

# 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 Mental Health and Hygiene*

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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

**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, Antibiograms and Anti-Infective Basics 101

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

**12:15 – 1:15:** Lunch/ Break

**1:15 – 2:00:** Clinical Overview: Urinary Tract Infections and Asymptomatic Bacteriuria

- *Surbhi Leekha, MBBS, MS*

**2:00 – 2:30:** Adverse Drug Events and Trigger Tool Prototype Introduction

- *Barbra Zarowitz, PharmD*

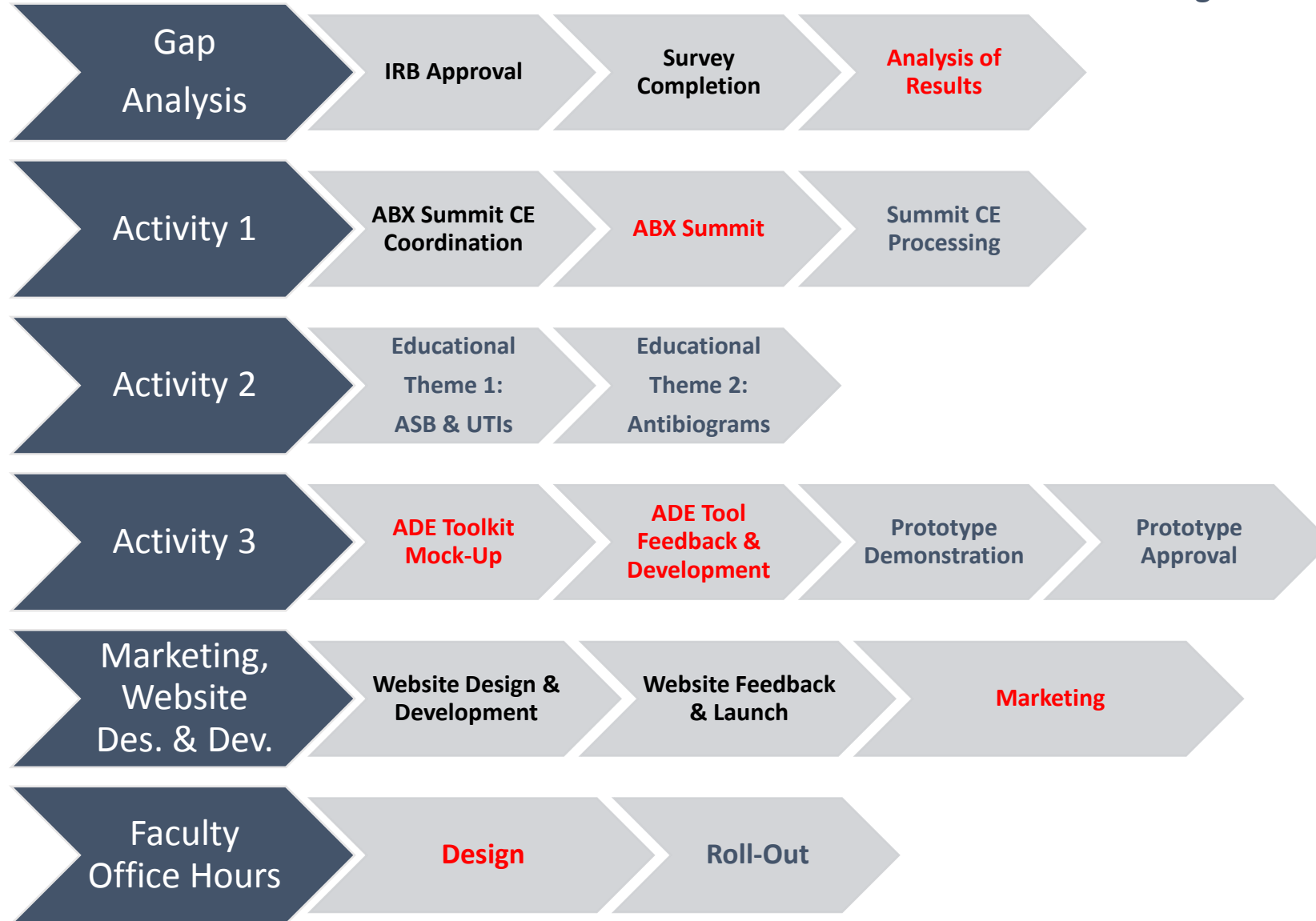
**2:30 – 4:00:** Getting Started: Implementation Strategies Workshop

- *Group Facilitators*

**4:00:** Closing announcements and next steps

# Grant Activities

- In Progress
- Completed Activities
- Remaining Activities

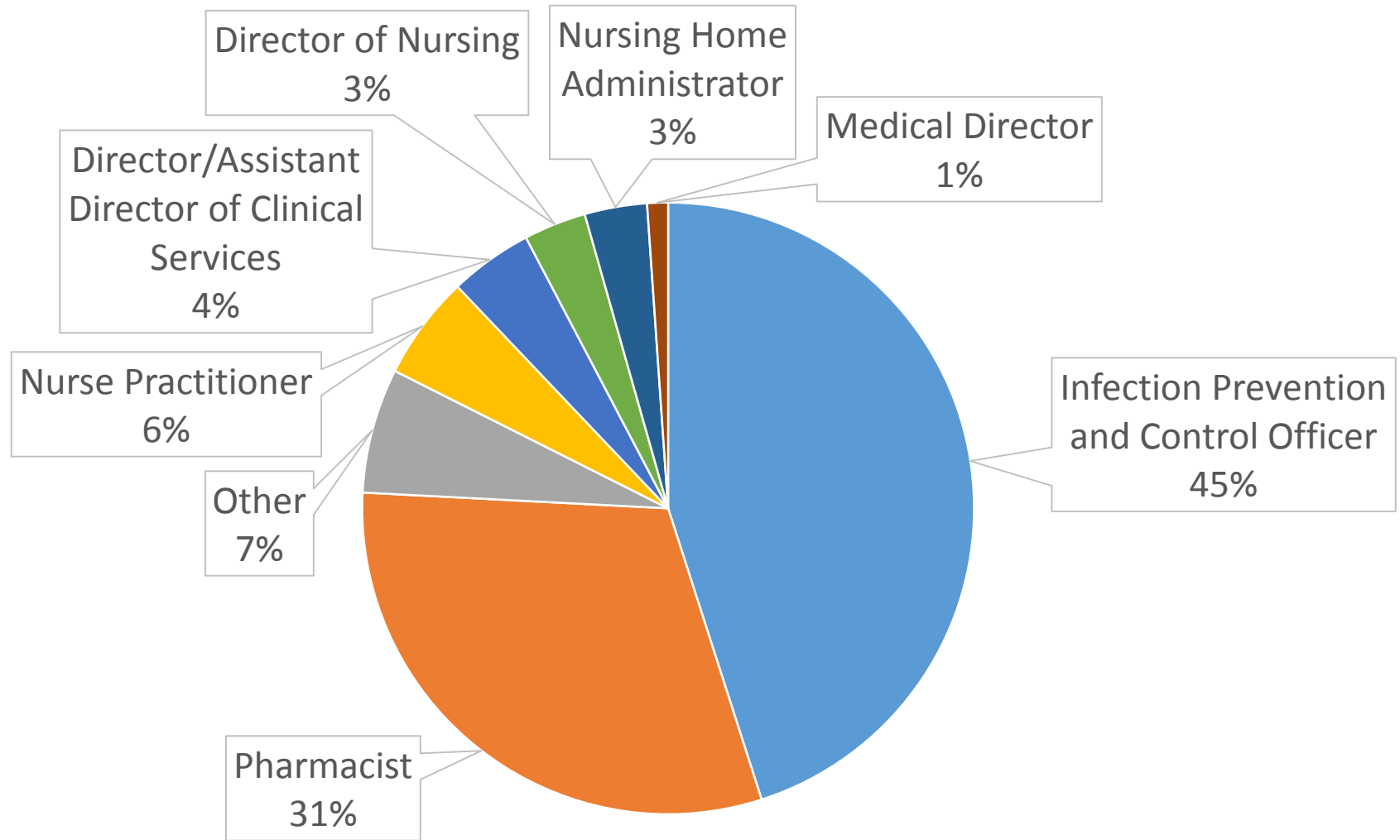


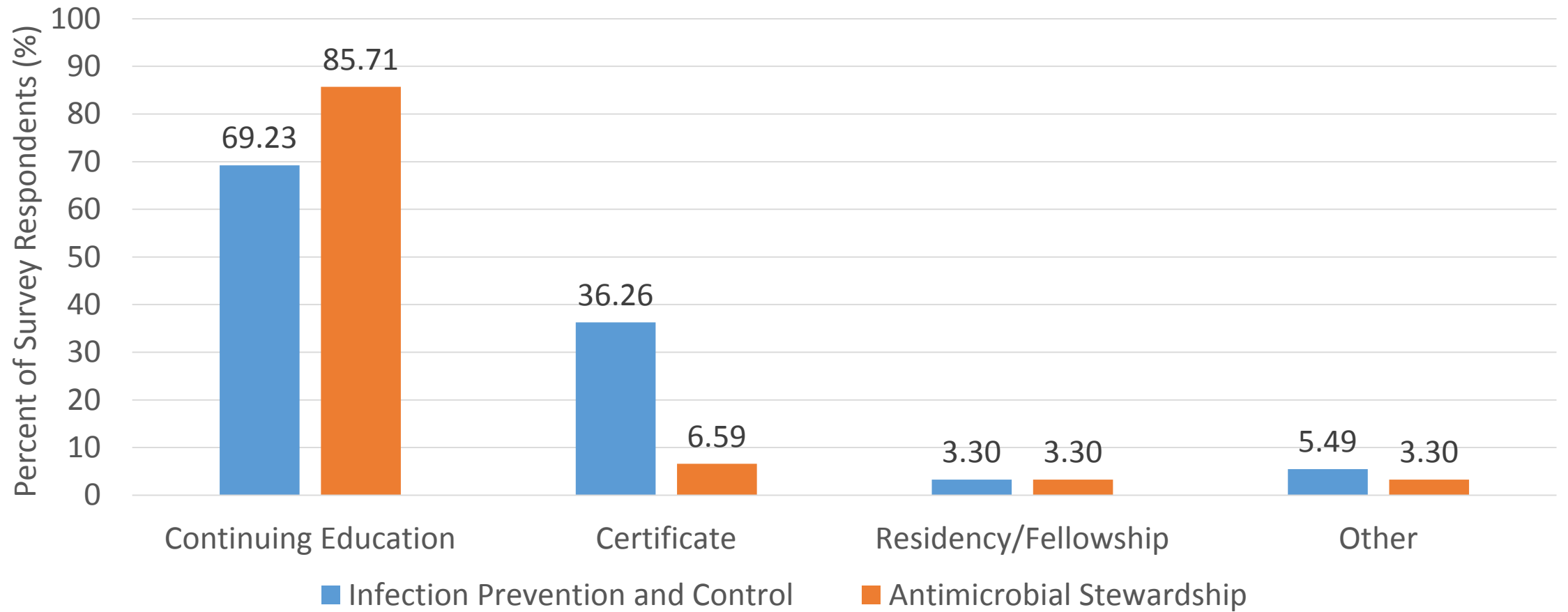
# Team Members

- **Nicole Brandt, PharmD, MBA, BCGP, BCPP, FASCP** Executive Director, The Peter Lamy Center for Drug Therapy and Aging, Professor, Pharmacy Practice and Science
- **Kimberly Claeys, PharmD, BCPS** Assistant Professor, Pharmacy Practice and Science
- **Rachyl Fornaro** Fourth-Year Pharmacy Student
- **Emily Heil, PharmD, BCPS-AQ ID** Assistant Professor, Pharmacy Practice and Science
- **Christine Khouri, PharmD** Clinical Quality Specialist, Think Research
- **Daniel Mansour, PharmD, BCGP, FASCP** Interprofessional Clinical Coordinator, The Peter Lamy Center for Drug Therapy and Aging
- **Barbra Zarowitz, PharmD, FCCP, FCCM, BCPS, BCGP, FASCP** Geriatric Pharmacotherapy and Clinical Research Consultant
- **Richard Brooks, MD, MPH**, Maryland Department of Health
- **Lucy Wilson, M.D., Sc.M.** Chief, Center for Surveillance, Infection Prevention and Outbreak Response

# Gap Analysis

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







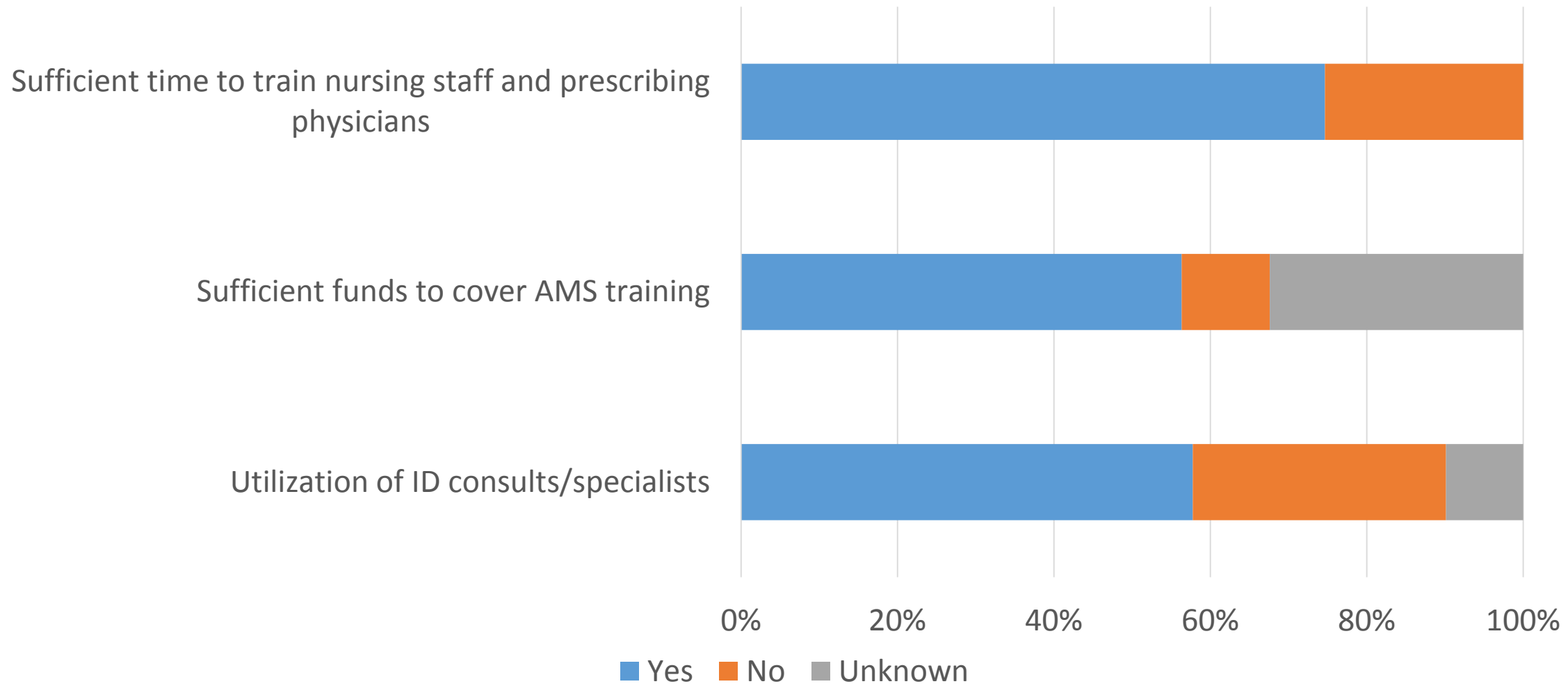
Ownership Type of Facility	Number of Respondents	Percentage (%)
For profit	52	59.77
Government	4	4.60
Non-profit	31	35.63

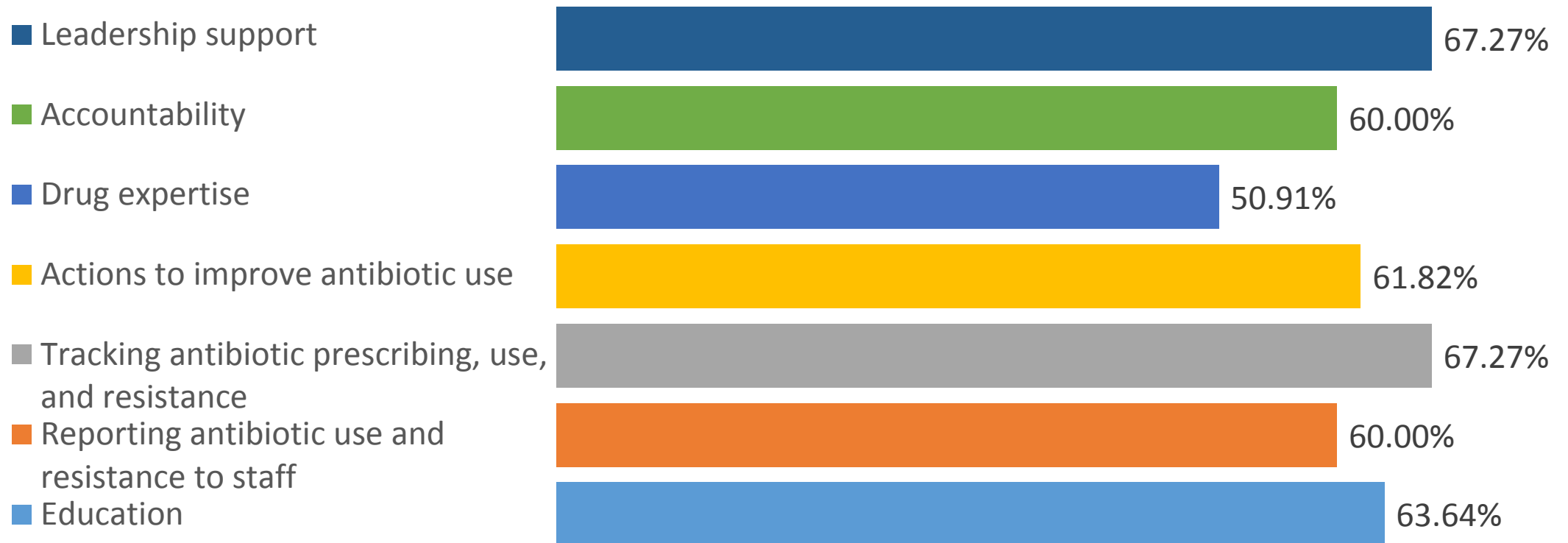
Number of Beds in Facility	Number of Respondents	Percentage (%)
0-99	30	34.48
100-199	46	52.87
≥200	11	12.6

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

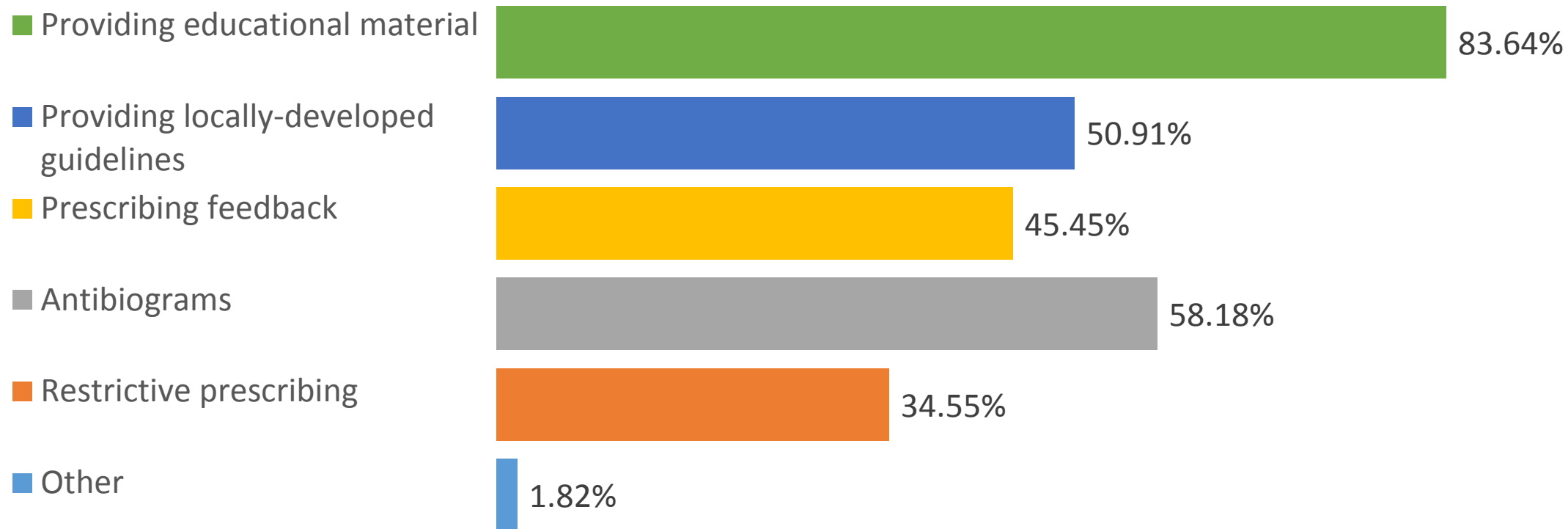
# Facility Demographics

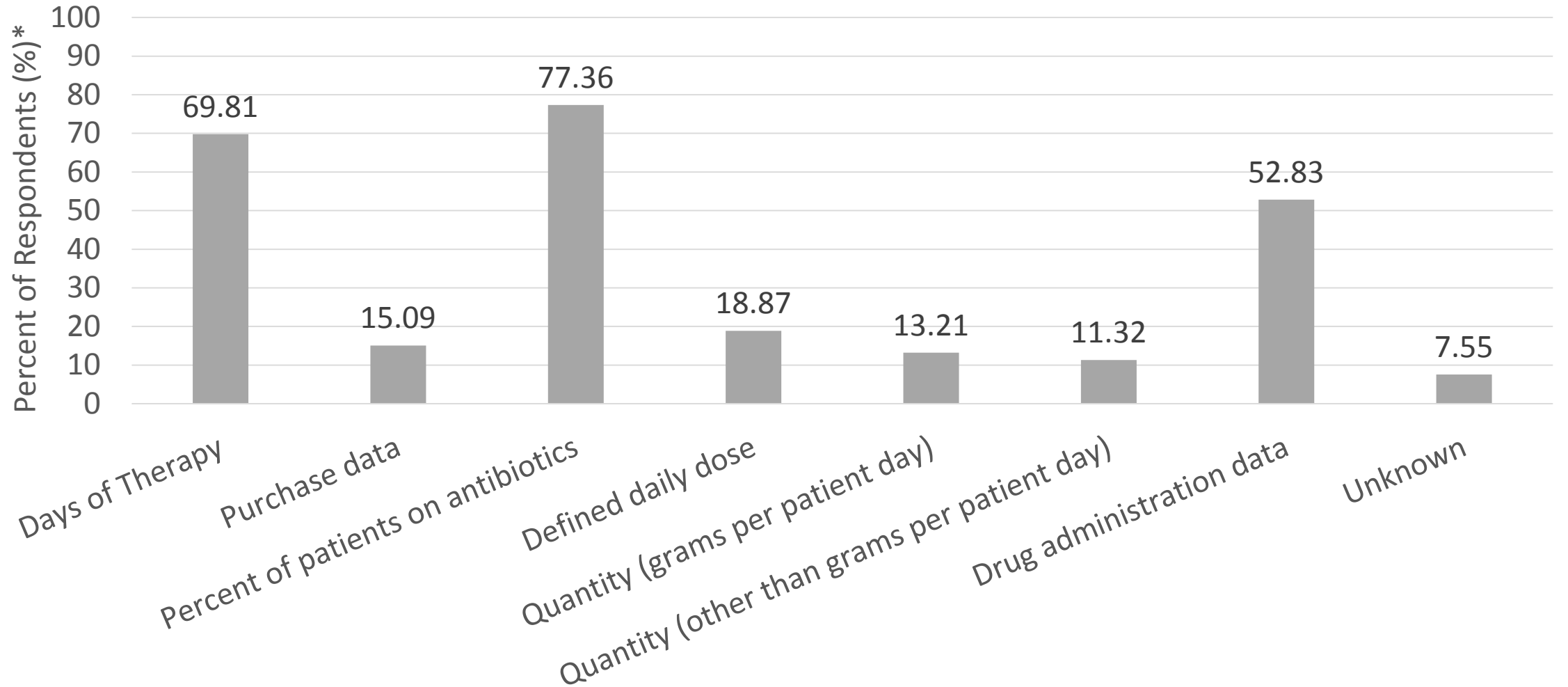




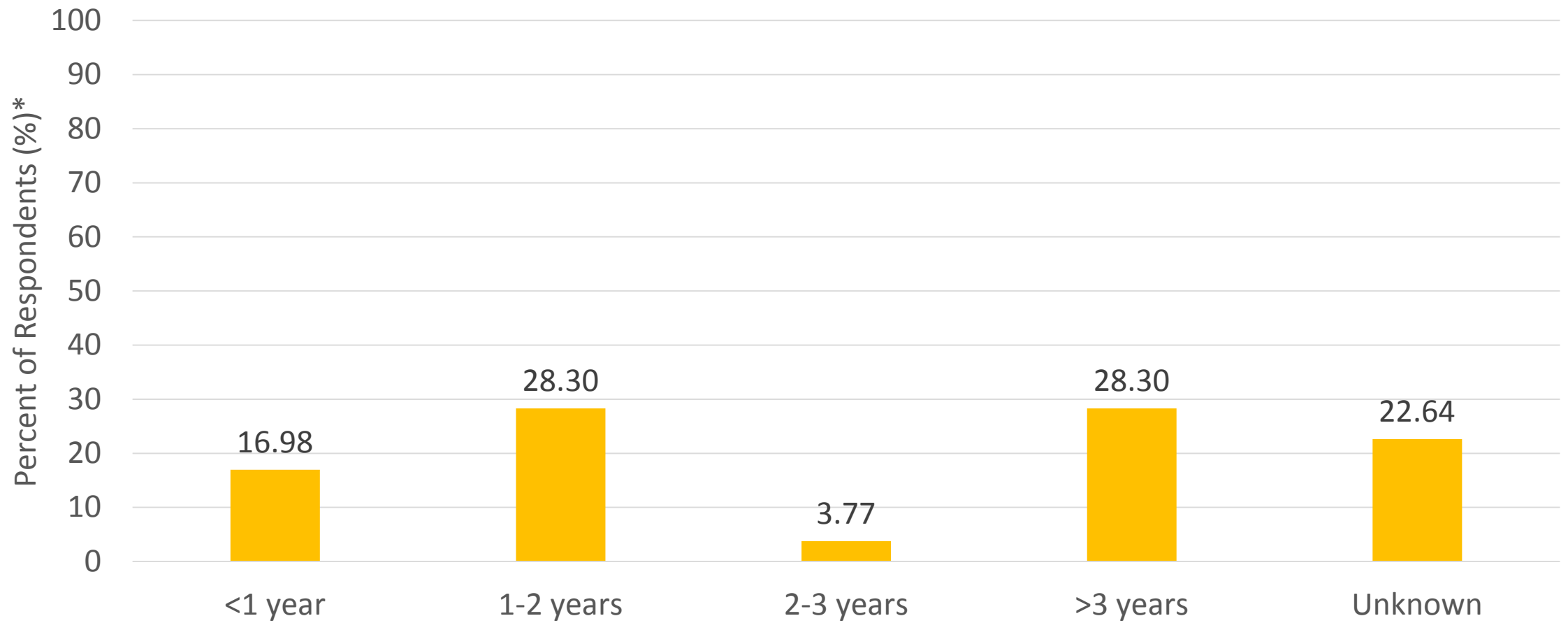
Source: [CDC Core Elements for Antimicrobial Stewardship in Nursing Homes](#).

*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.*

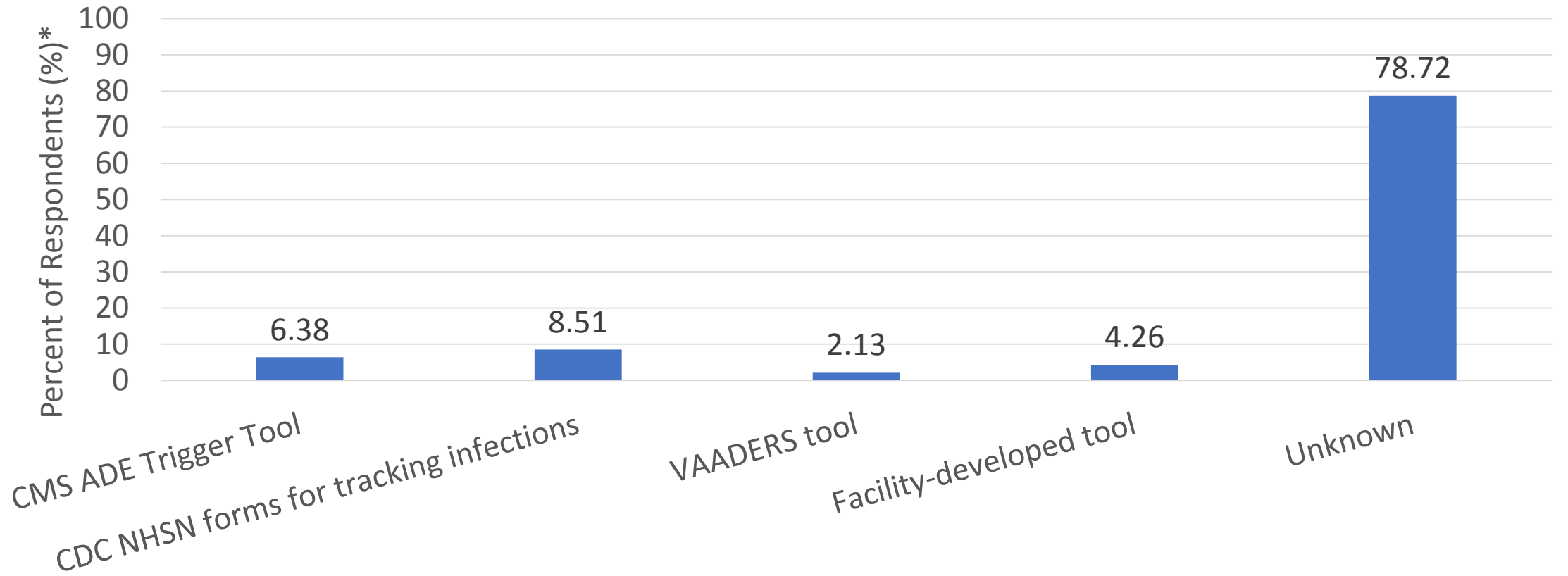




*\*53 respondents answered “yes” or “unknown” when asked whether their facility collects antibiotic use data. These individuals provided the above information.*



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*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.*

# End of Day Wrap Up: Next Steps



# Resources

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

**MED-PASS**  
Designing Solutions For Senior Care

FOR HELP Call 800-438-8884 or email us M-F between 8am - 6:30pm EST

Enter Search Keyword

Long-Term Care | Pharmacy | Home Health | Hospice | Assisted Living | Heaton Manuals | ASCP | Supplies/Branding

Long-Term Care/Assisted Living: Medicare Beneficiary Notices

Home Health/Hospice: Patient Information Handbooks

Senior Care Pharmacy: Updated Policies & Procedures Manual for Long-Term Care Pharmacy Operations

The Core Elements of Antibiotic Stewardship for Nursing Homes CHECKLIST

National Center for Emerging and Zoonotic Infectious Diseases  
Division of Healthcare Quality Promotion

CS27376-A

### 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 \_\_\_\_\_

Fax \_\_\_\_\_

Nurse \_\_\_\_\_ Facility Phone \_\_\_\_\_

Submitted by  Phone  Fax  In Person  Other \_\_\_\_\_

**S 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®)

www.ahrq.gov/NH-ASPGuide · June 2014  
AHRQ Pub. No. 14-0010-2-EF

### 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 IVs, 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;

CMG-20054 (5/2017)

# Webinars and Faculty Office Hours

# 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 UMSON within 2-4weeks
  - **Pharmacists** – credits will be posted to the CPE Monitor within 30 days of activity completion.
  - **Physicians** – will complete an online profile and receive two emails; a confirmation email and an email from CME office to claim CME credits.

# 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?