



# The ABC's of Antibiotic Stewardship Georgia's Approach



Presentation to: 2018 Flex Program Reverse Site Visit

Presented by: Lisa Carhuff MSN RN

# Learning Objectives

- Describe the history of antibiotic stewardship programs in Georgia's critical access hospitals (CAHs)
- Describe Georgia's approach within the Flex Grant Program for supporting all CAHs with antibiotic stewardship program adoption

# Georgia SORH - - - Where we are



Georgia's Flex program is managed by the State Office of Rural Health, a Division of the Department of Community Health.

Georgia SORH is located in Cordele, Georgia, a small rural farming community in Crisp County with a population of 10,856. We are known as the Watermelon Capital of the World.



# Georgia SORH

## Who We Serve

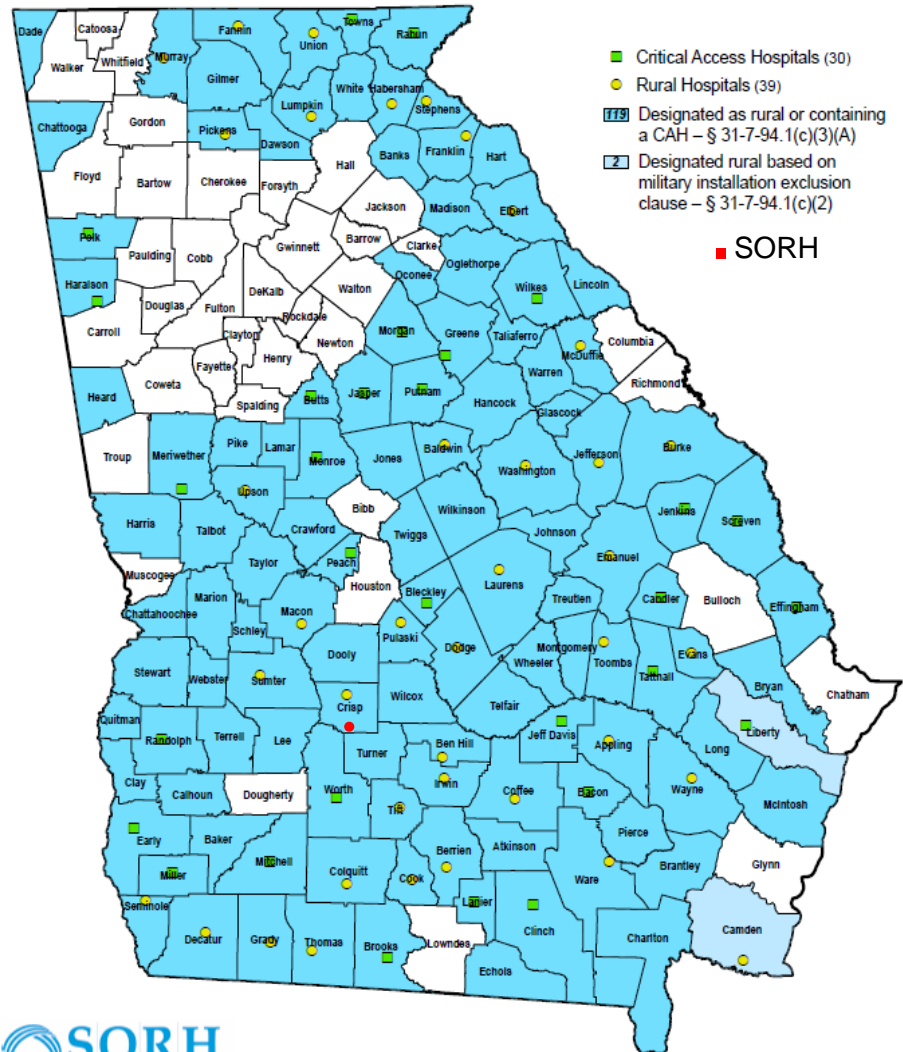
Georgia's Hospital Services Department serves 58 small rural hospitals

30 - Critical Access Hospitals

121 Counties in Georgia are designated RURAL 76% of Georgia's 159 Counties

24% of Total Population of Georgia is considered Rural

## Georgia Counties with Rural and Critical Access Hospitals Rural Hospital Organization Assistance Act of 2017



# Influences affecting early adoption of Antibiotic Stewardship Programs

- Hospital Engagement Network (HEN) /Hospital Improvement Innovation Networks (HIINs)
  - 26 of the 30 FLEX hospitals have elected to participate with the Georgia Hospital Association (GHA) Health Resource and Educational Trust (HRET) HIIN
    - 11 of these hospitals report National Healthcare Safety Network (NHSN) Hospital Acquired Infection (HAI) Patient Safety Module
    - 15 report HAI to GHA database

# Influences affecting early adoption of Antibiotic Stewardship Programs (cont.)

Critical Access Hospitals with a **“system of support”**

- 11 of the early adopters have management with a broader focus

# Influences affecting early adoption of Antibiotic Stewardship Programs (again)

## Georgia Department of Public Health Initiative

The **Georgia Honor Roll for Antibiotic Stewardship** was established in 2014 by the Healthcare Associated Infections Advisory Committee. The goal of the program was to provide an incentive for acute care facilities and critical access hospitals to engage in antimicrobial stewardship.

- 3 CAHs participated this initial program in 2014
- Currently 4 CAHs are recognized



# Influences affecting early adoption (cont.)



CMS finalizes improvements in care, safety, and consumer protections for **long-term care facility** residents September 28, 2016:

*Updating the long-term care facility's infection prevention and control program, including requiring an infection prevention and control officer and an antibiotic stewardship program that includes antibiotic use protocols and a system to monitor antibiotic use.*

*4 early adopters have nursing homes*

<https://www.cms.gov/Newsroom/MediaReleaseDatabase/Press-releases/2016-Press-releases-items/2016-09-28.html>



# Influences affecting early adoption of Antibiotic Stewardship Programs (final)

The Joint Commission (TJC) issued antimicrobial stewardship **accreditation standards** (*Standard MM.09.01.01*) which went into effect January 1, 2017. The standards require hospitals, critical access hospitals, and nursing care centers to implement antimicrobial stewardship programs that align with current evidence-based practices.

[https://www.jointcommission.org/assets/1/6/New\\_Antimicrobial\\_Stewardship\\_Standard.pdf](https://www.jointcommission.org/assets/1/6/New_Antimicrobial_Stewardship_Standard.pdf)

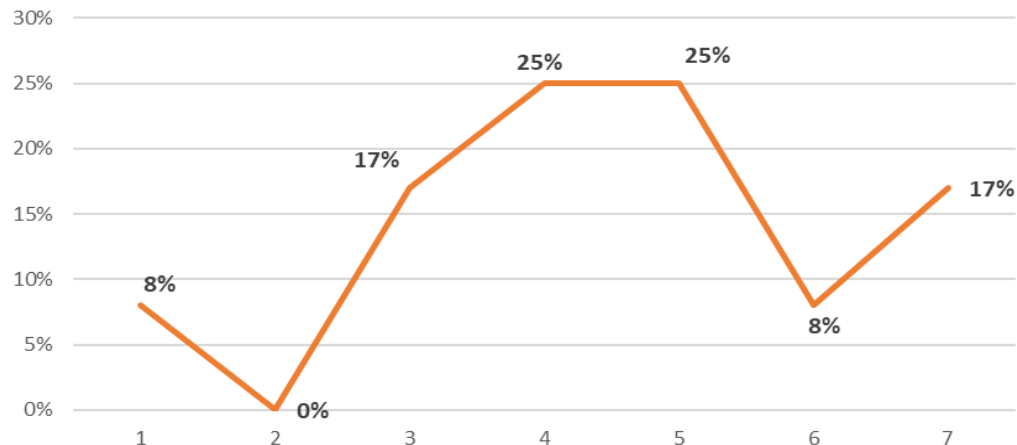
# 2014 – Georgia Survey Data

**40%**

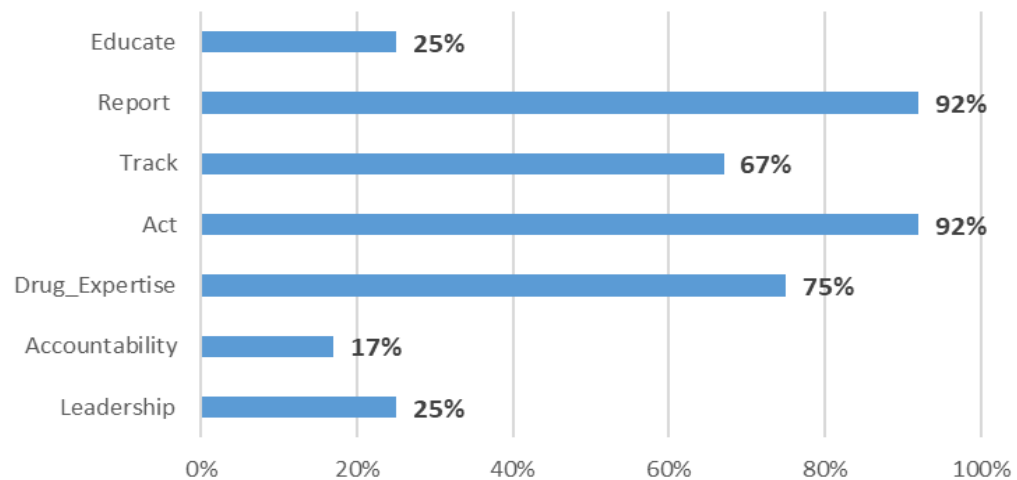


Georgia CAH's Reporting

2014 Percent of Core Elements "Met"



Percent of Hospitals Meeting each Core Element



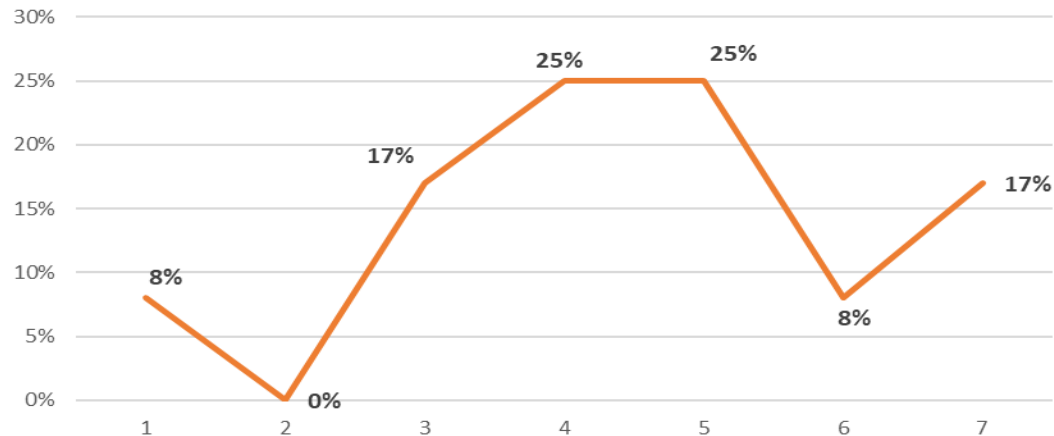
# 2015 – Georgia Survey Data

**60%**

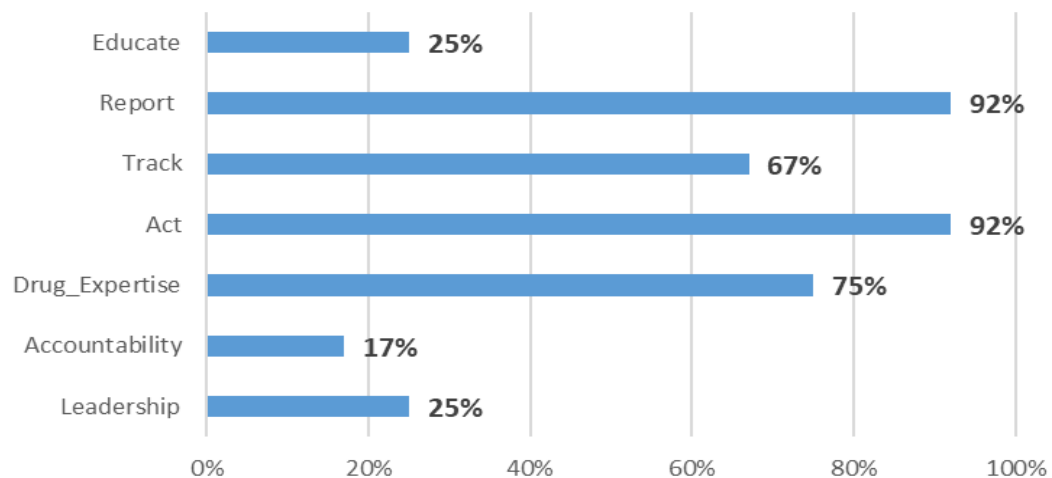


Georgia CAH's Reporting

2015 Percent of Core Elements "Met"



Percent of Hospitals Meeting each Core Element



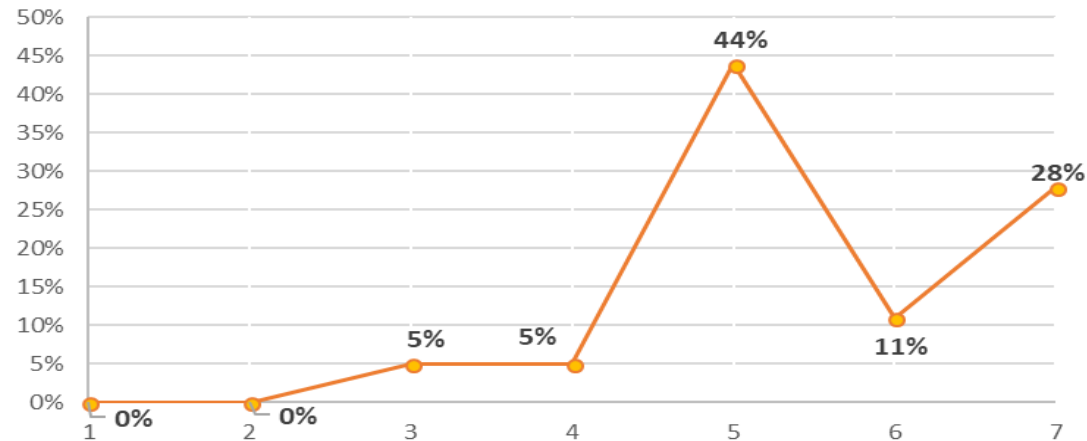
# 2016 – Georgia Survey Data

**60%**

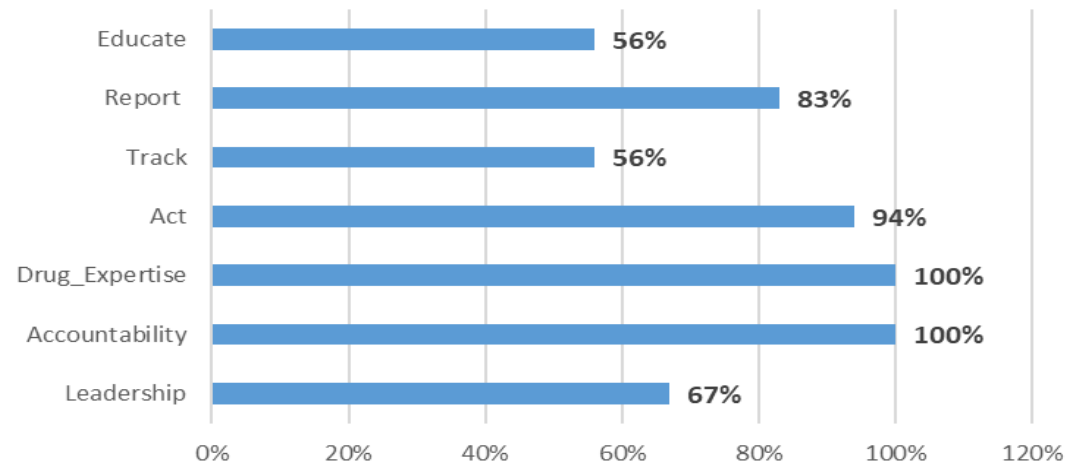


Georgia CAH's Reporting

2016 Percent of Core Elements "Met"



Percent of Hospitals Meeting Each Core Element



# Georgia's Strategic 2 Phase Approach

## Phase 1: Develop a cadre of “Mentor Hospitals”

- Engage early adopters
- Strengthen their expertise as a team
- Promote their adoption of Core Elements

## Phase 2: Spread best practices to remaining CAHs

- Recruit remaining CAHs
- Shared experiences from Mentor Hospital
- Link team members for consultation as needed



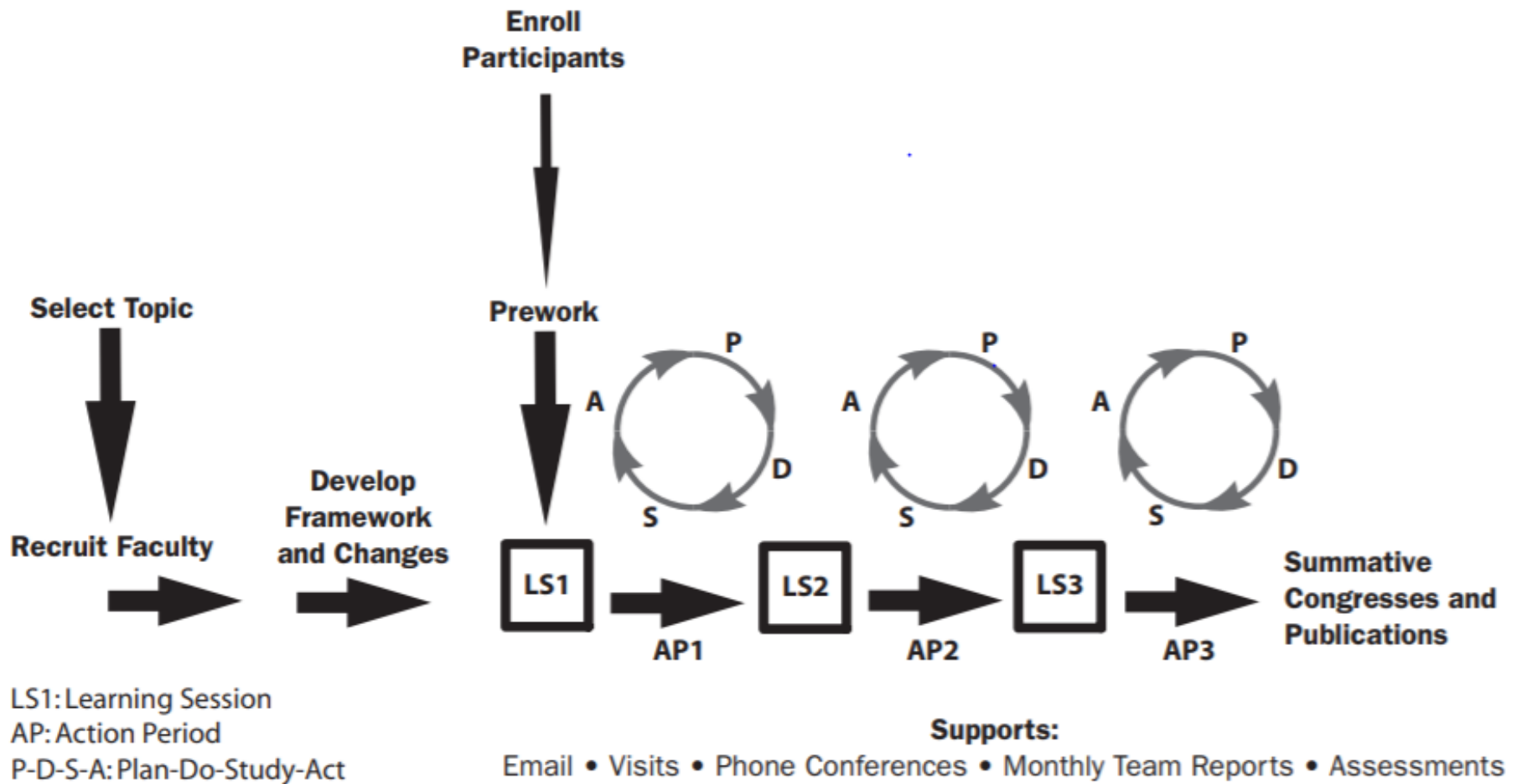
# Framework - Breakthrough Collaborative Methodology

The driving vision behind the Breakthrough Series is this: *there is a gap between what we know and what we do.*

“A Breakthrough Series Collaborative is a short-term (6- to 15-month) learning system that brings together a large number of teams from hospitals to seek improvement in a focused topic area.”

IHI Breakthrough Series white paper 2003

# Framework - Breakthrough Collaborative Methodology (2)



# Resources

Education • Quality • Infection Prevention

**EQIP** Critical Access Hospitals

Training and Professional Development Program

## JUMP START STEWARDSHIP

*Implementing Antimicrobial Stewardship in a Small, Rural Hospital*



**GEORGIA DEPARTMENT OF COMMUNITY HEALTH**

The Core Elements of Hospital Antibiotic Stewardship Programs CHECKLIST

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

Implementation of Antibiotic Stewardship Core Elements at Small and Critical Access Hospitals

Centers for Disease Control and Prevention  
National Center for Emerging and Zoonotic Infectious Diseases



# TOOLS

## Drivers of Optimal Antimicrobial Use

According to the Antibiotic Stewardship Driver Diagram and Change Package (Institute for Healthcare Improvement (IHI) and Centers for Disease Control and Prevention (CDC), 2012), the following drivers produce optimal, judicious antimicrobial use. This framework may be used to identify one or more interventions consistent with primary or secondary drivers. Over time, adding activities, interventions and actions addressing each of the drivers will make your ASP more robust and effective.

Primary Drivers	Secondary Drivers	Key Change Concepts
Leadership and Culture Change	Promote a culture of optimal antibiotic use within the facility	Engage administrative and clinical leadership to champion stewardship effort
	Promptly identify patients who require antibiotics	Develop a standardized process to identify patients who require antibiotics
Timely and Appropriate Initiation of Antibiotics	Obtain cultures prior to starting antibiotics	Create standardized protocols for ordering and obtaining cultures and other diagnostic tests prior to initiating antibiotics
	Do not give antibiotics with overlapping activity or combinations not supported by evidence or guidelines	Develop a way to inform clinicians about unnecessary combinations of antibiotics, including "double coverage"
	Determine and verify antibiotic allergies and tailor therapy accordingly	Choose antibiotic based on patient allergies
	Consider local antibiotic susceptibility patterns to select therapy	Develop a standardized process for antibiotic selection

## Feasibility of ASP Interventions Worksheet

Selection of specific interventions to implement should be tailored to areas (populations, units, drugs) with the most opportunity for improvement in your hospital. Consider several potentially-feasible interventions targeted to such areas, then assess which might be the most supported by clinical staff using the worksheet below.

Score each factor on a scale from 0 to 5 relative to conditions specific to your hospital. Sum each row across the columns for the score.

Interventions with the highest scores should be considered for selection. We've added lines for you to add your own proposed interventions.

Intervention	Positive Clinical Impact	Positive Financial Impact	Political Expediency	Resource Requirements	Ease of Implementation	Score
	0 = None 5 = High	0 = None 5 = High	0 = Impossible 5 = Win/Win	0 = Impossible 5 = None	0 = Impossible 5 = Easy	
Prospective audit with intervention and feedback						0
Formulary restriction and pre-authorization						0
Education						0
Guidelines and Clinical Pathways						0
Streamlining or de-escalation of therapy						0
Parenteral to oral conversion ("IV to PO")						0

## Infectious Clinical Syndrome Profile

To the best of your ability, complete the following table for the three most often diagnosed infectious clinical syndromes in your hospital in the last year (e.g. community-acquired pneumonia, skin and soft tissue infection, urinary tract infection, etc.). One purpose of this profile is to help you understand variation in prescribing practices in your hospital. The chart allows you to capture 2 varying regimens, with combination therapy of 2 drugs each. Try to calculate the cost per day of each drug as prescribed, and approximate the portion of cases that fall into each regimen (e.g. 90% for Regimen 1; 10% for Regimen 2; if you have much variation (more than 2 prominent regimens), percentages may not sum to 100%).

Clinical Syndrome	Number of Cases	Average Length of Stay	Antimicrobial Regimen 1		Antimicrobial Regimen 2		
			Drug Dose Frequency Duration Cost per Day	Percent of Cases	Drug Dose Frequency Duration Cost per Day	Percent of Cases	
EXAMPLE Community-Acquired Pneumonia (non-ICU)	43	6.6 days	Moxifloxacin 400 mg, IV q 24 hours 5 days \$131.50	60%	Ceftriaxone 1 g, IV q 24 hours 7 days \$28.80	Azithromycin 1 g, IV q 24 hours 7 days \$31.56	30%



<https://www.cdc.gov/getsmart/community/~local/modules/programs-measurement/stewardship-in-small-rural-hospitals-workbook-wa-508.pdf>

## Is the “Low-Hanging Fruit” Worth Picking for Antimicrobial Stewardship Programs?

Debra A. Goff,<sup>1</sup> Karri A. Bauer,<sup>1</sup> Erica E. Reed,<sup>1</sup> Kurt B. Stevenson,<sup>2,3</sup> Jeremy J. Taylor,<sup>1</sup> and Jessica E. West<sup>2</sup>

<sup>1</sup>Department of Pharmacy, The Ohio State University Wexner Medical Center, <sup>2</sup>Division of Infectious Diseases, College of Medicine, and <sup>3</sup>Division of Epidemiology, College of Public Health, The Ohio State University, Columbus

**A new antimicrobial stewardship program can be overwhelmed at the breadth of interventions and education required to conduct a successful program. The expression “low-hanging fruit,” in reference to stewardship, refers to selecting the most obtainable targets rather than confronting more complicated management issues. These targets include intravenous-to-oral conversions, batching of intravenous antimicrobials, therapeutic substitutions, and formulary restriction. These strategies require fewer resources and less effort than other stewardship activities; however, they are applicable to a variety of healthcare settings, including limited-resource hospitals, and have demonstrated significant financial savings. Our stewardship program found that staged and systematic interventions that focus on obvious areas of need, that is, low hanging fruit, provided early successes in our expanded program with a substantial cumulative cost savings of \$832 590.**

*Clinical Infectious Diseases*, Volume 55, Issue 4, 15 August 2012, Pages 587–592, <https://doi.org/10.1093/cid/cis494>



# Hospital Teams

- Physician Champion
- CEO/Administrator
- Chief Nurse
- Infection Preventionist
- Quality Manager
- Med-Surg Nurse Managers
- Emergency Department Director
- Pharmacy
- Lab
- Respiratory Department Director





# Mission

The mission of the Department of Community Health is to provide access to affordable, quality health care to Georgians through effective planning, purchasing, and oversight.

*We are dedicated to A Healthy Georgia.*