

AHRQ Safety Program for Improving Antibiotic Use



Gap Analysis for Antibiotic Stewardship in Ambulatory Care

Instructions: Complete this document to evaluate the practices antibiotic stewardship activities on an annual basis and to define areas for further improvement. Approaches to address the antibiotic stewardship areas in this document can be found throughout the AHRQ Safety Program Toolkit.

The questions labeled as Fundamental (➡) indicate components/resources that all ambulatory Antibiotic Stewardship Teams should have, and those labeled as Enhanced (+) indicate components/resources that may further enhance antibiotic stewardship activities. If antibiotic stewardship practices are missing Fundamental components or the Antibiotic Stewardship Team is not performing core interventions, then the stewardship team should determine how to manage these deficiencies, including meeting with senior leadership to discuss additional resources. If some Enhanced items are missing, discuss whether implementation of these items might be of benefit to the practice and what resources would be needed to operationalize them.

Key: ➡ = Fundamental, + = Enhanced

Antibiotic Stewardship Leaders

Job Title	Antibiotic Stewardship Area	Answers	Comments
Clinician Lead	➡ Has a Clinician Lead been identified to assist with implementation of antibiotic stewardship activities?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	+ Is supporting antibiotic stewardship activities included in the Clinician Lead’s job description or contract?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	+ Has the Clinician Lead received specialized training in antibiotic stewardship? Describe in comments.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	



Job Title	Antibiotic Stewardship Area	Answers	Comments
Administrative Lead	➡ Is an Administrative Lead (e.g., office manager, clinic nurse, pharmacist) with the ability to gather data and to coordinate antibiotic stewardship activities a member of the Antibiotic Stewardship Team?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	➡ Does the Administrative Lead have access to data?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	➡ Does the Administrative Lead have the ability to convene meetings at the practice or have devoted time at existing meetings to discuss antibiotic stewardship issues?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	+ Is supporting antibiotic stewardship activities included in the Administrative Lead's job description or contract?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Senior Leadership	➡ To whom do the Antibiotic Stewardship Team report?	<input type="checkbox"/> Medical director of the practice <input type="checkbox"/> Leadership group of the practice <input type="checkbox"/> Quality improvement leadership <input type="checkbox"/> Other: <input type="checkbox"/> There is no reporting structure	
	➡ How often does the Antibiotic Stewardship Team meet with senior leadership?	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Annually <input type="checkbox"/> Never <input type="checkbox"/> Other:	

Job Title	Antibiotic Stewardship Area	Answers	Comments
	<p>➔ Does senior leadership actively support antibiotic stewardship activities? Select all that apply.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> No <input type="checkbox"/> Yes: Attends practice meetings where antibiotic stewardship activities are discussed <input type="checkbox"/> Yes: Provides adequate funding for antibiotic stewardship activities <input type="checkbox"/> Yes: Provides protected time for the Antibiotic Stewardship Team to conduct antibiotic stewardship activities <input type="checkbox"/> Yes: Aids in encouraging information technology support for data or interventions <input type="checkbox"/> Yes: Provides back up to the Antibiotic Stewardship team if prescribers do not follow antibiotic stewardship protocols <input type="checkbox"/> Yes: Decouples clinician-level patient satisfaction scores from antibiotic prescribing <input type="checkbox"/> Yes: Aligns antibiotic stewardship goals with organizational strategic goals <input type="checkbox"/> Yes: Includes antibiotic stewardship activities as part of job descriptions or evaluation criteria for the Antibiotic Stewardship Team <input type="checkbox"/> Yes: Connects the Antibiotic Stewardship Team to relevant stakeholders <input type="checkbox"/> Other: 	

Antibiotic Stewardship Team Structure

Antibiotic Stewardship Area	Answers	Comments
<p>➡ What are the activities of the Antibiotic Stewardship Team? Select all that apply.</p> <p>Note: activities listed are suggestions for team activities; not all teams will perform all activities.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Establish and review antibiotic use protocols <input type="checkbox"/> Track antibiotic use data <input type="checkbox"/> Recommend approaches to improve antibiotic use <input type="checkbox"/> Perform proactive risk assessments to determine areas in which harm related to antibiotic prescribing could be avoided with interventions <input type="checkbox"/> Develop, review, and distribute materials to clinicians and staff regarding optimal antibiotic prescribing <input type="checkbox"/> Develop, review, and distribute materials to patients and family members regarding optimal antibiotic prescribing <input type="checkbox"/> Provide feedback to clinicians about antibiotic prescribing practices <input type="checkbox"/> Review approaches employed by local labs for reporting testing results, culture, and susceptibility data <input type="checkbox"/> Obtain, review, and distribute an antibiogram <input type="checkbox"/> Other: <input type="checkbox"/> No activities performed 	
<p>➡ Does the Antibiotic Stewardship Team develop an annual plan outlining goals for the following year?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No 	
<p>+ Does the Antibiotic Stewardship Team document how the practice maintains compliance with The Joint Commission’s Antimicrobial Stewardship requirements, the Merit-Based Incentive Payment System (MIPS) program through the Centers for Medicare & Medicaid Services (CMS), and/or the Centers for Disease Control and Prevention (CDC) Core Elements of Antibiotic Stewardship for Ambulatory Care? Select all that apply.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Yes, The Joint Commission’s Antimicrobial Stewardship requirements <input type="checkbox"/> Yes, the MIPS program <input type="checkbox"/> Yes, the CDC Core Elements of Antibiotic Stewardship for Ambulatory Care <input type="checkbox"/> No 	

Antibiotic Use Protocols/Guidelines

Antibiotic Stewardship Area	Answers	Comments
➔ Does the practice have infectious condition specific diagnosis and treatment protocols/guidelines?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
➔ Which of the following infectious condition specific diagnosis and treatment protocols/guidelines has the practice developed? Select all that apply.	<input type="checkbox"/> Upper respiratory tract infections <input type="checkbox"/> Influenza <input type="checkbox"/> Respiratory syncytial virus (RSV) <input type="checkbox"/> Acute bronchitis <input type="checkbox"/> Acute otitis media <input type="checkbox"/> Pharyngitis <input type="checkbox"/> Sinusitis <input type="checkbox"/> Community-acquired pneumonia <input type="checkbox"/> Urinary tract infections <input type="checkbox"/> Asymptomatic bacteriuria <input type="checkbox"/> Skin and soft tissue infections <input type="checkbox"/> Management of patient with antibiotic allergies <input type="checkbox"/> Other: <input type="checkbox"/> Other: <input type="checkbox"/> Other: <input type="checkbox"/> N/A	
➔ Do the infectious condition protocols/guidelines indicate when antibiotics are and are not indicated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
➔ Do the infectious condition protocols/guidelines provide recommendations for diagnostic testing?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
➔ Do the infectious condition protocols/guidelines provide recommendations on choice of therapy?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
➔ Do the infectious condition protocols/guidelines provide recommendations on duration of therapy?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
+ Do the infectious condition protocols/guidelines provide interpretation of microbiology results (including rapid diagnostic tests)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
➔ Do the infectious condition protocols/guidelines provide guidance on how patients should follow up or when patients should seek emergency attention?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
➔ Are infectious condition protocols/guidelines disseminated to clinicians at the point of care?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Antibiotic Stewardship Area	Answers	Comments
<p>➡ Are infectious condition protocols/guidelines periodically reviewed at meetings which diverse members of the practice attend (e.g., clinicians, nurses, pharmacists, office manager)?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Interventions (Part A)

Core Interventions	Data Point	Frequency of Data Gathering	Frequency of Data Feedback
<p>Monitoring of Antibiotic Prescribing Data</p> <p>For each data point, indicate the frequency of data gathering and the frequency of data feedback.</p>	Number of visits	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A
	Number of viral respiratory tract infection visits	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A
	Number of visits for specific ICD-10 codes (e.g., pharyngitis, sinusitis)	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A
	Antibiotics prescribed overall	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A
	Antibiotics prescribed during visits with viral respiratory tract infection diagnoses	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A
	Antibiotics prescribed for specific ICD-10 codes (e.g., pharyngitis, sinusitis)	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A

Core Interventions	Data Point	Frequency of Data Gathering	Frequency of Data Feedback
	Antibiotics prescribed per prescribing clinician in the practice	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A
	Number of visits	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A
	Viral respiratory tract infection visits	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A
	Antibiotics prescribed overall	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A
	Type of Antibiotics Prescribed: <input type="checkbox"/> Amoxicillin <input type="checkbox"/> Amoxicillin/clavulanate <input type="checkbox"/> Azithromycin <input type="checkbox"/> Cefaclor <input type="checkbox"/> Cefadroxil <input type="checkbox"/> Cefdinir <input type="checkbox"/> Cefditoren <input type="checkbox"/> Cefixime <input type="checkbox"/> Cefpodoxime <input type="checkbox"/> Cefprozil <input type="checkbox"/> Ceftibuten <input type="checkbox"/> Cefuroxime <input type="checkbox"/> Cephalexin <input type="checkbox"/> Ciprofloxacin <input type="checkbox"/> Clarithromycin <input type="checkbox"/> Clindamycin <input type="checkbox"/> Delafloxacin <input type="checkbox"/> Dicloxacillin <input type="checkbox"/> Doxycycline <input type="checkbox"/> Erythromycin	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Biannually <input type="checkbox"/> Annually <input type="checkbox"/> Other: <input type="checkbox"/> N/A

Core Interventions	Data Point	Frequency of Data Gathering	Frequency of Data Feedback
	<input type="checkbox"/> Fosfomycin <input type="checkbox"/> Levofloxacin <input type="checkbox"/> Linezolid <input type="checkbox"/> Metronidazole <input type="checkbox"/> Minocycline <input type="checkbox"/> Moxifloxacin <input type="checkbox"/> Nitrofurantoin <input type="checkbox"/> Omadacycline <input type="checkbox"/> Penicillin <input type="checkbox"/> Rifampin <input type="checkbox"/> Trimethoprim-sulfamethoxazole <input type="checkbox"/> trimethoprim <input type="checkbox"/> Tedizolid <input type="checkbox"/> Vancomycin PO <input type="checkbox"/> Other:		

Interventions (Part B)

Antibiotic Stewardship Data	Answers	Comments
➡ How are data on antibiotic prescriptions monitored at the practice?	<input type="checkbox"/> Data from dispensing pharmacy <input type="checkbox"/> Data from electronic medical record <input type="checkbox"/> Manual data entry <input type="checkbox"/> Other: <input type="checkbox"/> N/A	
➡ How are antibiotic stewardship data provided to members of the practice?	<input type="checkbox"/> Staff meetings <input type="checkbox"/> Individual phone calls <input type="checkbox"/> Individual emails <input type="checkbox"/> Signs in clinic <input type="checkbox"/> Other: <input type="checkbox"/> N/A	
➡ At what level are antibiotic stewardship data provided? (Check all that apply)	<input type="checkbox"/> Clinician <input type="checkbox"/> Practice <input type="checkbox"/> Multiple practices <input type="checkbox"/> Other: <input type="checkbox"/> N/A	

Other Interventions To Consider (Part C)

Antibiotic Stewardship Data	Answers	Comments
+ List interventions being conducted by the Antibiotic Stewardship Team to improve antibiotic use outside of core interventions.		

Microbiology

Antibiotic Stewardship Data	Answers	Comments
+ Does the Antibiotic Stewardship Team have access to an antibiogram?	<input type="checkbox"/> Yes, specific to our clinic <input type="checkbox"/> Yes: borrowed regional referral laboratory data <input type="checkbox"/> Yes: borrowed from hospital laboratory data <input type="checkbox"/> Yes: borrowed from hospital laboratory data focused on outpatient sites <input type="checkbox"/> No	

Education

Antibiotic Stewardship Data	Answers	Comments
➔ Does the Antibiotic Stewardship Team provide updates to clinicians about judicious antibiotic prescribing and the importance of antibiotic stewardship?	<input type="checkbox"/> No <input type="checkbox"/> Yes: Nurses <input type="checkbox"/> Yes: Pharmacists <input type="checkbox"/> Yes: Clinicians <input type="checkbox"/> Yes: Other(s)	
➔ How frequently does the Antibiotic Stewardship Team discuss antibiotic improvement efforts with the practice?	<input type="checkbox"/> Annually <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly <input type="checkbox"/> Other: <input type="checkbox"/> N/A	
➔ Does the Antibiotic Stewardship Team conduct education on approaches to communicate with patients and families when antibiotics are not needed?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
➔ Does the Antibiotic Stewardship Team develop educational material for patients and families?	<input type="checkbox"/> Yes <input type="checkbox"/> No	