Antimicrobial Stewardship Gap Analysis Tool

Antimicrobial Stewardship Strategies	Antimicrobial Stewardship Strategy Audit
Action Step: Identify antimicrobial stewardship champions	
A physician serves as antimicrobial stewardship (AS) champion to support following clinical practice guidelines for antimicrobial prescribing	□ **Yes;** name and position: _____ □ **No** (if checked, complete questions below) Barriers: ⟶ Action Steps to Address Barriers:
Nursing leadership serves as an AS champion to promote nursing assessment, documentation, and communication in antimicrobial stewardship activities	□ **Yes;** name and position: _____ □ **No** (if checked, complete questions below) Barriers: ⟶ Action Steps to Address Barriers:
A coordinator is assigned to oversee AS activities	□ **Yes;** name and position: _____ □ **No** (if checked, complete questions below) Barriers: ⟶ Action Steps to Address Barriers:
Senior leadership is supportive of AS activities	□ **Yes;** name(s) and position(s): _____ How is support demonstrated? □ **No** (if checked, complete questions below) Barriers: ⟶ Action Steps to Address Barriers:

Action Step: Incorporate antimicrobial stewardship issues into a committee/workgroup (Antimicrobial Stewardship Team)	
A committee/workgroup (Antimicrobial Stewardship [AS] Team) is identified to incorporate AS issues	□ **Yes**; □ AS Team formed □ Existing committee/workgroup:_____ Identify committee membership: □ AS champion(s) pharmacist □ Consulting or in-house □ Nursing leadership □ Quality improvement □ AS Coordinator □ LTCF infection preventionist □ Senior leadership □ Information technologist □ Other: (e.g. members of collaborating hospital's AS Team, microbiology representative): _____ □ **No** <u>Barriers:</u> ⟶ <u>Action Steps to Address Barriers:</u>
AS Team develops and communicates roles and responsibilities about antimicrobial stewardship for facility stakeholders	□ **Yes;** describe: □ AS Team roles and responsibilities have been developed and are documented below: <u>AS Team Member Name/Role:</u> <u>Responsibilities:</u> □ AS Team roles and responsibilities are communicated to facility stakeholders as described below: □ **No** (if checked, complete questions below) <u>Barriers:</u> ⟶ <u>Action Steps to Address Barriers:</u>
AS Team members have dedicated time for AS activities	□ **Yes;** describe**:** □ **No** (if checked, complete questions below) <u>Barriers:</u> ⟶ <u>Action Steps to Address Barriers:</u>
The facility explores quality improvement- and resident safety-related grant funding opportunities that could incorporate AS activities	□ **Yes;** describe**:** □ **No** (if checked, complete questions below) <u>Barriers:</u> ⟶ <u>Action Steps to Address Barriers:</u>

AS Team regularly reviews antimicrobial use summaries/reports	☐ **Yes;** describe the review process, including the types of summaries/reports, and the frequency of review: ☐ **No** Barriers: ⟶　　　　　　Action Steps to Address Barriers:
The consulting or in-house pharmacist is engaged in AS activities, particularly antimicrobial measurement	☐ **Yes;** name of pharmacist: _____ 　　Role: ☐ Consulting pharmacist ☐ In-house pharmacist ☐ **No** Barriers: ⟶　　　　　　Action Steps to Address Barriers:
Nursing leadership/nursing champion regularly communicates AS progress to nursing assistants and nurses • Progress may include improved shift change hand-offs, compliance with use of Situation–Background–Assessment– Request (SBAR) form, infection rates, communication and documentation of nursing assessments, etc.	☐ **Yes;** describe the communication process, including the frequency of communication: ☐ **No** Barriers: ⟶　　　　　　Action Steps to Address Barriers:
Medical director/physician champion regularly communicates AS progress to licensed providers in the facility • Consider communicating aggregate and/or individual antimicrobial use results to providers	☐ **Yes;** describe the communication process, including the frequency of communication: ☐ **No** Barriers: ⟶　　　　　　Action Steps to Address Barriers:
Medical director/physician champion communicates aggregate and/or individual antimicrobial use results to providers	☐ **Yes;** describe the communication process, including the regularity of communication: ☐ **No** Barriers: ⟶　　　　　　Action Steps to Address Barriers:

Published clinical practice guidelines that support AS are reviewed by key AS stakeholders – at a minimum the medical director/antimicrobial stewardship physician champion, nursing leadership/director of nursing, infection preventionist, consulting/ in-house pharmacist	□ **Yes**; check all guidelines reviewed, and indicate by whom they are reviewed:
	□ Loeb M, Bentley DW, Bradley S, et al. Development of minimum criteria for initiation of antibiotics in long-term care residents: Results of a consensus conference. *Infection Control and Hospital Epidemiology* 2001; 22:120-4.
	  □ Medical director/AS physician champion
	  □ Nursing leadership/director of nursing
	  □ Infection preventionist
	  □ Consulting/ in-house pharmacist
	  □ Other, please specify: _____
	□ SHEA Position Paper. Nicolle LE, the SHEA Long-Term Care Committee. Urinary tract infections in long-term care facilities. *Infection Control and Hospital Epidemiology*2001; 22:167-75.
	  □ Medical director/AS physician champion
	  □ Nursing leadership/director of nursing
	  □ Infection preventionist
	  □ Consulting/ in-house pharmacist
	  □ Other, please specify: _____
	□ SHEA Position Paper. Strausbaugh LJ, Crossley KB, Nurse BA, et al. Antimicrobial resistance in long-term care facilities. *Infection Control and Hospital Epidemiology* 1996; 17:129-40.
	  □ Medical director/AS physician champion
	  □ Nursing leadership/director of nursing
	  □ Infection preventionist
	  □ Consulting/ in-house pharmacist
	  □ Other, please specify: _____
	□ SHEA Position Paper. Nicolle LE, Bentley D, Garibaldi R, et al. Antimicrobial use in long-term care facilities. *Infection Control and Hospital Epidemiology* 1996; 17:119-28.
	  □ Medical director/AS physician champion
	  □ Nursing leadership/director of nursing
	  □ Infection preventionist
	  □ Consulting/ in-house pharmacist
	  □ Other, please specify: _____
	□ IDSA Guidelines. High KP, Bradley SF, Gravenstein S, et al. Clinical practice guideline for the evaluation of fever and infection in older adult residents of long-term care facilities: 2008 update by the Infectious Diseases Society of America. Clin Infect Dis 2009; 48:149-171. Available at:
	  www.idsociety.org/Other_Guidelines/#sthash.ntIBYQdM.IkHRSefX
	    □ Medical director/AS physician champion
	    □ Nursing leadership/director of nursing
	    □ Infection preventionist
	    □ Consulting/ in-house pharmacist
	    □ Other, please specify: _____

Action Step: Provide education and training to nursing staff at all levels within the facility to promote the timely and accurate recognition, assessment, communication, and documentation of change in a resident's condition	

	□ Other(s):_____
	  □ Medical director/AS physician champion
	  □ Nursing leadership/director of nursing
	  □ Infection preventionist
	  □ Consulting/ in-house pharmacist
	  □ Other, please specify: _____
	
	□ **No** (if checked, complete questions below)
	Barriers: ⟶ Action Steps to Address Barriers:

Action Step: Provide regular antimicrobial stewardship education and training to all healthcare personnel, including providers	
Provide education and training about AS to resident care staff, including providers Consider including findings from AS assessments such as: • Nursing and Provider Antibiotic Use Attitudes and Beliefs Surveys (Appendix D) • Antimicrobial Use Assessment (Appendix E) • Nursing Process Evaluation tool (Appendix F)	□ **Yes;** describe regularity of education and training, staff to whom it was provided, and topics included: □ **No** Barriers: ⟶ Action Steps to Address Barriers:

Nursing staff at all levels within the facility utilize education and training tools to promote the timely and accurate recognition, assessment, communication, and documentation of change in a resident's condition
Consider the following tools that provide cues and organize observations of resident changes:
• Agency for Healthcare Research and Quality (AHRQ) Improving Patient Safety in Long-Term Care Facilities:
  o Module 1. Detecting Change in a Resident's Condition
  o Module 2. Communicating Change in a Resident's Condition
• INTERACT™ *Stop and Watch* Early Warning Tool for nursing assistants
• SBAR Form for licensed nurses (Appendix G)
• AHRQ Concerned – Uncomfortable – Safety (CUS) Communication Tool (Appendix H)
• AHRQ Changes that Matter Tool (Appendix I)
	□ **Yes;** describe regularity of education and training, staff to whom it was provided, and topics included:
	
	□ **No**
	Barriers: ⟶ Action Steps to Address Barriers:

Action Step: Communicate antimicrobial stewardship messages to healthcare facility staff and resident family and visitors	
Communicate AS messages to all facility staff (e.g., via staff meetings, newsletters, etc.)	□ **Yes;** describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:
Communicate AS messages to family/visitors (e.g., via brochures, newsletters, family council meetings)	□ **Yes;** describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:
Action Step: Develop and communicate policies and protocols based on clinical guidelines for antimicrobial stewardship, infection management, and diagnostic testing	
Facility develops policies based on clinical practice standards for AS (e.g., the 5 Ds: right diagnosis, drug, dose, duration, and de-escalation)	□ **Yes;** describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:
Facility develops policies based on clinical practice guidelines for infection management including prescribing algorithms and clinical pathways (e.g., Loeb et al. [2001], SHEA/IDSA guidelines)	□ **Yes;** describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:
Facility develops standardized policies and protocols for ordering diagnostic tests (e.g., microbiology, imaging) based on clinical guidelines (e.g., High et al. [2008])	□ **Yes;** describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:

Facility communicates policies and protocols for antimicrobial stewardship, infection management, and diagnostic testing to all licensed providers in the facility	□ **Yes;** describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:
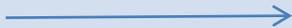
Action Step: Conduct surveillance for infections	
Infection surveillance is conducted using standardized infection definitions (e.g., Stone ND, et al. Surveillance definitions of infections in long-term care facilities: revisiting the McGeer criteria. Infect Control Hosp Epidemiol. 2012;33:965-77.) Consider use of the following: • Tips for Applying CDC's Infection Surveillance Guidance (Appendix J) • Infection Surveillance Definition Worksheet (Appendix K) • Infection Surveillance Linelist Template (Appendix L) • Lee et al. (2007) Recommended practices for surveillance: APIC, Inc. Am J Infect Control 2007;35:427-40.	□ **Yes;** describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:
Infection prevention expertise is available in the LTCF	□ **Yes;** describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:

Action Step: Evaluate the facility's process to assess, communicate, and document a resident's change in condition	

The facility performs process mapping to examine key opportunities to communicate clinical information pertinent to infections and antimicrobial stewardship
Consider use of the following:
• Nursing Process Evaluation Tool, (Appendix F)
	□ **Yes;** describe the process, including:
	    Date of process mapping discussion:
	    Facilitator:
	    Staff participants:
	    Process mapping summary shared with:
	
	□ **No**
	Barriers: ⟶ Action Steps to Address Barriers:

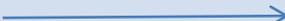| Action Step: The facility sets the expectation that a change in a resident's condition is consistently communicated between nursing assistants and nursing through the use of a standardized process	

The facility implements a standardized process to communicate a change in a resident's condition from nursing assistants (NAs) to nurses; use findings from process mapping to develop or revise processes
 	
Consider the following resources to standardize communication:
• AHRQ Improving Patient Safety in Long-Term Care Facilities:
  • Concerned – Uncomfortable – Safety (CUS) Communication Tool (Appendix H)
  • Changes that Matter Tool (Appendix I)
• INTERACT™ *Stop and Watch* Early Warning Tool for NAs
	□ **Yes;** describe the standardized communication process between NAs and nurses, including communication tools and staff education and training:
	
	□ **No**
	Barriers: ⟶ Action Steps to Address Barriers:

Action Step: The facility sets the expectation that a change in a resident's condition is consistently communicated between nursing and providers through the use of a standardized process	
The facility implements a standardized process to communicate a change in resident's condition in a consistent manner from nursing to providers; use findings from process mapping to develop or revise processes • Consider using Situation – Background – Assessment – Request (SBAR) Form (Appendix G)	□ **Yes;** describe the standardized communication process between nursing and providers, including communication tools and staff education and training: □ **No** Barriers: ⟶⟶⟶⟶⟶ Action Steps to Address Barriers:
The facility has identified sources of resident information (e.g., electronic health record, 24-hour/daily report, shift change report/communication, stand-up meetings, wall boards, etc.)	□ **Yes;** describe: Type (verbal, written, electronic): Location of clinical documentation: □ **No** Barriers: ⟶⟶⟶⟶⟶ Action Steps to Address Barriers:
The facility provides education and training to staff on the standardized communication process	□ **Yes;** describe: □ **No** Barriers: ⟶⟶⟶⟶⟶ Action Steps to Address Barriers:
Audit the implementation of the standardized communication process (e.g., are nursing staff using standardized communication tools?)	□ **Yes;** describe: □ **No** Barriers: ⟶⟶⟶⟶⟶ Action Steps to Address Barriers:

Audit the completeness and accuracy of the information included on the standardized communication tool (e.g., SBAR). For example, are nurses thoroughly and appropriately communicating the information required according to the standardized communication tool?	☐ **Yes;** describe: ☐ **No** Barriers: ⟶ Action Steps to Address Barriers:

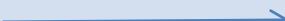| Action Step: The facility sets the expectation that a change in a resident's condition is consistently documented	
Centrally document change in resident condition	☐ **Yes**; describe: ☐ **No** Barriers: ⟶ Action Steps to Address Barriers:
The facility has integrated tools for information gathering into the electronic health record when possible to provide consistency, care continuity, and centrally documented information (e.g., a UTI monitor)	☐ **Yes;** describe the tools and how they promote consistency, care continuity, an centrally-documented information: ☐ **No** Barriers: ⟶ Action Steps to Address Barriers:
Information Technology support for AS activities is available to facilitate accessibility of clinical documentation; activities may include report generation, optimizing electronic health record for clinical documentation, etc.	☐ **Yes;** describe: ☐ **No** Barriers: ⟶ Action Steps to Address Barriers:

Explore ways your electronic health record vendor can support AS activities	□ **Yes**; describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:

Action Step: Diagnostic testing results, including microbiology, are accessible in a timely manner for clinical decision-making and infection surveillance

A process is implemented to ensure that diagnostic testing, including microbiology results, are accessible in a timely manner for clinical decision-making	□ **Yes**; describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:
A process is implemented to ensure that diagnostic testing, including microbiology results, are accessible in a timely manner for infection surveillance	□ **Yes**; describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:

Action Step: All licensed providers in the facility follow clinical practice guidelines for infection management

Policies/protocols based on clinical practice guidelines for the initiation of antimicrobials (e.g., Loeb et al. [2001]) are followed by all licensed providers in the facility regardless of employment status (e.g., full-time, part-time or casual status; on-call; external consultant; etc.) • Consider conducting antimicrobial use assessment to monitor guideline adherence (Appendix E)	□ **Yes**; describe: □ **No** Barriers: ⟶ Action Steps to Address Barriers:

The facility ensures all licensed providers follow basic antimicrobial stewardship practices including the 5 Ds: right diagnosis, drug, dose, duration, de-escalation
• Consider engaging consulting or in-house pharmacist
• Specifically ensure that all antimicrobial orders have the following elements documented:
Diagnosis
  • Treatment indication/ rationale (e.g. specific resident symptoms warranting antibiotics)
  • Treatment site (e.g. urinary tract, lower respiratory tract, etc.)
Drug
Dose
Duration
  • Antibiotic start date
  • Antibiotic end date
Route/ de-escalation
	□ **Yes**; describe:
	
	□ **No**
	Barriers: ———————————→ Action Steps to Address Barriers:

Empirically prescribed antibiotics are reviewed by the provider in a timely manner and adjusted or discontinued based on microbiology culture and sensitivity results	□ **Yes**; describe the process, including: Who is notified of the results? Who is responsible for follow up? □ **No** Barriers: ———————————→ Action Steps to Address Barriers:

All licensed providers in the facility follow clinical guidelines/recommendations for asymptomatic bacteriuria management (e.g., Infectious Diseases Society of America (IDSA) Guidelines for the Diagnosis and Treatment of Asymptomatic Bacteriuria in Adults 2005.) • Consider conducting antimicrobial use assessment to monitor guideline adherence (Appendix E)	□ **Yes**; describe how the facility formalizes the use of IDSA clinical guidelines: □ **No** Barriers: ⟶ Action Steps to Address Barriers:
All licensed providers have access to a local antibiogram; consider whether the data are compiled from the facility, local hospital, healthcare system, region, etc.; as well as how often the data are updated (e.g., annually, quarterly, monthly, etc.)	□ **Yes**; describe 1) how antibiogram accessibility is achieved; 2) the source of the antibiogram data; and 3) the frequency of antibiogram updates: □ **No** Barriers: ⟶ Action Steps to Address Barriers:
Action Step: Measure antimicrobial use
The facility establishes an antimicrobial utilization baseline • Consider using Antimicrobial Use Assessment (Appendix E)	□ **Yes;** describe: By whom: Describe what is reviewed (e.g., data sources used):_____ □ **No** Barriers: ⟶ Action Steps to Address Barriers:

The facility assesses antimicrobial use on a regular basis (e.g., monthly, quarterly, etc.)	□ **Yes;** by whom: How often? Describe what is reviewed (e.g. data sources used): □ **No** (if checked, complete questions below) Barriers: ————————→ Action Steps to Address Barriers:
The facility assesses antimicrobial appropriateness on a regular basis (e.g., monthly, quarterly, etc.); this activity is most suitable for the consulting or in-house pharmacist. Assess prescribing trends by provider and facility-wide	□ **Yes;** by whom: Identify prescribing trends assessed: How often? Define published treatment guidelines used to determine appropriateness: □ **No** (if checked, complete questions below) Barriers: ————————→ Action Steps to Address Barriers:
The facility monitors compliance with prescribing expectations and clinical practice guidelines relevant to antimicrobial stewardship (e.g., monitor compliance with Loeb minimum criteria for initiation of antibiotics in LTC residents) • Consider using Antimicrobial Use Assessment (Appendix E)	□ **Yes;** describe the process, including: By whom? How often? List facility practice expectations and/or clinical practice guidelines used: □ **No** Barriers: ————————→ Action Steps to Address Barriers:
The facility develops antimicrobial use summaries/reports on a regular basis	□ **Yes;** describe: How often? List antimicrobial use summaries/reports: □ **No** Barriers: ————————→ Action Steps to Address Barriers:

List at least 2 long-term goals for antimicrobial stewardship at your facility

1.

2.

List at least 4 short-term goals for antimicrobial stewardship at your facility

1.

2.

3.

4.

List the 3 primary challenges / barriers to implementing / expanding antimicrobial stewardship strategies in your facility:

1.

2.

3.