

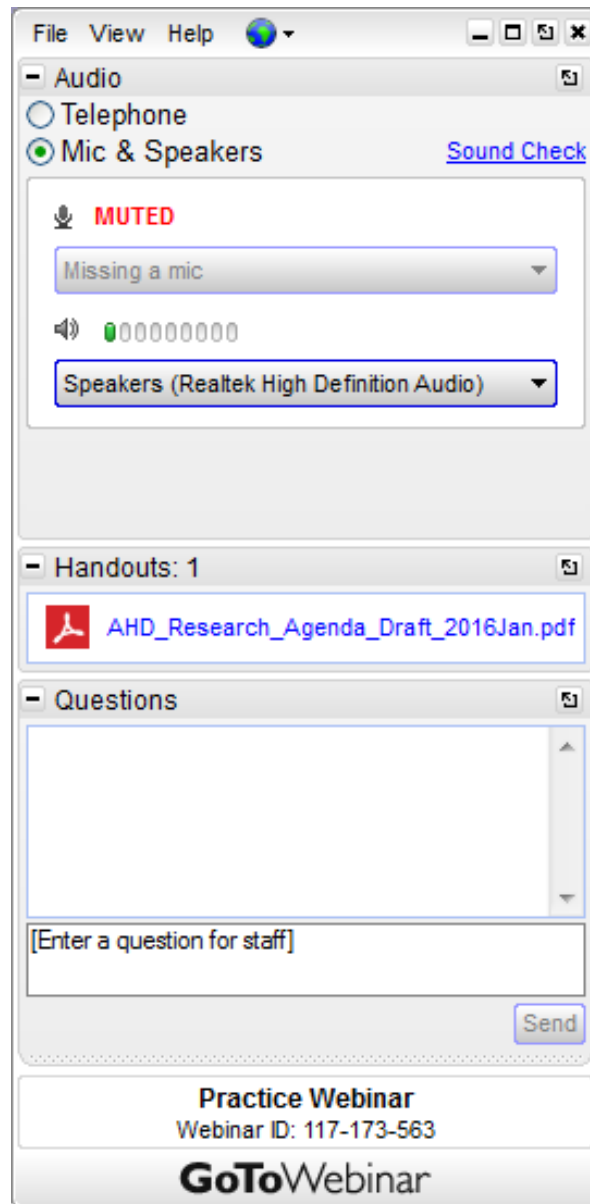


Building Cross-Sector Collaborations to Promote Effective Antibiotic Use in Inpatient, Outpatient, and Long-Term Care Settings

Tuesday, February 7, 2017

Housekeeping

- All attendees are muted.
- Materials for today's presentation are available for download in the "Handouts" panel.
- Use computer speakers or provided call-in number for sound.
- Please use the "Questions" panel to ask questions and submit comments throughout the webinar.
- This webinar will be recorded and archived. The archive will be made available following the meeting.



The screenshot displays the GoToWebinar interface with the following sections:

- Audio:** Shows "Telephone" and "Mic & Speakers" (selected). A "MUTED" status is indicated with a microphone icon. A dropdown menu shows "Missing a mic". A volume level indicator shows 00000000. Another dropdown menu shows "Speakers (Realtek High Definition Audio)". A "Sound Check" link is visible.
- Handouts: 1:** Displays a PDF document titled "AHD_Research_Agenda_Draft_2016Jan.pdf".
- Questions:** A large text area for entering questions, with a placeholder "[Enter a question for staff]". A "Send" button is located at the bottom right of this section.
- Footer:** Contains the text "Practice Webinar", "Webinar ID: 117-173-563", and the "GoToWebinar" logo.

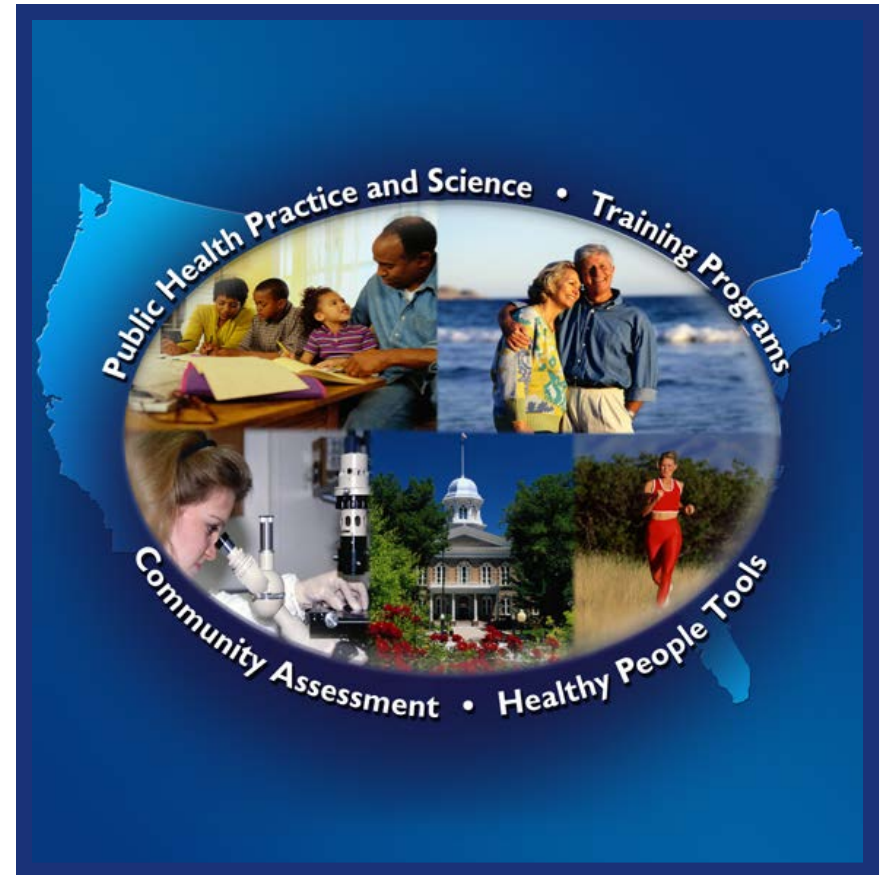
Thanks to our sponsor!

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Learning Objectives

- Describe how cross-sector collaboration can improve antibiotic stewardship programs
- List at least three outcomes or impacts that have resulted from cross-sector collaboration in antibiotic stewardship
- Identify best practices to developing cross-sector collaboration in antibiotic stewardship
- Identify and avoid potential pitfalls to developing cross sector-collaboration in antibiotic stewardship

Today's Presenters

- Marisa D'Angeli, Washington State Department of Health
- Aimee Ford, Qualis Health
- Suzanne Williams, Illinois Department of Public Health
- Scott Bergman, University of Nebraska
 - Previously with the Southern Illinois University School of Pharmacy and the Illinois Pharmacists Association)



Advancing Antimicrobial Stewardship (AMS) in Nursing Homes Through Cross-Sector Partnerships

Marisa D'Angeli, MD, MPH
Medical Epidemiologist
Washington State
Department of Health

Aimee Ford, MS, RN
QI Consultant, Nursing Homes
Qualis Health

February 7, 2017



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Organizations**
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Education • Quality • Infection Prevention



Training and Professional Development Program

- EQUIP Program—Education, Quality (Improvement), Infection Prevention
- Developed by Qualis Health with funding from CMS
- Partnership with DOH and other organizations
- Support infection preventionists in small, rural hospitals



Education • Quality • Infection Prevention



Training and Professional Development Program

EDUCATION

- Monthly webinars
- Recorded webinars
- Annual conference
- Regional in-person workshops

MENTORSHIP

- Partnerships with experienced preventionists
- Conference calls with subject matter experts, as needed and requested

COLLABORATIVE LEARNING

- Members-only SharePoint site
- Shared documents and tools
- Discussion boards
- Collaborative improvement projects

DATA SHARING

- Healthcare-associated infection reports
- Local benchmarking reports



Antimicrobial Stewardship Summit

- AMS Advisory Committee members developed materials for in-person learning sessions
- Summit hosted by trade association and local health departments in King County, Spokane & Tri-Cities
- Presenters: local/state health departments, SNF medical director, pharmacy, micro lab, infection prevention (IP) and stewardship experts
- Panel discussion with providers and a family member addressing barriers to AMS

Provider Feedback

Please list 3 new ways you do will things, or do them differently, as a result of this program.

Answered:14 Skipped: 0

Count ABO use Infection rates Write UTI protocol

4/21/2016 3:34 PM

screen residents admitted from hospital look at and revise infection control program audit documentation of abo use.

4/15/2016 4:11 PM

Change what I monitor get rid of the dip stick work with the providers

4/15/2016 11:24 AM

Preventing and managing UTIs Prescreening and managing C-Diff Working closer with MD and Pharmacy

4/15/2016 10:29 AM

I will ask the DSD to report immunizations for flu, vaccines for PNA at QAPI monthly for staff and residents. We will use the reports from the lab to identify ABO's that aren't working and educate the physicians, we will stop using dipsticks:)

4/14/2016 4:43 PM

send new ABO orders to pharmacy for review, give additional help to IP, train ARNP and MD

4/14/2016 2:45 PM

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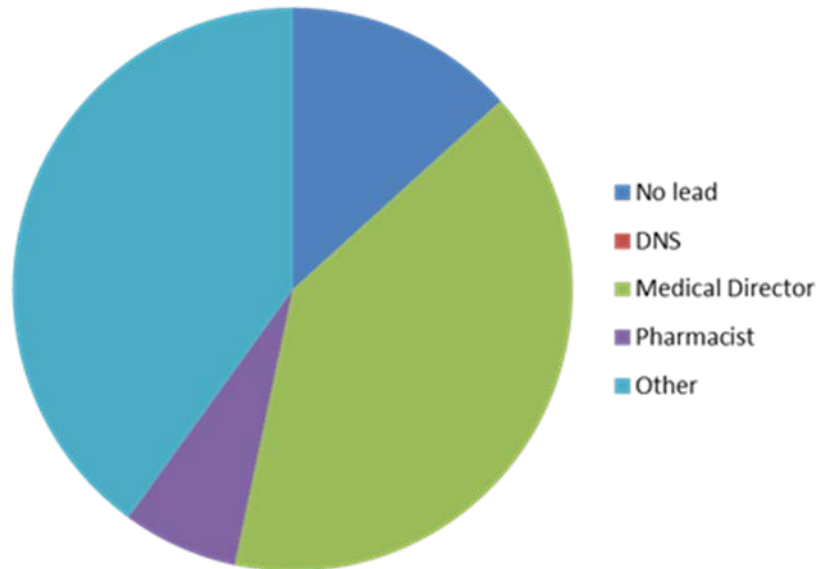
EQulP for LTC

Training and Professional Development Program

- Funding from CDC Epidemiology and Lab Capacity grant to apply EQulP model to LTC
- Goal: Help SNFs meet new CMS requirement for IP and AMS
- Partnership: Qualis Health, WA & ID departments of health, APIC, state survey agency, LTC trade associations, nursing home staff, and family representative

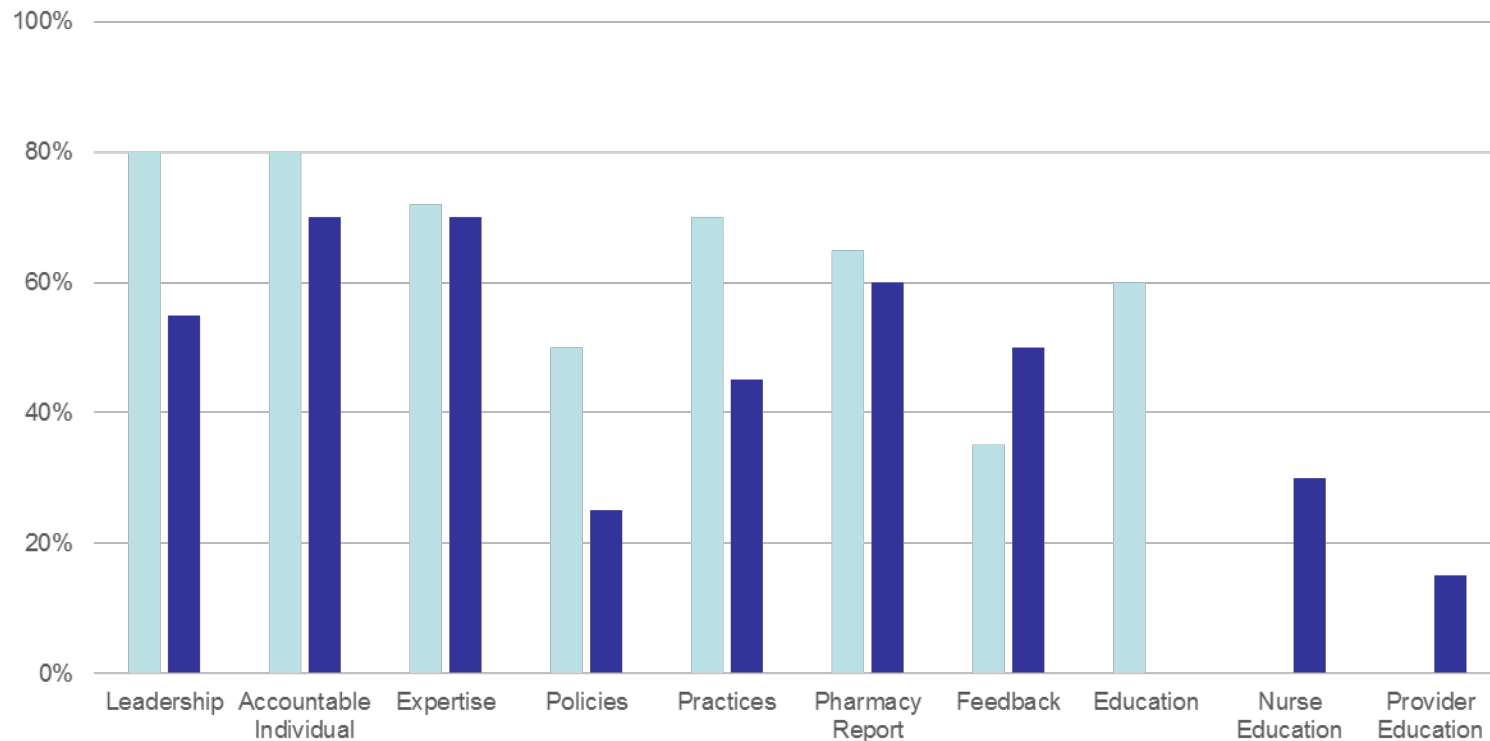
Assessing Nursing Homes' IP & AMS Preparedness

Antimicrobial Stewardship Leader



- Annual Facility Survey completed by NHSN SNF cohort
- Gap survey of SNFs in Idaho & Washington to assess infection prevention and stewardship
- DOH Infection Control and Response (ICAR) visit summaries

EQuIP Gap Survey vs. Infection Control and Response Assessments



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Training and Professional Development Program

JUMP START STEWARDSHIP

Implementing a Stewardship
Program in a Skilled Nursing
Facility

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Public Health's Role in Antibiotic Stewardship

Efforts to promote optimal antibiotic use should employ both the public health and healthcare systems. While some drivers of antibiotic resistance fall outside the direct control of public health (e.g., use of antibiotics in livestock food supplies), others highlighted here sit squarely within the focus of public health organizations.

This diagram outlines primary and secondary drivers of optimal antibiotic use. It complements a driver diagram being piloted in eight hospitals by the Institute for Healthcare Improvement (IHI). PHF is actively seeking comments on the driver diagram from healthcare and public health organizations already engaged in efforts to address antibiotic resistance.

Driver Diagram

PRIMARY DRIVERS

Appropriate Use of Antibiotics

Data Monitoring, Transparency, and Stewardship Infrastructure

Knowledge, Awareness, and Perception of the Importance of Appropriate Antibiotic Use

SECONDARY DRIVERS

Partnerships, Communication, Reimbursement, & Stewardship

- Provide information on which antibiotics are most effective within your community at a certain point in time
- Provide information on which diseases are prevalent within a community at a point in time
- Develop policies that create incentives for appropriate antibiotic use
- Develop appropriate policies for daycare, work, and school on appropriate attendance during illness (staying away and going back)

Surveillance, Analysis, Feedback, Triage, & Leveraging Resources

- Leverage existing infrastructure to promote better antibiotic use
- Use local resistance data to inform antibiotic choice
- Explore ways to gather use and prescribing data

Share Evidence Broadly, Provide Education, Create Urgency, & Empower Alternative Action

- Develop intervention plans for segmented target audiences (consumers, providers, insurers, policy makers, etc.)
- Change attitudes and perceptions about what constitutes appropriate antibiotic use
- Educate health departments and public health professionals
- Incorporate antibiotic usage into community assessment and improvement plans

AIM Promote Optimal Antibiotic Use

Goals

- Preserve antibiotics for the future
- Decrease demand by the public for inappropriate use
- Reduce the spread of antibiotic resistance
- Decrease adverse events associated with inappropriate antibiotic use
- Decrease costs associated with antibiotic use

Policy, Communication, Education, Incentives, Partnerships, and Facilitation

Public Health's Role in Antibiotic Stewardship

Efforts to promote optimal antibiotic use employ both the public health and clinical systems. While some drivers of antibiotic use fall outside the direct control of public health organizations, the use of antibiotics in livestock food production highlighted here sit squarely within the purview of public health organizations.

This diagram outlines primary and secondary drivers of optimal antibiotic use. It complements a driver diagram being piloted in eight hospitals by the Institute for Healthcare Improvement (IHI). PHF is actively seeking comments on the driver diagram from healthcare and public health organizations already engaged in antibiotic stewardship and antibiotic resistance.

- Clinical practice guidelines
- Surveillance reports
- Promote stewardship as the new norm

SECONDARY DRIVERS

Partnerships, Communication, Reimbursement, & Stewardship

Provide information on which antibiotics are most effective within your community at a certain point in time

- Provide information on which diseases are prevalent within a community at a point in time
- Develop policies that create incentives for appropriate antibiotic use
- Develop appropriate policies for daycare, work, and school on appropriate attendance during illness (staying away and going back)

Appropriate Use of Antibiotics

- Routine infection surveillance
- Consultant pharmacist
- Micro lab
- Antibiotic measurement

Surveillance, Analysis, Feedback, Triage, & Leveraging Resources

Leverage existing infrastructure to promote better antibiotic use

- Use local resistance data to inform antibiotic choice
- Explore ways to gather use and prescribing data

AIM

Promote Optimal Antibiotic Use

Goals

- AMS toolkit
- Existing resources from CDC, AHRQ & Choosing Wisely
- Educate residents, families, and staff
- Create intervention plan with measurable outcomes

Share Evidence Broadly, Provide Education, Create Urgency, & Empower Alternative Action

Develop intervention plans for segmented target audiences (consumers, providers, insurers, policy makers, etc.)

- Change attitudes and perceptions about what constitutes appropriate antibiotic use
- Educate health departments and public health professionals
- Incorporate antibiotic usage into community assessment and improvement plans

Policy, Communication, Education, Incentives, Partnerships, and Facilitation

Cross-sector Collaboration

Benefits:

- Amplifies stewardship message
- Provides complementary expertise
- Increases credibility of program
- Minimizes duplication of work

Pitfalls:

- Competing initiatives in each sector
- Participation of members may be inconsistent
- Potential conflicts in working styles

Best Practices in Collaboration

- Ensure clear objectives that align with members' work
- Identify and include the end-users on the team
- Leaders foster high standards for communicating and resolving difference of opinions
- Build on existing relationships within the team

Contact

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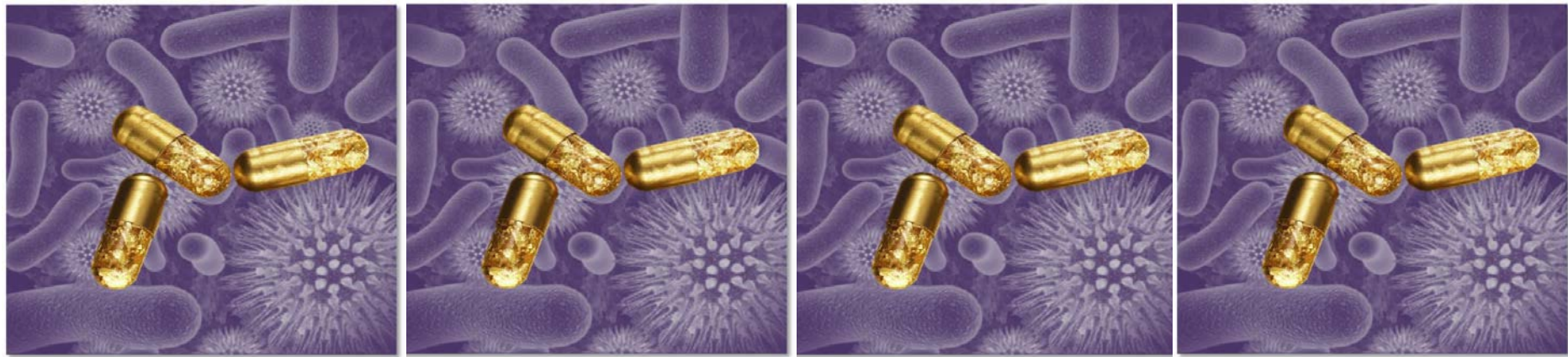
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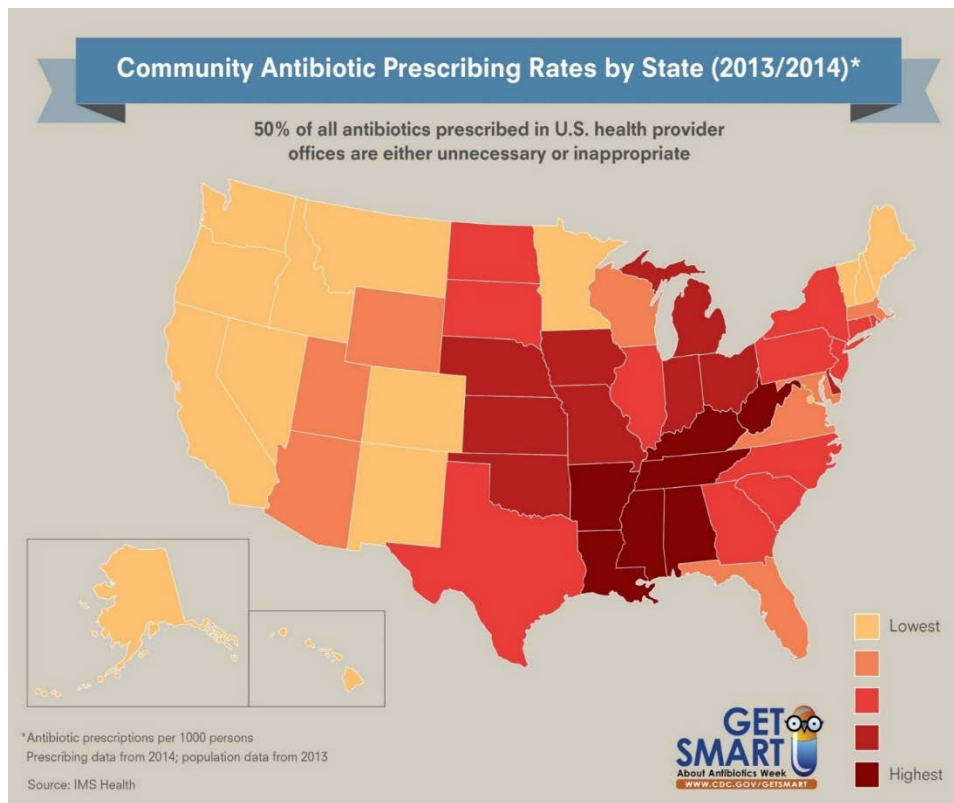
Precious Drugs & Scary Bugs Campaign

Suzanne Williams, MPH
Division of Patient Safety and Quality
Illinois Department of Public Health

PHF/CDC Presentation
February 7, 2017



Antibiotic Use in Illinois



- In 2013-2014, there were 853 antibiotic prescriptions per 1,000 people¹ in Illinois
- *An unintended consequence of antibiotic use:*
 - **Over half** of the 15,000 cases of *Clostridium difficile* infections in Illinois hospitals reported to NHSN in 2015 were community onset

<http://www.cdc.gov/getsmart/community/images/usmap.jpg>

1. <http://www.cdc.gov/getsmart/community/programs-measurement/measuring-antibiotic-prescribing.html>



Original Investigation

Nudging Guideline-Concordant Antibiotic Prescribing A Randomized Clinical Trial

- 5 outpatient primary clinics
- Displayed poster-sized commitment letters in examination rooms for 12 weeks
- **19.7 absolute percentage reduction in inappropriate antibiotic prescribing rate** relative to control (P = .02)

[JAMA Intern Med.](#) 2014 Mar 1;174(3):425-31. doi: 10.1001/jamainternmed.2013.14191. Nudging guideline-concordant antibiotic prescribing: a randomized clinical trial. [Meeker D](#)¹, [Knight TK](#)², [Friedberg MW](#)³, [Linder JA](#)⁴, [Goldstein NJ](#)⁵, [Fox CR](#)⁵, [Rothfeld A](#)⁶, [Diaz G](#)⁷, [Doctor JN](#)².

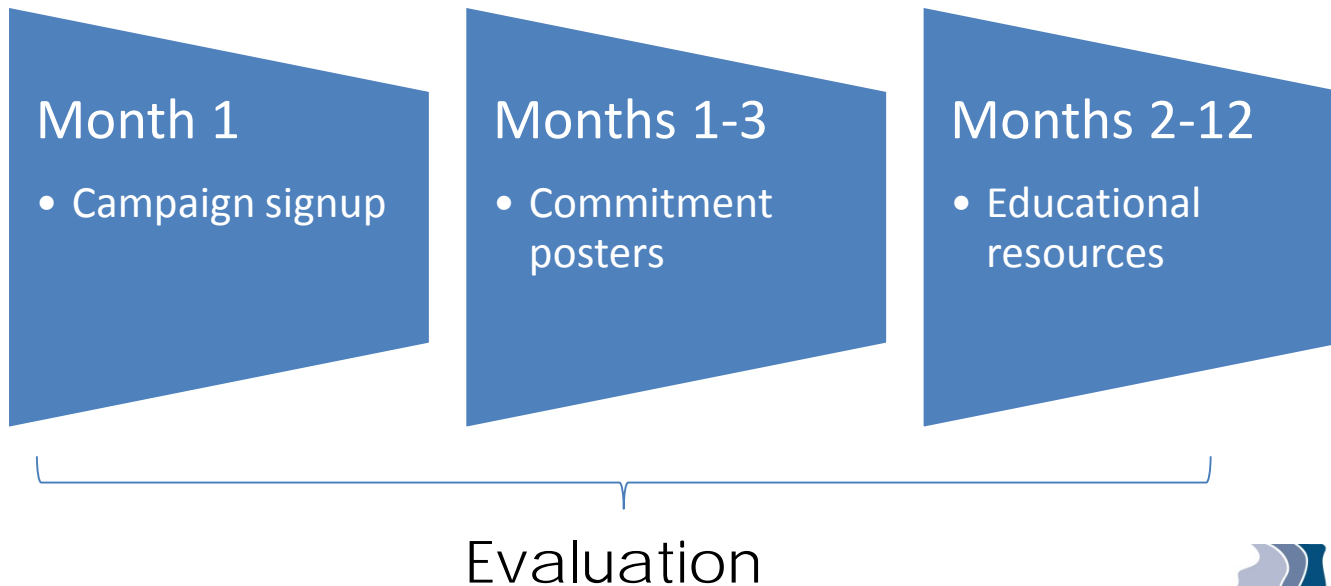


Illinois Campaign

Goals

- Increase provider and patient knowledge, provide resources, and improve coordination and exchange of best practices between stakeholders

Campaign Timeline (March 2015 to Present)



(Pre & post survey, provider interviews, antibiotic prescribing data)



Core Intervention-Commitment Poster



Safe Antibiotic Use:

An Important Message From Your Providers

Dear Patient,

We want to give you some important information about antibiotics.

- ▶ **Antibiotics only fight infections caused by bacteria.**
- ▶ **Antibiotics will **NOT** help you feel better if you have a viral infection like:**
 - Cold or runny nose
 - Bronchitis or chest cold
 - Flu
- ▶ **If you take antibiotics when you don't really need them, they can cause more harm than good:**
 - You might feel worse
 - You can get diarrhea, rashes, or yeast infections
 - Antibiotics may **NOT** work when you really need them because antibiotics make bacteria more resistant to them. This can make future infections harder to treat.

What can you do as a patient? Talk with me about the treatment that is best for you. Follow the treatment plan that we discuss.

As your healthcare provider, I will give you the best care possible. I am dedicated to avoid prescribing antibiotics when they are likely to do more harm than good. If you have any questions, please ask me, your nurse, or your pharmacist.

Sincerely,



Provider
photo

Signature



Provider
photo

Signature



Provider
photo

Signature



Provider
photo

Signature

The best care
is the right care.
Only use antibiotics
when needed.

Facility Logo



“The value I see to it is that patients see it and read it and it paves the way for you, but it’s more than a constant reminder to do the right thing and not give in. It makes you take the time commitment to talk to the patient.”

- *Physician*



Campaign Workgroup (1)

• Who?

- Ann & Robert H. Lurie Children's Hospital of Chicago
- BlueCross BlueShield of Illinois
- **Downstate Illinois Partnership Against Antibiotic Resistance (Southern Illinois University Family Medicine)**
- Illinois Academy of Family Physicians
- Illinois Academy of Pediatrics
- Illinois Pharmacy Association
- Illinois Primary Health Care Association
- Medical Groups
- Academic Partners



Campaign Workgroup (2)

Facility Engagement

- Recruitment
- Campaign implementation guide

Tool Development

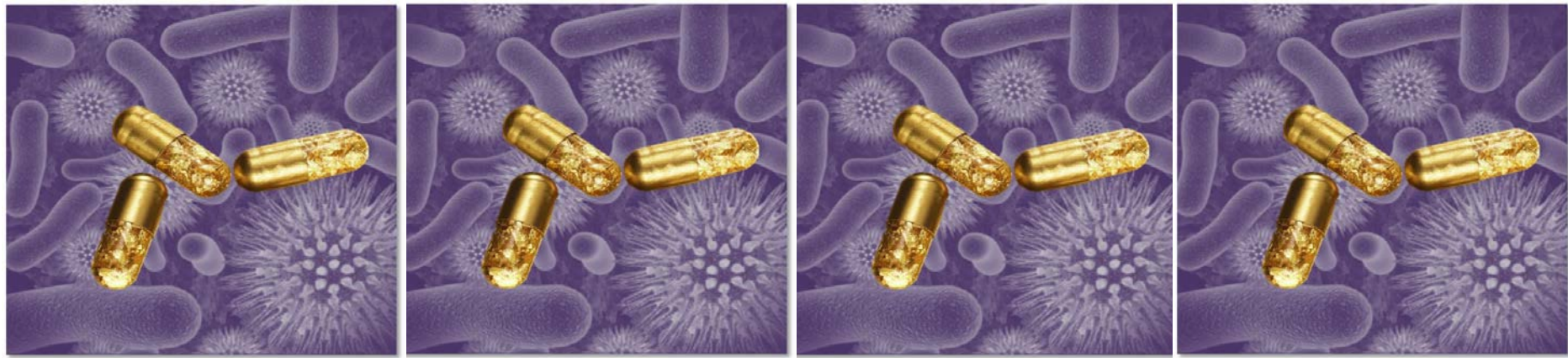
- Commitment poster design
- Webinar development
- Evaluation tools



Thank You

Suzanne Williams, MPH

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SIU Family Medicine's Experience

Scott Bergman, PharmD, BCPS-ID, FIDSA

Currently

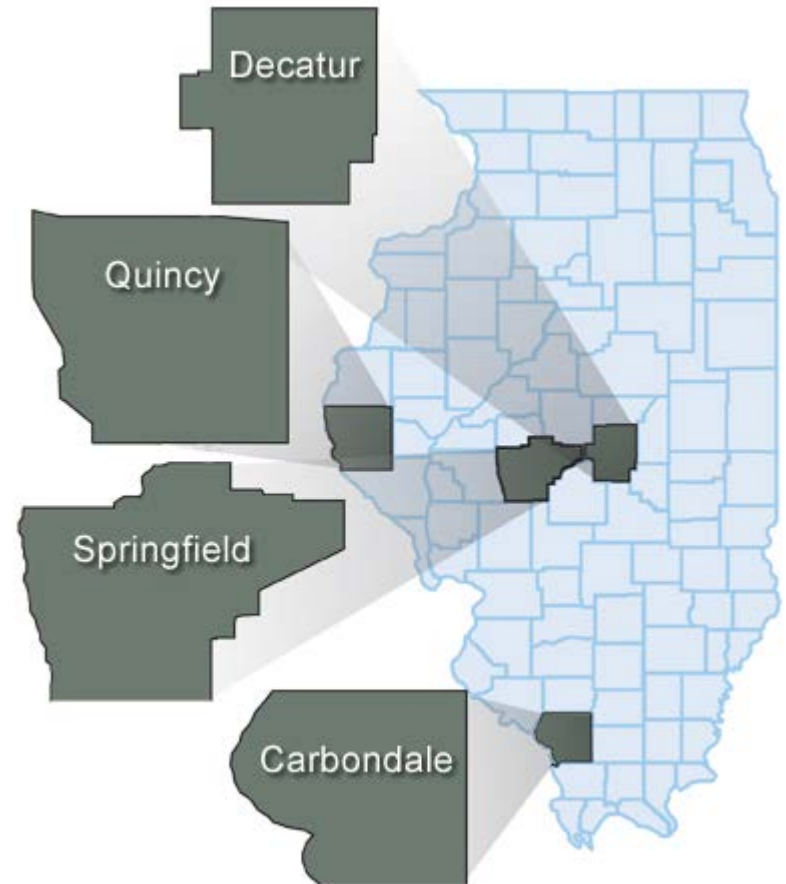
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Associate Professor, Southern Illinois University Edwardsville
School of Pharmacy and SIU School of Medicine
Springfield, IL



- 4 clinic locations
- 2 participated





Background



Downstate Illinois Partnership Against Antibiotic Resistance

SIU SOM LINKS SEARCH SIU SOM

Home Learn More Industry News About Us Contact Us

PROTECT ANTIBIOTICS

- 1 Prevent infections and the spread of drug resistant bacteria.
- 2 Use antibiotics much more responsibly.
- 3 Track resistance patterns.
- 4 Develop new drugs.



Think Globally, Act Locally

Raising awareness of the threat of antibiotic resistance.
Promoting research and responsible prescription by health professionals in downstate Illinois.

Email Print

Downstate Illinois Partnership Against Antibiotic Resistance

In response to the global concern regarding antibiotic resistance, the Downstate Illinois Partnership Against Antibiotic Resistance (DIPAAR) was created. It is sponsored by the Southern Illinois University School of Medicine with partners across central and southern Illinois. DIPAAR partners represent the majority of the 102 counties in Illinois.

Antimicrobial drug resistance occurs everywhere in the world and is not limited to industrialized nations. Health care professionals in all settings struggle daily to combat drug-resistant organisms and infections. This website was created to inform the global community of DIPAAR's existence and activities. It will also serve as a gateway to reliable and credible information for health care professionals and patients.

Antibiotic Resistance Related Events

Get Smart About Antibiotics Week for 2015 is November 16 to 22. Visit the official website at <http://www.cdc.gov/getsmart/week/index.html> for more information.

For a full list of Get Smart Week Activities and Events, click here.

A Webinar, titled **Getting Smart about Antibiotics: Policy and Behavior Change Drivers for Stewardship**, will be held Tuesday, November 17. For more details, click here.



DIPAAR Updates:

The Downstate Illinois Partnership Against Antibiotic Resistance is collaborating with the Illinois Department of Public Health on a new statewide initiative to promote appropriate use of antibiotics in outpatient healthcare settings. Antibiotics are often misused in outpatient and other healthcare settings, contributing to reduced effectiveness of these important drugs and making even common infections more difficult to treat.



The Precious Drugs & Scary Bugs Campaign aims to increase healthcare





Who and How

- Recruiting sites to participate
 - Champion at each location
 - Physician assistant
- Buy-in from leadership
 - Medical director
 - Quality improvement
- Facility involvement
 - 12 faculty (physicians and mid-levels)
 - 15 residents at each site



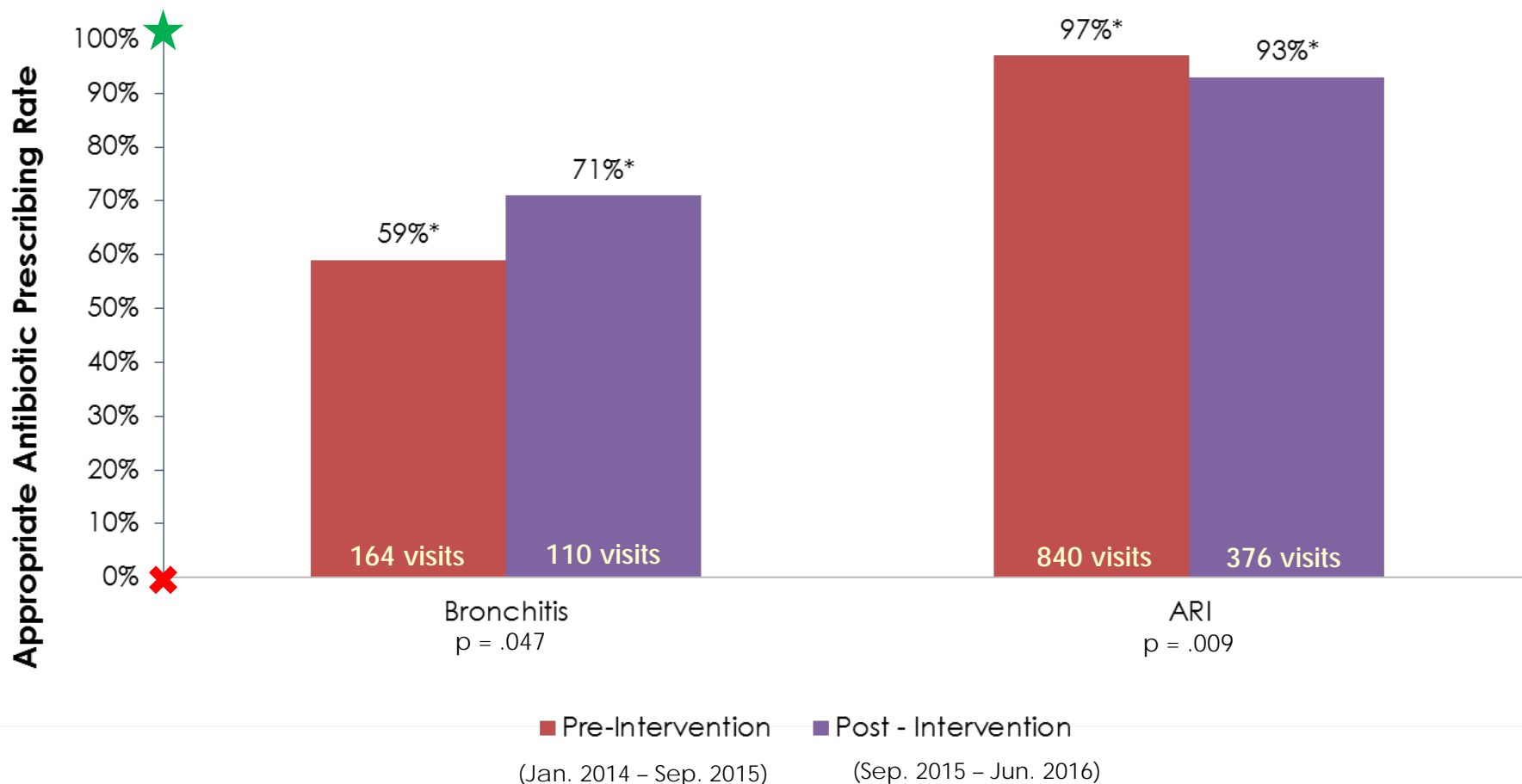
- Efforts
 - (1) Commitment poster intervention
 - Acute bronchitis
 - Acute respiratory infections
 - (2) Educational Webinar
 - Development by champions
 - Viewed by clinic providers
 - (3) Evaluation
 - Antibiotic Prescribing Data
 - Provider Interviews



- Two clinics enrolled
- One reporting data
- Difficulty in pulling report
 - Medical resident performed QA
- Other non-academic clinics signing up



Appropriate antibiotic prescribing rate for Bronchitis and ARI before and after commitment poster intervention



*Statistically significant



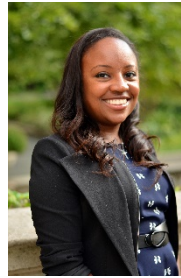
Challenges

- Changing EHRs
- ICD-9 vs. ICD-10
- Primary vs. secondary diagnosis
 - Acute otitis media
- Inclusion/exclusion criteria
 - COPD
- Drugs included
 - Trimethoprim/polymyxin otic drops

Questions or Comments?



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Resources

- [CDC's Antibiotic Stewardship Implementation Framework for Health Departments](#)
- [PHF's Antibiotic Stewardship Programs and Resources](#)
- [CDC's Get Smart About Antibiotics](#) campaign, available through [PHF's Online Store](#)
- [TRAIN Learning Network's courses on antimicrobial and antibiotic resistance and stewardship](#)

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- Core Competencies for Public Health Professionals
- Academic Health Department Learning Community

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Thank You!