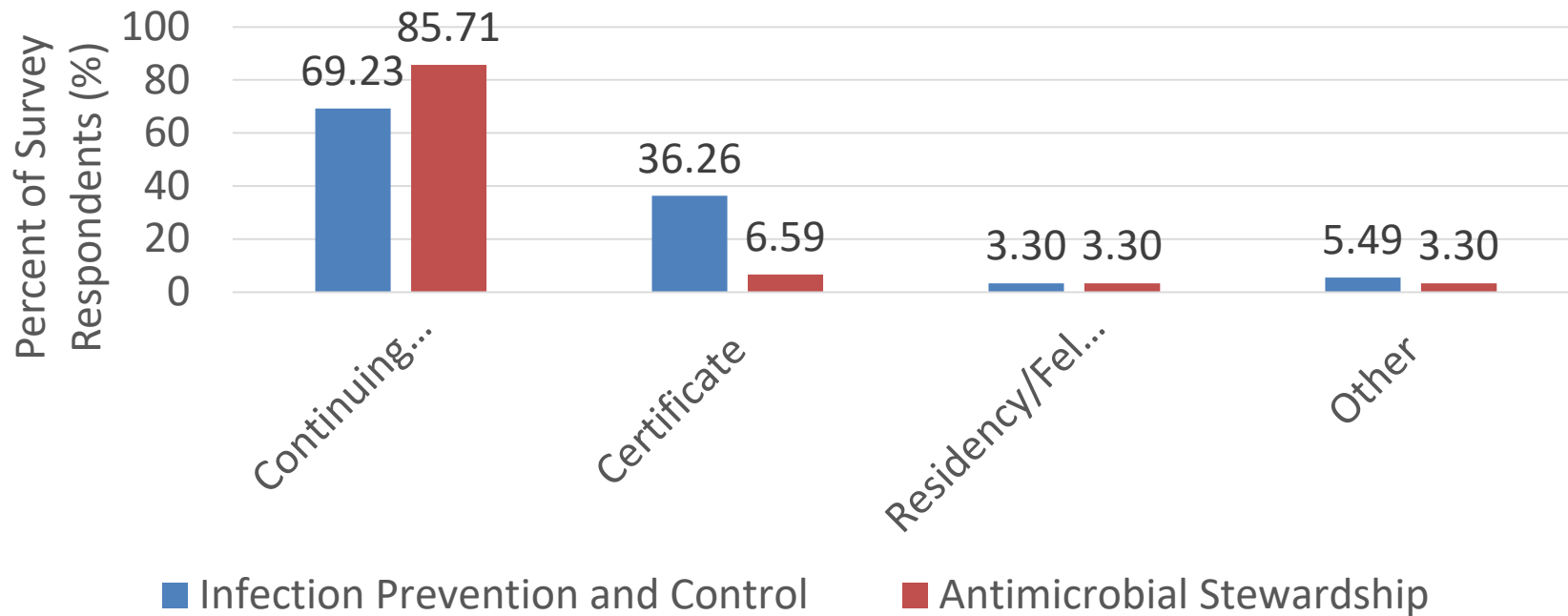
Gap Analysis

**Overview provided by
Rachyl Fornaro, PharmD Candidate 2019**

Respondent Demographics



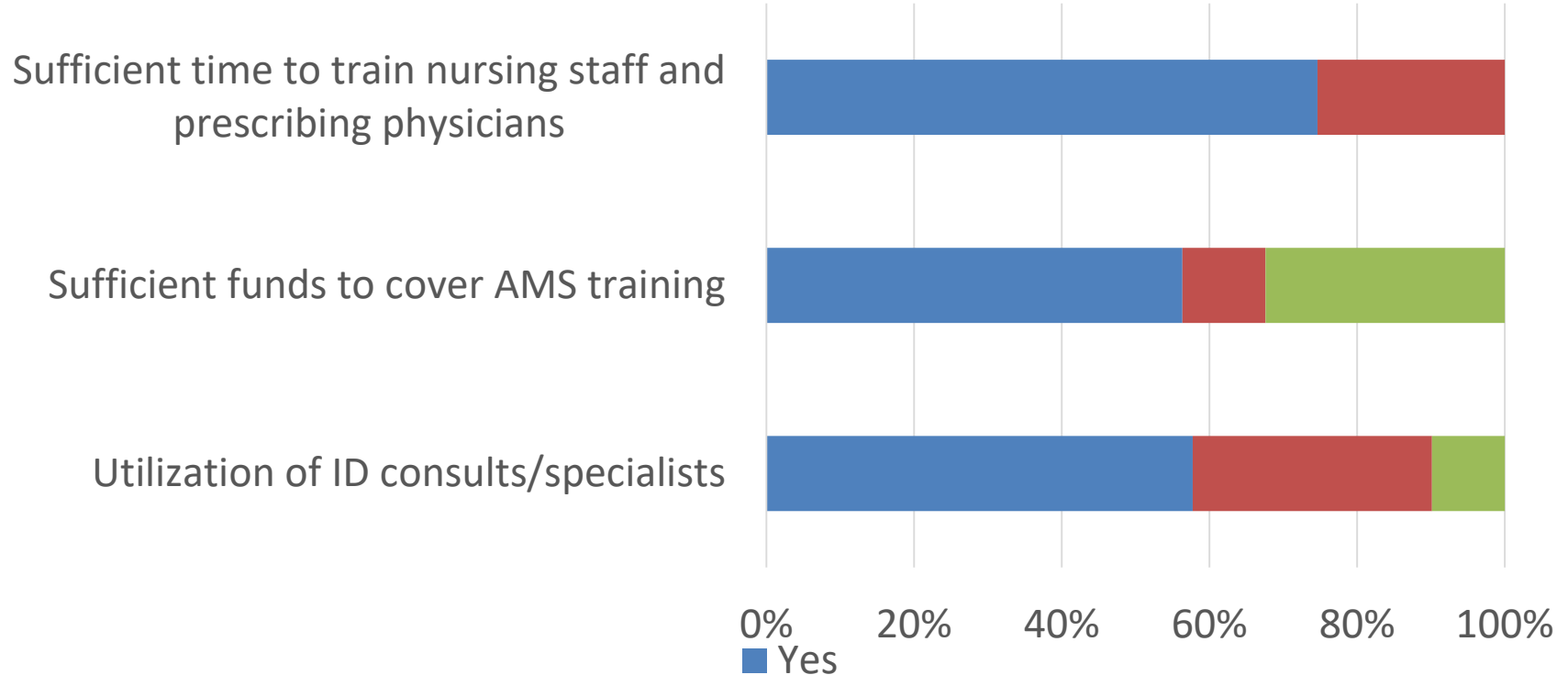
Respondent Demographics: Infection Prevention and Control Training vs. Antimicrobial Stewardship



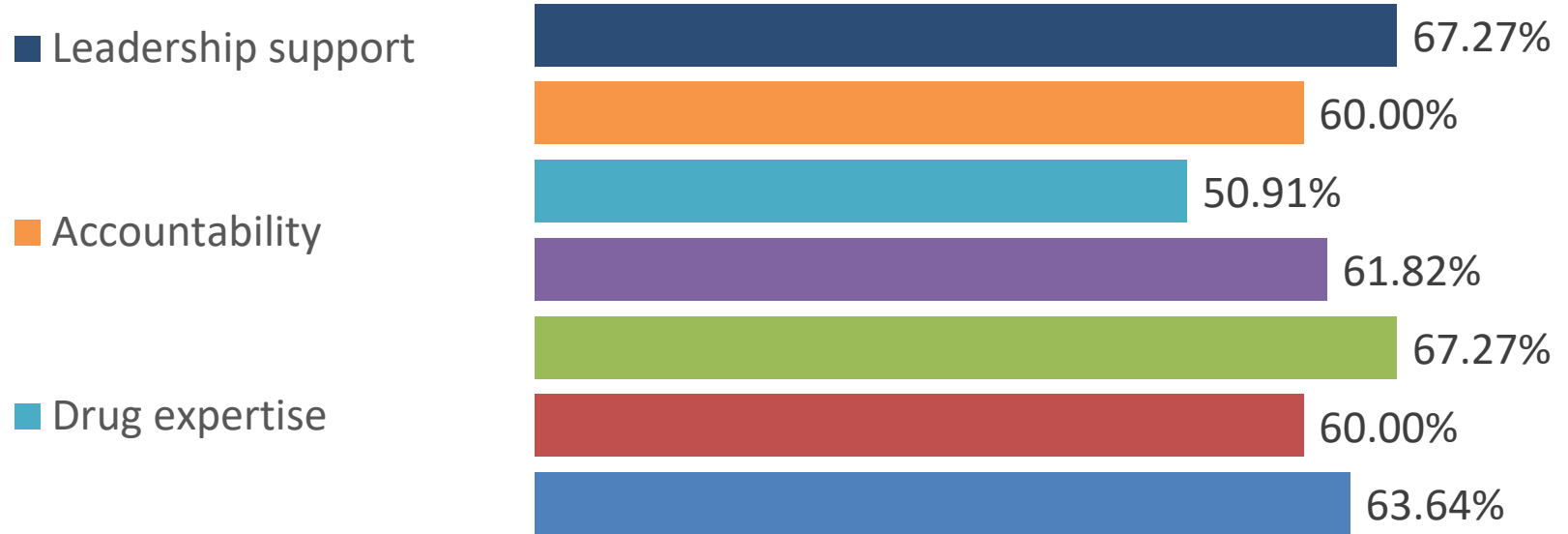
Ownership Type of Facility	Number of Respondents	Percentage (%)
For profit	52	59.77
Government	4	4.60
Non-profit	31	35.63
Number of Beds in Facility	Number of Respondents	Percentage (%)
0-99	30	34.48
100-199	46	52.87
≥200	11	12.6
Number of Staff in Facility	Number of Respondents	Percentage (%)
0-50	19	26.76
51-99	13	18.31
100-199	21	29.58
200-499	13	18.31
≥500	5	7.04
Nurse Staffing Hours/Resident/Day	Number of Respondents	Percentage (%)
0-3	28	39.44
4-7	19	26.76
>8	24	33.80

Facility Demographics

Current Practices: Potential Barriers to Implementing Antimicrobial Stewardship



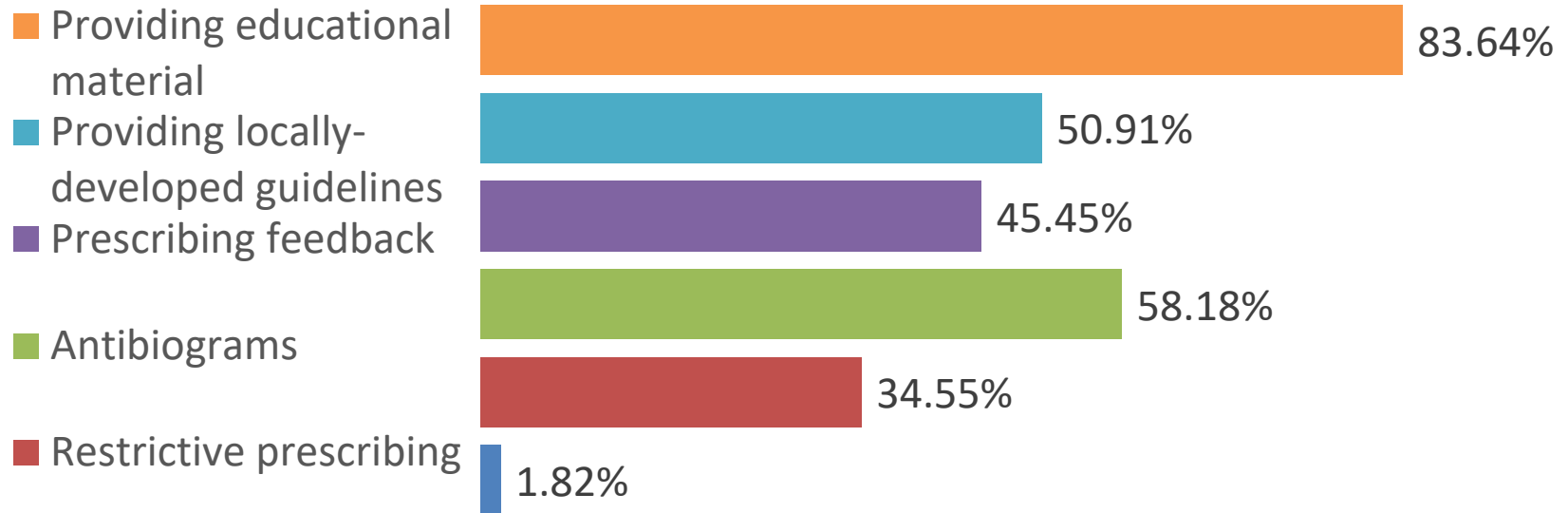
Current Practices: Implementation of CDC Core Elements



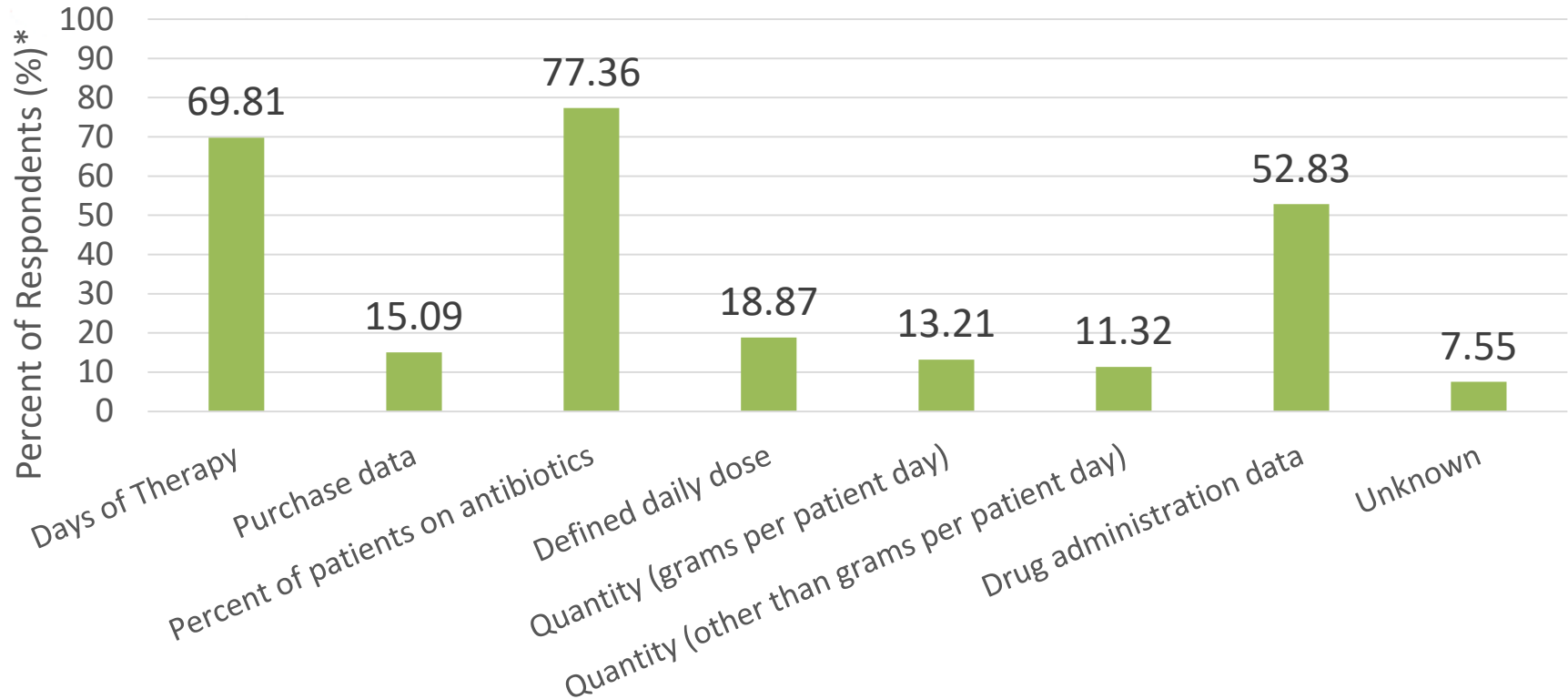
Source: [CDC Core Elements for Antimicrobial Stewardship in Nursing Homes](#).

Of note, five respondents (9.09%) indicated that their facility has not yet implemented any of the Core Elements. Ten respondents (18.18%) indicated that they did not know whether their facility has implemented the Core Elements.

Current Practices: Implementation of Strategies to Improve Antimicrobial Use

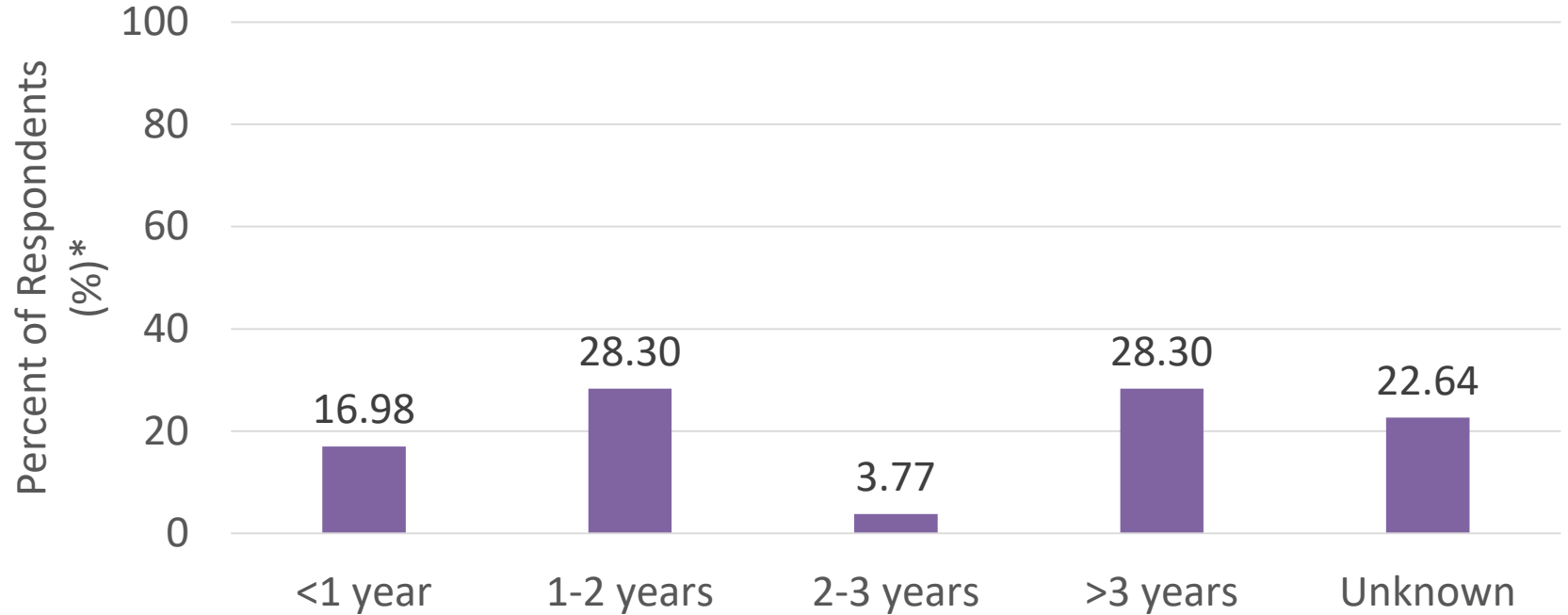


Data Collection: Types Antibiotic Use Data



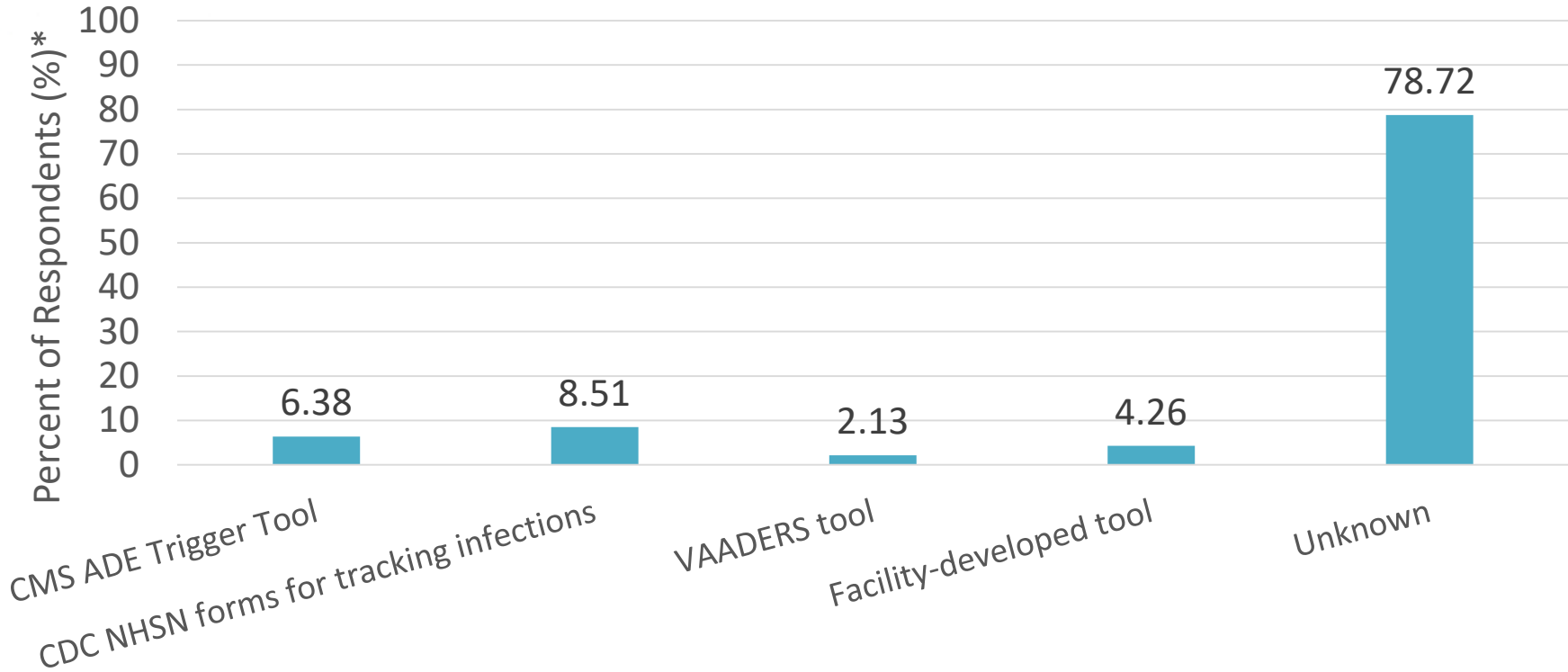
**53 respondents answered "yes" or "unknown" when asked whether their facility collects antibiotic use data. These individuals provided the above information.*

Data Collection: Duration of Antibiotic Use Data Collection



**53 respondents answered “yes” or “unknown” when asked whether their facility collects antibiotic use data. These individuals provided the above information.*

Data Collection: Adverse Event Data Collection Tools



CMS: Centers for Medicare and Medicaid; ADE: Adverse Drug Event; CDC: Centers for Disease Control and Prevention; NHSN: National Healthcare Safety Network; VAADERS: Veteran's Affairs Adverse Drug Event Reporting.

*47 respondents answered "yes" or "unknown" when asked whether their facility collects data about adverse events. These individuals provided the above information.

AHRQ Safety Program for Improving Antibiotic Use

- Collaborative intervention: JHH, AHRQ, NORC
- Overarching goal
 - To improve antibiotic prescribing practices by promoting communication and culture change and to assist facilities in implementing effective stewardship programs.
- What does the program address?
 - **Technical aspects**
 - Best practice in antibiotic prescribing for common infectious diseases syndromes in long term care (UTIs, respiratory disease, skin/soft tissue infections)
 - **Adaptive aspects**
 - Safety culture, behavior change, teamwork and communication



Participating in the AHRQ Safety Program

- One-year program begins in December 2018
- **FREE TO PARTICIPATE**
- Participation **satisfies CMS requirements**
- Facilities with and without existing stewardship programs are welcome to join
- Continuing medical education (CME) credits and continuing education units (CEU) are free and available for physicians and nurses



To Learn More and Enroll

- Visit [our Web site:](https://safetyprogram4antibioticstewardship.org/)
 - <https://safetyprogram4antibioticstewardship.org/>
- Complete the online application on the Web site
- Email antibioticsafety@norc.org with any questions





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End of Day Wrap Up: Next Steps

Take Home Points for Implementation

- A clear, measurable aim
- A measurement framework in support of reaching the aim
- A clear description of the
 - Ideas (content) and how these ideas are expected to impact the results (the causal pathway from changes to desired outcomes)
 - Execution strategy (what will be done to ensure reliable adoption of the content?)
- Dedication to rapid testing (PDSA cycles), prediction, and learning from tests

Future Considerations and Reflection

- How would you apply what you have learned to your work?
- What are the concepts that made you think differently than before and why?
- What's your greatest “take away” learning from this session?
 - Why?

Resources

<https://www.pharmacy.umaryland.edu/centers/lamy/education/antimicrobial-stewardship/resources/>



Suspected UTI SBAR

Complete this form before contacting the resident's physician.

Date/Time _____

Nursing Home Name _____

Resident Name _____ Date of Birth _____

Physician/NP/PA _____ Phone _____

Nurse _____ Fax _____

Submitted by ☐ Phone ☐ Fax ☐ In Person ☐ Other _____ Facility Phone _____

A Situation

I am contacting you about a suspected UTI for the above resident.

Vital Signs BP _____ / _____ HR _____ Resp. rate _____ Temp. _____

B Background

Active diagnoses or other symptoms (especially bladder/kidney/genitourinary conditions)

Specify _____

☐ No ☐ Yes The resident has an indwelling catheter

☐ No ☐ Yes Patient is on dialysis

☐ No ☐ Yes The resident is incontinent. If yes, new/worsening? ☐ No ☐ Yes

☐ No ☐ Yes Advance directives for limiting treatment related to antibiotics and/or hospitalizations

Specify _____

☐ No ☐ Yes Medication Allergies

Specify _____

☐ No ☐ Yes The resident is on Warfarin (Coumadin®)

Infection Prevention, Control & Immunizations

Infection Control: This facility task must be used to investigate compliance at F880, F881, and F883. For the purpose of this task, "staff" includes employees, consultants, contractors, volunteers, and others who provide care and services to residents on behalf of the facility. The Infection Prevention and Control Program (IPCP) program must be facility-wide and include all departments and contracted services. If a specific care area concern is identified, it should be evaluated under the specific care area, such as for pressure ulcers, respiratory care, catheter care, and medication pass observations which include central lines, peripheral IV's, and oral/IM/respiratory medications.

Coordination:

- ☐ One surveyor coordinates the facility task to review for:
 - The overall Infection Prevention and Control Program (IPCP);
 - The annual review of the IPCP policies and practices;
 - The review of the surveillance and antibiotic stewardship programs; and
 - Tracking influenza/pneumococcal immunization of residents.
- ☐ Team assignments must be made to include the review of:
 - Laundry services;
 - A resident on transmission-based precautions, if any;
 - Five sampled residents for influenza/pneumococcal immunizations; and
 - Other care-specific observations if concerns are identified.
- ☐ Every surveyor assesses IPCP compliance throughout the survey and communicates any concerns to the team.

Hand Hygiene:

- ☐ Staff implement standard precautions (e.g., hand hygiene and the appropriate use of personal protective equipment (PPE)).
- ☐ Appropriate hand hygiene practices are followed.
- ☐ Alcohol-based hand rub (ABHR) is readily accessible and placed in appropriate locations. These may include:
 - Entrances to resident rooms;
 - At the bedside (as appropriate for resident population);
 - In individual pocket-sized containers by healthcare personnel;
 - Staff work stations; and
 - Other convenient locations.
- ☐ Staff wash hands with soap and water when their hands are visibly soiled (e.g., blood, body fluids), or after caring for a resident with known or suspected C. difficile infection (CDI) or norovirus during an outbreak, or if endemic rates of CDI are high. ABHR is not appropriate to use under these circumstances.
- ☐ Staff perform hand hygiene (even if gloves are used) in the following situations:
 - Before and after contact with the resident;

Webinars and Faculty Office Hours

- Monthly Zoom Webinars starting in October 2018 to follow-up on summit activities and next steps.
 - Dates **TBD**
- Enduring Programs will be available starting January 2019 at:
<https://www.pharmacy.umaryland.edu/centers/lamy/education/antimicrobial-stewardship/educational-opportunities/>
- Faculty Office Hours will be available to compliment the additional educational tools and materials starting in January 2019.

Continuing Education Credits

- An Evaluation link will be sent out via email after the summit.
- You MUST complete the evaluation in order to receive CE credits. After completing the evaluation:
 - **Nurses** – will receive CE certificate via email from UMSOM within 2- 4weeks
 - **Pharmacists** – credits will be posted to the CPE Monitor within 30 days of activity completion.
 - **Physicians** – will be contacted by UMSOM within a few days of completing the activity evaluation.

THANK YOU!

Questions or Comments?

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