

AHRQ Safety Program for Telemedicine: Improving Antibiotic Use

Gap Analysis for Telemedicine: Antibiotic Stewardship

Instructions: Complete this document annually to evaluate the telemedicine practice's antibiotic stewardship activities and define areas for further improvement. Approaches to address the antibiotic stewardship components in this document can be found throughout the Toolkit To Improve Antibiotic Use in Telemedicine.

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

This tool is designed for large practices; smaller practices or individual clinicians can still benefit from sustainability planning. The wording of the questions may need to be modified as needed.

Key: ➡ = Fundamental, + = Enhanced

Antibiotic Stewardship Leaders

Job Title	Antibiotic Stewardship Area	Answers	Comments
Telemedicine Practice Clinician Lead	➡ Has a Clinician Lead (e.g., physician, advanced practice provider, or pharmacist) been identified to assist with implementation of antibiotic stewardship activities?	☐ Yes ☐ No	
	+ Is supporting antibiotic stewardship activities included in the Clinician Lead's job description or contract?	☐ Yes ☐ No ☐ N/A	
	+ Has the Clinician Lead received specialized training in antibiotic stewardship? Describe in comments.	☐ Yes ☐ No ☐ N/A	

Job Title	Antibiotic Stewardship Area	Answers	Comments
Telemedicine Practice Administrative Lead	➡ Is an Administrative Lead (e.g., manager, nurse, etc.) with the ability to gather data and to coordinate antibiotic stewardship activities identified?	☐ Yes ☐ No	
	➡ Does the Administrative Lead have access to data?	☐ Yes ☐ 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?	☐ Yes ☐ No	
	+ Is supporting antibiotic stewardship activities included in the Administrative Lead's job description or contract?	☐ Yes ☐ No	
Telemedicine Practice Senior Leadership	➡ To whom do the clinician and administrative lead report?	☐ Medical director of the practice or company ☐ Leadership group of the practice or company ☐ Quality improvement leadership ☐ Other: ☐ There is no reporting structure	
	➡ How often do the clinician and administrative leads meet with senior leadership?	☐ Monthly ☐ Quarterly ☐ Annually ☐ Never ☐ Other:	

Job Title	Antibiotic Stewardship Area	Answers	Comments
	➡ Does senior leadership actively support antibiotic stewardship activities? Select all that apply.	☐ No ☐ Yes: Attends practice meetings where antibiotic stewardship activities are discussed ☐ Yes: Provides adequate funding for antibiotic stewardship activities ☐ Yes: Provides protected time for the antibiotic stewardship leaders to conduct antibiotic stewardship activities ☐ Yes: Aids in encouraging information technology support for data or interventions ☐ Yes: Provides backup to the antibiotic stewardship leaders if clinicians do not follow antibiotic stewardship protocols ☐ Yes: Decouples clinician-level patient satisfaction scores from antibiotic prescribing ☐ Yes: Aligns antibiotic stewardship goals with organizational strategic goals ☐ Yes: Includes antibiotic stewardship activities as part of job descriptions or evaluation criteria for the antibiotic stewardship leaders ☐ Yes: Connects the antibiotic stewardship leaders to relevant stakeholders ☐ Other:	

Antibiotic Stewardship Team Structure

Antibiotic Stewardship Area	Answers	Comments
➡ What are the antibiotic stewardship activities in the telemedicine practice? Select all that apply. Note: activities listed are suggestions; not all practices will perform all activities.	☐ Establish and review antibiotic use protocols ☐ Track antibiotic use data ☐ Recommend approaches to improve antibiotic use ☐ Perform proactive risk assessments to determine areas in which harm related to antibiotic prescribing could be avoided with interventions ☐ Develop, review, and distribute materials to clinicians and staff regarding optimal antibiotic prescribing ☐ Develop, review, and distribute materials to patients and family members regarding optimal antibiotic prescribing ☐ Provide feedback to clinicians about antibiotic prescribing practices ☐ Review approaches for specimen collection (including at home) for telemedicine patients ☐ Other: ☐ No activities performed	
➡ Do the antibiotic stewardship leaders develop an annual plan outlining goals for the following year?	☐ Yes ☐ No	
+ Does the Antibiotic Stewardship Team document how the telemedicine practice or organization 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 in Outpatient Telemedicine? Select all that apply.	☐ Yes, The Joint Commission's Antimicrobial Stewardship requirements ☐ Yes, the MIPS program ☐ Yes, the CDC Core Elements of Antibiotic Stewardship in Telemedicine ☐ No	

Antibiotic Use Protocols/Guidelines

Antibiotic Stewardship Area	Answers	Comments
➡ Does the telemedicine practice have or adhere to infectious syndrome-specific diagnosis and treatment protocols/guidelines?	☐ Yes ☐ No	
➡ Which of the following infectious syndrome-specific diagnosis and treatment protocols/guidelines has the telemedicine practice developed? Select all that apply.	☐ Upper respiratory tract infections ☐ Influenza ☐ COVID-19 ☐ Respiratory syncytial virus ☐ Acute bronchitis ☐ Acute otitis media ☐ Pharyngitis ☐ Sinusitis ☐ Community-acquired pneumonia ☐ Urinary tract infections ☐ Asymptomatic bacteriuria ☐ Skin and soft tissue infections ☐ Syphilis ☐ Gonorrhea ☐ Chlamydia ☐ Sexually transmitted infection risk ☐ Management of patient with antibiotic allergies ☐ Other: ☐ N/A	
➡ Do the infectious syndrome protocols/guidelines indicate when antibiotics are and are not indicated?	☐ Yes ☐ No ☐ N/A	
➡ Do the infectious syndrome protocols/guidelines provide recommendations for diagnostic testing?	☐ Yes ☐ No ☐ N/A	
➡ Do the infectious syndrome protocols/guidelines provide recommendations on choice of therapy?	☐ Yes ☐ No ☐ N/A	

Antibiotic Stewardship Area	Answers	Comments
➡ Do the infectious syndrome protocols/guidelines provide recommendations on duration of therapy?	☐ Yes ☐ No ☐ N/A	
+ Do the infectious syndrome protocols/guidelines provide interpretation of microbiology results (including rapid diagnostic tests)?	☐ Yes ☐ No ☐ N/A	
➡ Do the infectious syndrome protocols/guidelines provide guidance on how patients should follow up (including when patients should be seen in person) or when patients should seek emergency attention?	☐ Yes ☐ No ☐ N/A	
➡ Are infectious syndrome protocols/guidelines readily accessible to clinicians?	☐ Yes ☐ No ☐ N/A	
➡ Are infectious syndrome protocols/guidelines periodically reviewed at meetings attended by diverse members of the practice (e.g., clinicians, nurses, pharmacists, office manager)?	☐ Yes ☐ No ☐ N/A	

Interventions (Part A)

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

	Antibiotics prescribed for specific ICD codes (e.g., pharyngitis, sinusitis)	☐ Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐ Other: ☐ N/A	☐ Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐ Other: ☐ N/A
	Type of Antibiotics Prescribed: ☐ Amoxicillin ☐ Amoxicillin-clavulanate ☐ Azithromycin ☐ Cefaclor ☐ Cefadroxil ☐ Cefdinir ☐ Cefixime ☐ Cefpodoxime ☐ Cefproxil ☐ Cefuroxime ☐ Cephalexin ☐ Ciprofloxacin ☐ Clarithromycin ☐ Clindamycin ☐ Delafloxacin ☐ Dicloxacillin ☐ Doxycycline ☐ Erythromycin ☐ Fosfomycin ☐ Levofloxacin ☐ Linezolid ☐ Metronidazole ☐ Minocycline ☐ Moxifloxacin ☐ Nitrofurantoin ☐ Omadacycline ☐ Penicillin ☐ Rifampin ☐ Trimethoprim-sulfamethoxazole ☐ Tedizolid ☐ Other:	☐ Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐ Other: ☐ N/A	☐ Monthly ☐ Quarterly ☐ Biannually ☐ Annually ☐ Other: ☐ N/A

Interventions (Part B)

Antibiotic Prescription Data	Responses	Comments
➡ How are data on antibiotic prescriptions monitored at the telemedicine practice?	☐ Data from electronic medical record ☐ Manual data entry ☐ Other: ☐ N/A	
➡ How are antibiotic prescription data communicated to members of the telemedicine practice?	☐ Staff meetings ☐ Individual phone calls ☐ Individual emails ☐ Signs in clinic ☐ Electronic or electronic medical record reports ☐ Other: ☐ N/A	
➡ At what level are antibiotic prescription data provided? (Check all that apply)	☐ Clinician ☐ Telemedicine practice ☐ Multiple telemedicine practices ☐ Other: ☐ N/A	

Other Interventions to Consider (Part C)

Antibiotic Stewardship Interventions	Responses	Comments
✚ List interventions being conducted by the antibiotic stewardship leaders to improve antibiotic use outside of core interventions.		

Microbiology

Microbiologic Considerations	Responses	Comments
➤ Do the antibiotic stewardship leaders have access to an antibiogram?	☐ Yes, specific to our telemedicine practice ☐ Yes: regional referral laboratory data ☐ Yes: hospital laboratory data ☐ Yes: hospital laboratory data focused on outpatient sites ☐ No	

Education

Education	Responses	Comments
➤ Do the antibiotic stewardship leaders provide updates to clinicians about judicious antibiotic prescribing and the importance of antibiotic stewardship?	☐ No ☐ Yes: Nurses ☐ Yes: Clinicians ☐ Yes: Other(s)	
➤ How frequently do the antibiotic stewardship leaders discuss antibiotic improvement efforts with the practice?	☐ Annually ☐ Quarterly ☐ Monthly ☐ Other: ☐ N/A	
➤ Do the antibiotic stewardship leaders conduct education on approaches to communicate with patients and families when antibiotics are not needed?	☐ Yes ☐ No	
➤ Do the antibiotic stewardship leaders develop or distribute educational material for patients and families?	☐ Yes ☐ No	

AHRQ Pub. No. 26(27)-0021
October 2026