



# The Power of Small: Implementing Excellent Stewardship At A Critical Access Hospital

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# DISCLOSURES

- Nothing to disclose

# Agenda

At the conclusion of this session, participants will be able to:

- Describe Centers of Excellence (CoE) implementation strategies used in a critical access hospital
- Highlight Centers of Excellence (CoE) implementation challenges unique to a critical access hospital



# CoE Criteria

## IDSA Antimicrobial Stewardship Centers of Excellence - Core Criteria Description

**Program attests to complying with [CDC Core Elements](#), specifically:**

- Sustained Institutional Leadership Support
- Represents having ID Physician Leadership of the ASP, who receive protected time or compensation for their leadership.
- Represents having Drug Expertise with ID-trained Pharmacist
  - PharmD with **one** of the following:
    - Three years of clinical pharmacy experience AND AS training course certificate (SIDP/MAD-ID course) AND a letter of endorsement from ID Physician
    - Completed PGY-1 Residency AND AS training course certificate (SIDP/MAD-ID course)
    - PGY-2 Residency in ID
    - ID fellowship
- Has established protocols, consistent with reporting on antibiotic use and resistance patterns to clinicians, and proven interventions that effectively optimize antimicrobial use
- Provides on-going education to facility staff

**Demonstrate effective use of Electronic Health Record (EHR) and/or Clinical Decision Support System (CDSS) as an integral component of the ASP. At a minimum, a program should be able to demonstrate the following capabilities of their EHR/CDSS:**

- Produces reports on overall antibiotic use and trends (antibiotic use measured by using defined daily dosing (DDD) or days of therapy (DOT)).
- Produces reports on ASP interventions accepted and actions taken (e.g., percentage of cases where therapy is appropriate, adherence to hospital-specific guidelines, frequency at which de-escalation occurs, appropriate cultures obtained before starting antibiotics, timely administration of appropriate antibiotics for those cases of suspected sepsis, and performance of antibiotic time-outs), and measures of appropriate use and outcome measures such as length of stay, risk-adjusted mortality, hospital-onset *C. difficile* infection rates, adverse drug reactions, and antibiotic-resistance (focusing on hospital onset cases).

IDSA. IDSA Antimicrobial Stewardship Centers of Excellence – Core Criteria Description [Internet]. Infectious Diseases Society of America. 2020 [cited 2022 Oct 14]. Available from: <https://www.idsociety.org/globalassets/idsa-news/logos/coe-criteria-update-10.2020.pdf>



# Overview of Hospital

- Part of the Astria Health system
  - 2 hospitals, 941 employees, multiple rural health centers
- In-house microbiology lab, ICU, elective PCI, OB/GYN service, Med/Surg floor, Oncology outpatient clinic



# Overview of ASH's Program

- Our Mission for this program:
  - To protect our patients and community from the unwanted consequences of antimicrobial use through the promotion of safe and effective antimicrobial usage
- Outpatient, inpatient



# How ASH Meets CoE Standards

## Leadership/Accountability/Drug Expertise:

- Pharmacist-led (P & T physician support), 5.5 years clinical experience
- Signed support statement from C-suite executive, clinical decision support systems, dedicated time



# How ASH Meets CoE Standards

## Action:

- Antibiotic/Antifungal Appropriate Use Criteria, institution-specific prescribing guidelines, antibiogram, nurse-initiated UTI protocol, indication required in EMR
- Daily handshake stewardship rounds with hospitalist
- Nudge in urinary culture and sensitivity reports

# How ASH Meets CoE Standards

## Education:

- Patients: Pharmacist discharge consult service
- Clinical staff: UW-TASP lectures and guidebook, Mission Moments/Opportunities via email and in meetings, annual Healthstream education, new provider orientation, one-pagers

# How ASH Meets CoE Standards

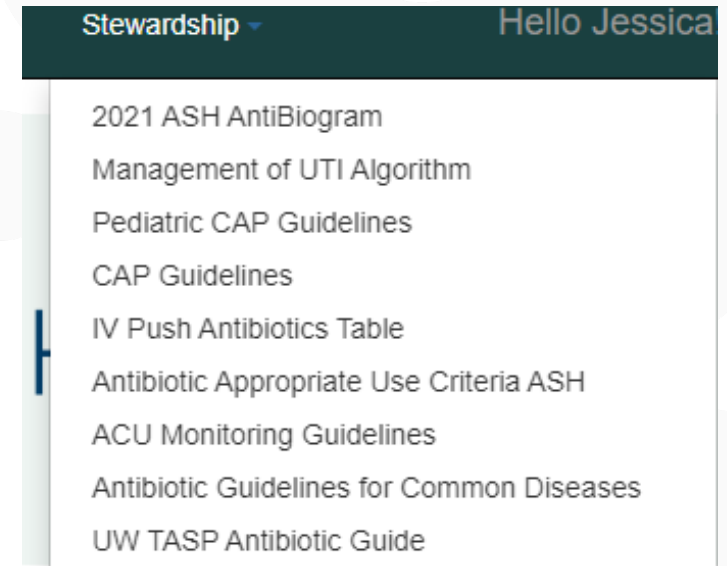
## Monthly Tracking & Reporting:

- # of pharmacist interventions, acceptance rate, adverse drug reactions, DOTs of broad spectrum antibiotics, annual antibiogram reports complete with MDRO analysis



# Implementation Strategies

- **Resources for Clinicians**
  - Distributed via Intranet, new provider orientation, cheat sheets
- **Daily handshake stewardship**
- **Education**
  - Via email, orientation, and Healthstream
- **Reporting**
  - All committees via Quality report

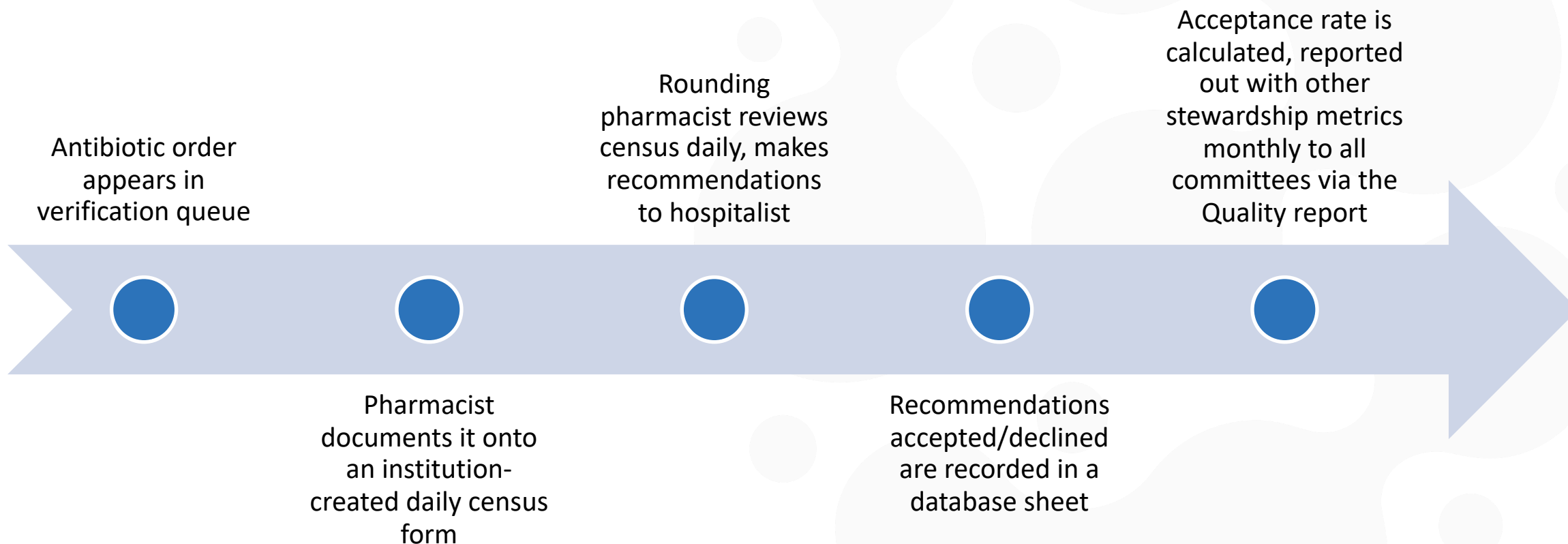


 ASTRIA SUNNYSIDE HOSPITAL

ICU

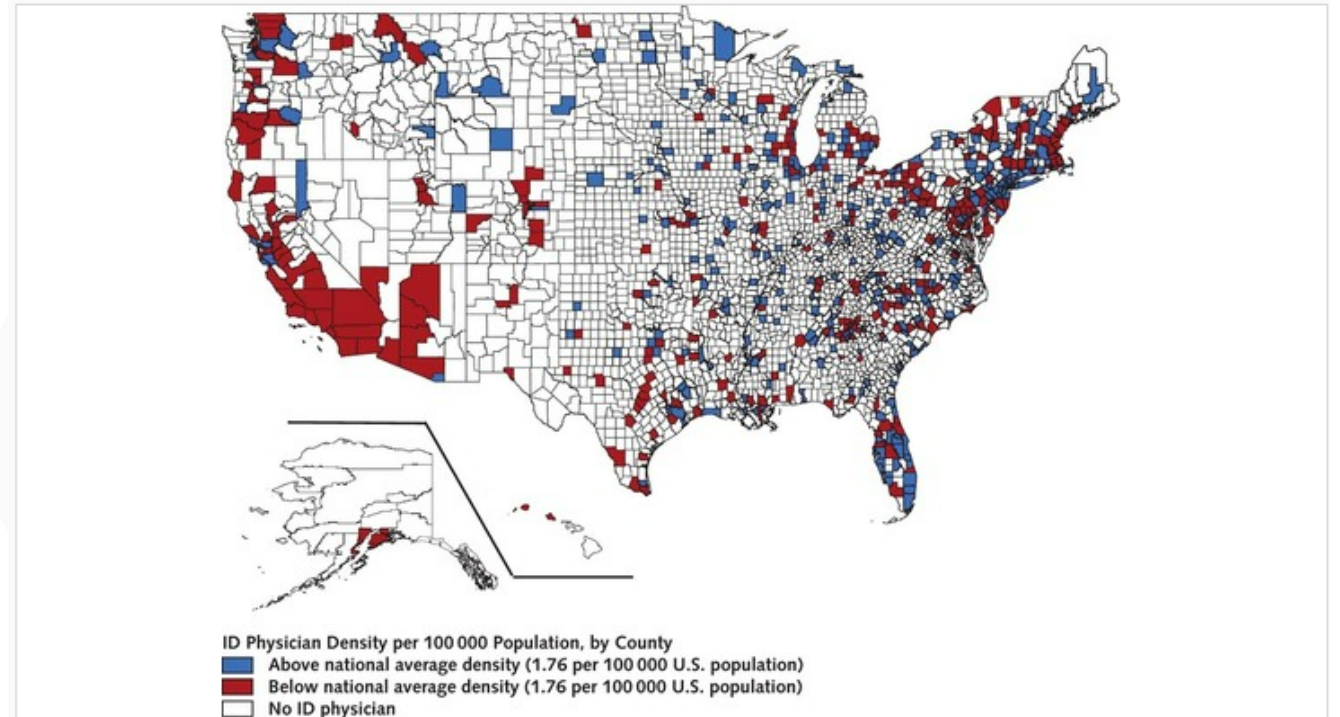
Room	Pt Name	Age (M/F)	Diagnosis	Renal Failure?	Antibiotics	Dose/Freq	Organisms	Date Started	Notes/Intervention
A	Example, Patient	60M	UTI	CrCl 60+	Ceftriaxone	1g qd	E. coli in urine culture	12/05	No known allergies
B	Example, Patient 2	60M	Community Acquired Pneumonia	Dialysis	Ceftriaxone Azithromycin	1g qd 500mg qd	Pending sputum culture	12/05	Allergy to Levaquin
C									
D									

# Stewardship Workflow



# CoE Implementation Challenges

- **No dedicated ID physician**
  - 208 million Americans live in an area with no or below-average access to an ID physician<sup>1</sup>
- **Limited financial resources**
  - \$5000/2 years for CoE designations
  - C-suite buy-in



**Figure 1. County-level ID physician density for the United States.**

The average ID physician density in the United States is 1.76 per 100 000 persons. Counties with ID physicians above this national average density are shown in blue, those with below national average density are shown in red, and those with no ID physicians are shown in white. ID = infectious disease.



# CoE Implementation Challenges

- “Multiple Hats”
  - Making friends with the IT department
  - Reporting functions in the EMR
  - Order sets, culture and sensitivity reports



Hocking S. Stack of Hats [Internet]. Unsplash. 2018 [cited 2022 Oct 14]. Available from: <https://unsplash.com/photos/QxeihtV-5Kk>

# CoE Implementation Challenges

- Buy-In
  - Know your regulations
  - Reframe the narrative
  - Stewardship is a quality improvement initiative also!



Cytonn Photography. Handshake [Internet]. Unsplash. 2018 [cited 2022 Oct 14].  
Available from: <https://unsplash.com/photos/vWchRczcQwM>

# CoE Implementation Challenges

- Staff turnover and locum services
  - Building a policy-backed structure
  - Putting stewardship into orientation
  - Identifying a point-of-contact with locum services or medical staff who can share education/updates on your behalf



Graham S. Writing On Paper [Internet]. Unsplash. 2015 [cited 2022 Oct 14]. Available from: <https://unsplash.com/photos/OQMZwNd3ThU>



# The Power of Small Excellence

- Limited resources have a greater impact
- Programs/policies can be implemented much faster
- Bigger community impact
- Innovation



van Neck S. Fireworks in Night Sky [Internet]. Unsplash. 2020 [cited 2022 Oct 14]. Available from: <https://unsplash.com/photos/vsxO1kefz90>

# Conclusion

- Excellent stewardship programs at CAHs is possible, but may face significant barriers to implementation
- Recommend that CoE designation criteria be revised to consider the unique barriers of CAHs



**Thank you!**

