

## Change Pathway: Antibiotic Stewardship

### COVID-19's Impact on Antibiotic Stewardship

It is apparent that the use of antibiotics has had a huge impact on treatment outcomes across the healthcare landscape. However, as the number of antibiotic-resistant organism increases, appropriate use of antibiotics has taken center stage.

Appropriate antibiotic prescribing has been further emphasized by the COVID-19 pandemic. [During the initial phases of COVID-19 treatment, antibiotic use increased](#) as providers were faced with increased community acquired respiratory conditions. At first, COVID-19 was especially difficult to discern from other respiratory infections.

[Recent studies suggest](#) that secondary bacterial infections appear to be uncommon in patients with COVID-19, however, COVID-19 diagnosis is associated with a longer hospital stay, thus increasing the risk of spread of antimicrobial resistant organisms.

The immense impact of the COVID-19 pandemic has underscored the importance of infection prevention and antibiotic stewardship in protecting patients from antibiotic-resistant infections.

### Resources and tools for you



- [Medicare Conditions of Participation \(CoP\): §485.640](#)
- [Core Elements for Small and CAHs](#)
- [Suggested Strategies from High Performing CAHs \(Updated April 2020\)](#)
- [Antibiotic Awareness Week](#)
- [Reducing the use of empiric antibiotic therapy in COVID-19 hospital admission](#)
- [Implementation Tools & Resources - Society for Healthcare Epidemiology of America](#)

### Hospital Implementation of each Antibiotic Stewardship Core Element

 = 10 Hospitals

#### Leadership Commitment



#### Accountability



#### Pharmacy Expertise



#### Action



#### Tracking



#### Reporting



#### Education





## Step-by-Step Path to Quality Improvement



Hospital: \_\_\_\_\_

Team Leader: \_\_\_\_\_ Team members: \_\_\_\_\_ Executive Sponsor: \_\_\_\_\_

HQIC Quality Improvement Change Pathway Focus Topic: Antibiotic Stewardship

**Instructions:** This checklist serves as a guide for implementation of a selected quality improvement project. The change pathway is just one suggested method for achieving HQIC program goals, additional actions may be required.

## PLAN



- **Define the problem & analyze causes (Note: Quality Lead needs to complete the following 3 steps before starting the project)**

- Review relevant data. [Login to CDS](#) and click on “Reports” to view outcome measure trends.
- Review topic-specific self-assessment responses. Login to the Telligen [portal](#) to view your organization’s responses.
- Review [Medicare conditions of participation \(CoPs\)](#) if applicable and core resources (pg. 1).
  - Assess the current state by completing a [gap assessment](#) or current state [map](#) (See page 20).
  - Write out a problem statement that captures insights gained from data review.
  - Imagine the future state. Ask yourself, *what are we trying to accomplish?*
  - Perform a root cause analysis (RCA) of the problem. Select a template: [5 why’s](#), [fishbone diagram](#).
  - Consider barriers to improvement: [patient population disparities](#), [geographical barriers](#), staffing, and infrastructure challenges.
- **Build your team**
  - Identify key stakeholders and subject matter experts. Ask yourself, *who has a stake in the results of this project?* Ex. Pharmacists, nurses, etc.
  - Complete [QI Team Member Matrix tool](#). Keep your team small (less than 10 people).
  - Share Page 1 (above), hospital specific data, assessments, and patient stories to motivate the team into action.
  - Write out a compelling purpose (clear, challenging, consequential). Ask yourself, what does the team need to accomplish?

## DO



- **Select a promising practice (intervention) for implementation**
  - Ask yourself, *what changes can we make that will result in improvement?*
  - Select an intervention to try. Attempt “low hanging fruit” first. Ex: [Jumpstart Stewardship](#) (pgs 27-30), [Stewardship at Small and CA Hospitals](#), [Develop and Improve your Program](#)
  - Incorporate age friendly, rural, health equity, and/or patient-centered elements into your intervention.
  - Assess the financial feasibility of your intervention by conducting a [cost-benefit analysis](#) (if applicable) and obtain leadership approval.

- **Establish a measurement strategy**

- Ask yourself, *how will we know a change is an improvement?*
- Determine the types of data sources that already exist in your facility.
- Evaluate potential data sources for tracking your intervention. Examples include: EHR reports, physical checklists, risk management reports.
- Determine data collection method, frequency, and responsible team member(s).
- Review the [Telligen HQIC Specifications Manual](#). Baseline measure rate: \_\_\_\_\_ Improvement target rate: \_\_\_\_\_

- **Develop an action plan**

- Write an [AIM statement](#).
- Create a [timeline](#) (page 28) for implementation of selected intervention.
- Define role and responsibility for each team member.

- **Implement intervention**

## STUDY



- **Analyze results**

- Review progress toward improvement target.
- Ask yourself, has the “current state” changed?
- Revisit the [gap assessment](#).

## ACT



- **Adapt, Adopt, or Abandon**

- Reconvene team members and key stakeholders to determine next steps.
- Ask yourself, *was the intervention successful? How can we modify to create more improvement? Will a different intervention work better?*

- **Reflect, Share, and Spread**

- Conduct a Team Debrief: consider what worked well and what did not. [Plan for sustaining the gain](#).
- Share your pathway with other HQIC hospitals during learning collaborative events, via [Gaggle list serv](#), or by emailing [HQICTeam@telligen.com](mailto:HQICTeam@telligen.com).




### Additional Resources:

- [IHI Breakthrough Series White Paper](#), [IHI Comprehensive QI Toolkit](#), [Six Meetings for Success Video](#), [Jumpstart Stewardship Workbook](#)



## Develop Your Own AIM Statement

Use the following template to create your own AIM statement for your project.

By  , the  at  will

implement  to improve  Problem

by  to benefit  .

Calendar Date                      HQIC Team                      Hospital/Specific Unit

Intervention

How Much                      Whom

By                      the                      at                      will

implement                      to improve

by                      to benefit