

Welcome

Office for State, Tribal, Local and Territorial Support
presents . . .

CDC Vital Signs **Improving Antibiotic Prescribing in Hospitals**

March 11, 2014
2:00–3:00 pm (EDT)



Centers for Disease Control and Prevention
Office for State, Tribal, Local and Territorial Support

Agenda

2:00 pm	Welcome & Introductions	Dan Baden, MD Associate Director for External Partner Outreach and Connectivity, Office for State, Tribal, Local and Territorial Support, CDC
2:04 pm	Presentations	Scott Fridkin, MD, CAPT USPHS Medical Officer, Division of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infectious Diseases, CDC Angela Jackley, RN Healthcare Associated Infections Coordinator, Office of Disease Prevention, South Dakota Department of Health Jeanne Negley, MBA Director, Healthcare Associated Infections Surveillance, Division of Health Protection, Acute Disease Epidemiology Section, Georgia Department of Public Health
2:30 pm	Q&A and Discussion	Dan Baden, MD
2:55 pm	Wrap-up	
3:00 pm	End of Call	



CDC
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momentum around the monthly
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CDC *Vital Signs* Town Hall Improving Antibiotic Prescribing Practices in Hospitals

Scott Fridkin, MD, CAPT

Medical Officer, Division of Healthcare Quality Promotion
National Center for Emerging and Zoonotic Infectious Diseases
Centers for Disease Control and Prevention

March 11, 2014

Prescribing Practices Vary, Errors Common

3x

Doctors in some hospitals prescribed 3 times as many antibiotics as doctors in other hospitals.

- ❑ More than half of all hospital patients receive an antibiotic
- ❑ Doctors in some hospitals prescribed 3 times as many antibiotics as doctors in other hospitals



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Poor Prescribing Harms Patients

30%

Reducing prescriptions of high-risk antibiotics by 30% in hospitals can lower deadly diarrhea infections by 26%.



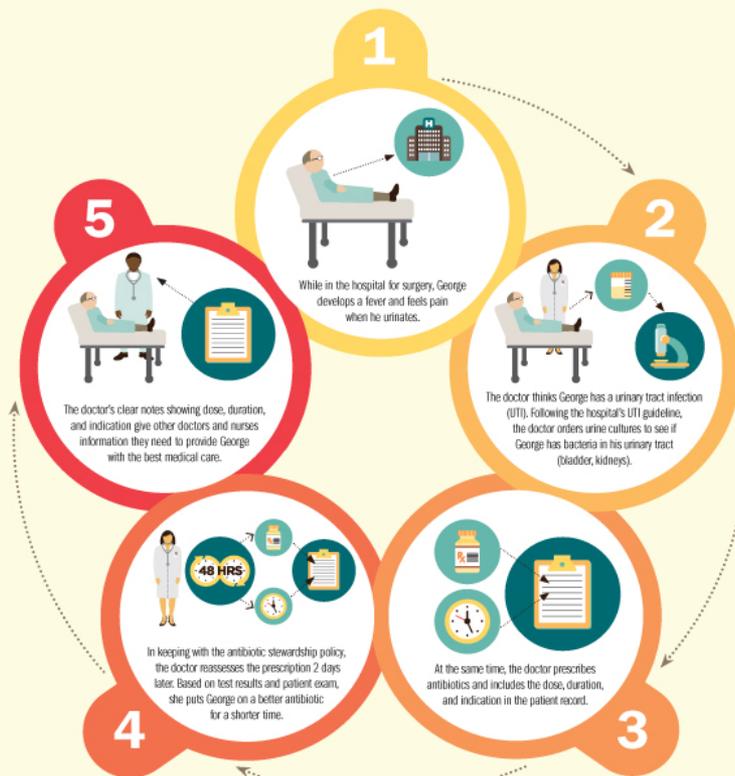
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- ❑ Decreasing by 30% the use of antibiotics that most often lead to *C.difficile* infection could lead to 26% fewer of these infections
- ❑ Patients getting broad-spectrum antibiotics are up to 3x more likely to get another infection from an even more resistant germ

CDC Recommends All Hospitals Implement Antibiotic Stewardship Programs

Improving antibiotic prescribing in hospitals

Key moments for improving the cycle of antibiotic prescribing practices



SOURCE: CDC Vital Signs, 2014

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- ❑ Leadership commitment
- ❑ Accountability
- ❑ Drug expertise
- ❑ Action
- ❑ Tracking
- ❑ Reporting
- ❑ Education

State Health Departments Can...

- ❑ Gain an understanding of antibiotic stewardship activities in the state or area
- ❑ Facilitate efforts to improve antibiotic prescribing and prevent antibiotic resistance
- ❑ Provide educational tools to facilities to help prescribers improve practices

Thank you!
Scott Fridkin, MD, CAPT
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For more information, please contact the Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333

Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

All Aboard the South Dakota StewardSHIP

Indian Health
Services

LTC Corporations



Angela Jackley, RN

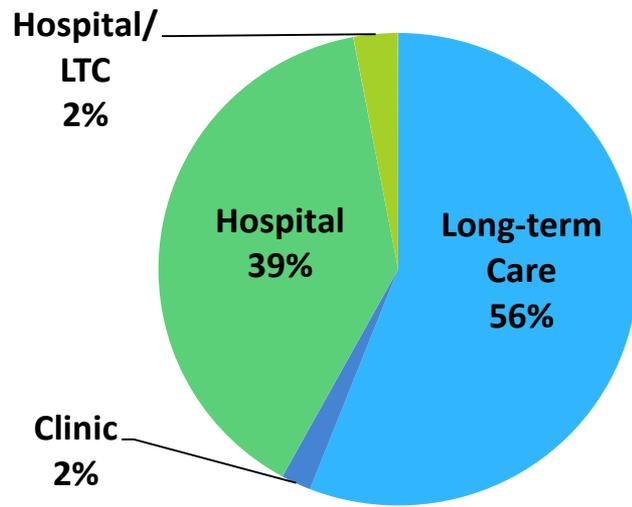
Healthcare Associated Infections Coordinator
Office of Disease Prevention
South Dakota Department of Health

Carbapenem-resistant *Enterobacteriaceae* (CRE) Door to Stewardship

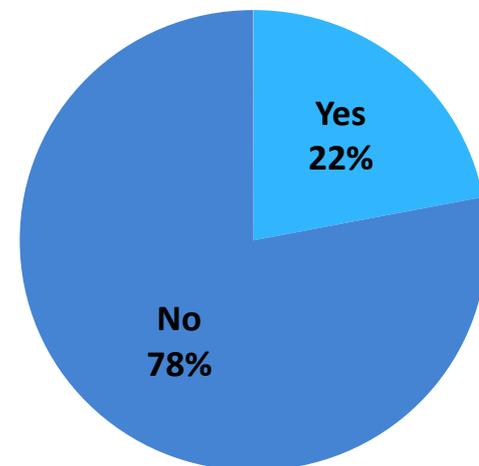
□ Aggressive response to cluster of CRE cases

- Collaborative—Healthcare facilities, systems, and organizations
 - Survey sent to acute- and long-term care
 - Education about CRE necessary
 - Address underlying problem—Antimicrobial Stewardship

Facilities Reporting



Participating in an antibiotic stewardship program?





Partnerships Enhanced

- ❑ From the CRE workgroup, we developed close working relations with many partners
- ❑ Educational opportunities to correlate multi-drug resistant organisms (MDROs) like CRE, while raising awareness about the need for stewardship
- ❑ Held a “Bugs & Drugs” seminar to educate and engage partners
- ❑ Overwhelming response from healthcare community

Top-Down Approach

- ❑ **Sent an invitation to join the Antimicrobial Stewardship Workgroup**
 - Sent by Secretary of Health
- ❑ **Invitation was sent to administrators asking for a representative with the ability to effect change**
 - Hospitals, long-term care, clinics, statewide organizations, Indian Health Services (IHS), US Department of Veteran's Affairs (VA), medical schools, pharmacy schools
 - First meeting was held in June 2013
- ❑ **Formed multi-disciplinary stewardship teams**
 - Administration, infectious disease technicians, physician champions, pharmacy, microbiology, nursing, infection control, employee health

System Impact

❑ Systems of care approach

- Stewardship activities chosen by flagship hospitals
- Many hospitals within systems implementing interventions
 - Future plans—system-wide

❑ Avera Health

- Review of frequently prescribed antibiotic classes
 - Identified over-utilization of Fluoroquinolones
 - Modified order sets to move away from Fluoroquinolones
 - Realized a 50% reduction in utilization of Fluoroquinolones
 - Created pneumonia order sets
- Provided robust physician education
 - Appropriate initiation
 - Tele-health ID consultations

System Impact (Continued)

□ Sanford Health

- Developed clinical guidelines
 - *Clostridium difficile* (*C. diff*)
 - Methicillin-resistant *Staphylococcus aureus* (MRSA)
 - Urinary tract infection (UTI)
 - Upper-respiratory tract infection (URI)
- Educational hand-outs
 - Antibiotic use during cold/flu season
 - Physician and parent education
- Newspaper ads



System Impact (Continued)

□ Regional Health

- Longstanding program in place
 - Antibiotic class pre-authorization
 - Prospective audits
 - Optimize reporting of culture results (lab partnership)
 - Consultation to long-term care facilities duplicating pre-authorization requirements
 - Ongoing real time oversight

System Impact (Continued)

❑ IHS Great Plains Area

- Formalized an Antimicrobial Stewardship Program at an area level
- Each Service Unit has identified a physician and pharmacist champion for the Stewardship Program
- Provided two ID pharmacists as area consultants for each of the service units
- Sent each service unit an antimicrobial guidebook with guidelines and general microbiology information
- Mandated reporting of stewardship activities to the Chief Medical Officer



Impact of Statewide Organizations

❑ Pharmacy

- Presented to stewardship workgroup regarding curriculum and current teaching practices

❑ Healthcare associations

- Provide support through their organizations
 - Speaking engagements
 - Booths at annual conventions
 - Connections with administrative groups for staff education
 - Forwarding through list-servs

❑ South Dakota Infection Control Council

- Annual conference featured MDRO topics and stewardship

Department of Health Role and Next Steps

❑ South Dakota Department of Health

- Neutral facilitator
- Provide statewide education
- Worked with facilities to receive electronic reports regarding MDROs
- Print materials
- Created and distributed statewide antibiogram encouraging facilities to do the same
- Provide consultation to interested facilities and pharmacy students
- Collaboration with workgroup members and public television to create education programming for patients

❑ Next Steps

- Physician and mid-level engagement
 - Education
 - Dissemination of guidelines and materials
 - Practical application
- Additional guidelines
- Electronic implementation
- Tele-health



Lessons Learned

- ❑ **Begin with a top-down approach**
- ❑ **Be flexible enough to go with momentum**
- ❑ **Maximize networking opportunities**
- ❑ **Include IT on the workgroup**



Thank you!

Angela Jackley, RN

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SOUTH DAKOTA
DEPARTMENT OF HEALTH



Georgia Department of Public Health

Georgia's Plan to Improve Antibiotic Use Across the State

Jeanne Negley, MBA

Healthcare Associated Infections Surveillance

Program Director

Acute Disease Epidemiology Section

Division of Health Protection

Georgia Department of Public Health



We Protect Lives.





Convene and Plan

- ❑ **Convened subcommittee on antibiotic stewardship**
 - Purpose—Design Georgia’s approach to address antibiotic resistance
 - Recommendation—Create statewide strategic plan for antibiotic stewardship

Potential Barrier	Solution
Limited resources	Develop additional partnerships and focus efforts
Challenges to implement state policy	Implement policy by leveraging shared value of stewardship
Measurement of impact	Adapted CDC assessment tool; use state HAI data set (National Healthcare Safety Network)
Competing priorities of healthcare facilities	Developed incentive through Honor Roll program

Trained Pharmacists and Physicians

- ❑ **Opportunity—HAI capacity grant from the Association of State and Territorial Health Officials (ASTHO)**
 - Created stewardship training programs focused on hospital physicians and pharmacists
 - 82 pharmacists attend in-person training
 - 75 physicians and clinicians attend webinars
 - Measurement
 - Assessment tool developed with CDC
 - Focus group with pharmacists
 - New Partners—Atlanta Chapter of the Society of Hospital Medicine, Atlanta Infectious Disease Society, Georgia Society of Health System Pharmacists, and Medical Association of Georgia





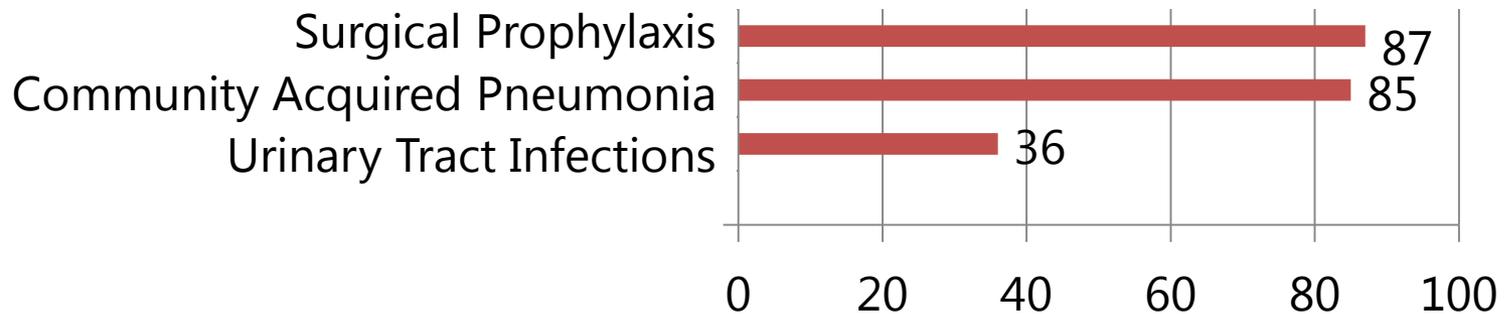
What We Learned about Leadership and Management

- ❑ **22 of 48 facilities had a multi-disciplinary committee focused on antibiotic use**
 - 16 (72%) reported physician or pharmacist leader for stewardship activities
 - 6 (27%) have neither physician nor pharmacist leaders
 - 2 (9%) did not meet regularly



What We Learned about Guidelines

❑ Does facility have facility-specific guidelines to assist with antibiotic selection for... (% Yes)?





Focus Group

The Role of the State in Stewardship

- ❑ **What can the state do to promote/enhance hospital stewardship efforts?**
 - More training and a stipend to facilitate attendance
- ❑ **What are your initial thoughts on the Honor Roll program?**
 - A “good starter” for stewardship activities
 - Needs flexibility to recognize different resource levels of facilities



Our Next Steps

- ❑ **Issue call for action for Antibiotic Stewardship from Department of Public Health Commissioner**
- ❑ **Launch Honor Roll for Antibiotic Stewardship**
 - Defines state expectations for Antibiotic Stewardship for hospitals
 - Two tiers of Stewardship
 - Level 1—Engagement (leadership support, defined multi-disciplinary team, staff education)
 - Level 2—Implementation (Level 1 activities plus implementation of stewardship intervention and data collection to demonstrate impact)
 - Honor Roll requires completion of assessment tool and annual renewal
- ❑ **Offer additional pharmacist training and stipends to hospitals to support participation**

Acknowledgements

Georgia Department of Public Health

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- Melissa Tobin D'Angelo
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Georgia Antibiotic Stewardship Subcommittee

- Jesse Jacob, MD, MS, Emory University Hospital, co-chair
- Renee Watson, RN, CIC, Children's Healthcare of Atlanta, co-chair
- Angelina Davis, PharmD, MS, BCPS (AQ-ID) WellStar Health System
- Denise Flook, RN, CIC, Georgia Hospital Association
- Kimberly Hazelwood, PharmD, Georgia Department of Public Health
- Sheena Kandiah, MD, Emory University Hospital
- Armando Nahum, SafeCare Campaign
- Cindy Prosnak, RN, CIC, Georgia Medical Care Foundation
- Craig Smith, MD, University Health System, Augusta

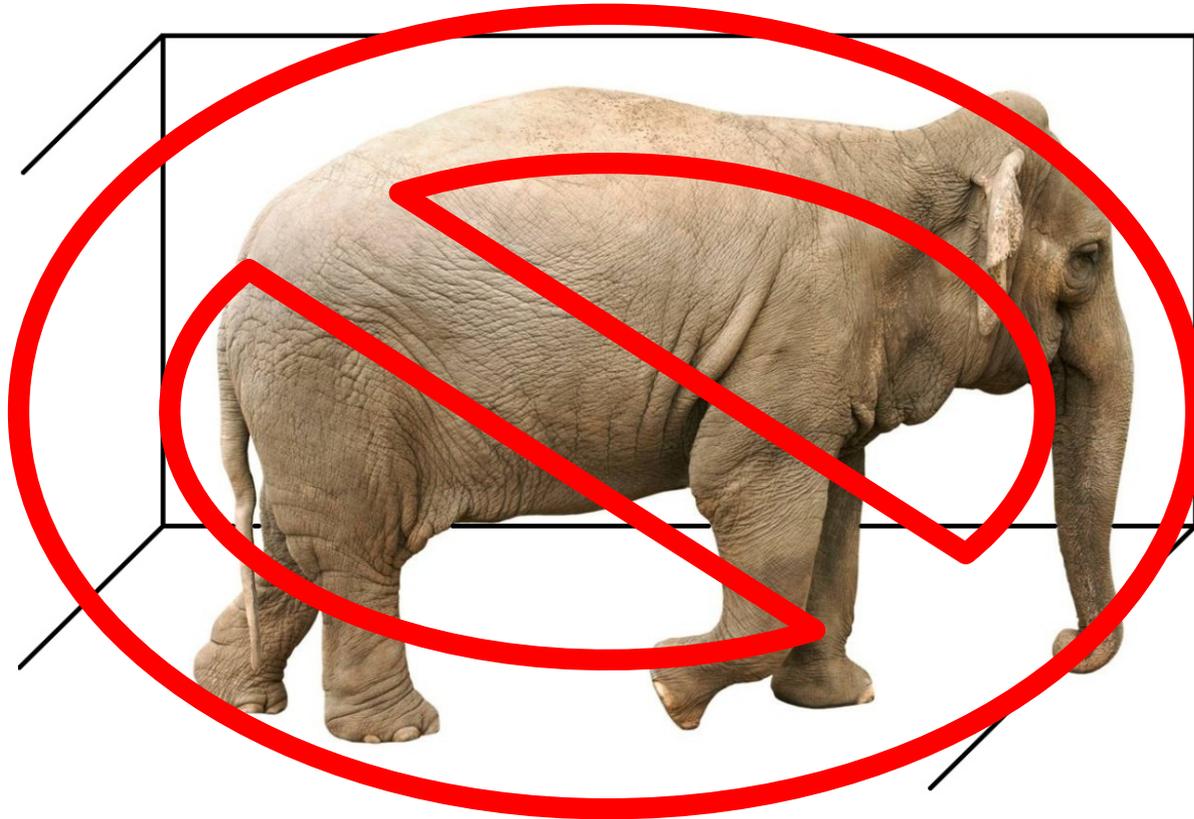
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Association of State and Territorial Health Officials

- Catherine Cairns
- Virginia Dolen

Antibiotic Stewardship



CDC Checklist for Core Elements of Hospital Antibiotic Stewardship Programs:

<http://www.cdc.gov/getsmart/healthcare/implementation/checklist.html>

Georgia Department of Public Health Honor Roll for Antibiotic Stewardship:

<http://dph.georgia.gov/georgia-honor-roll-antibiotic-stewardship>

We Protect Lives.



Thank you!

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www.cdc.gov/vitalsigns/SocialMedia.html

Public Health Practice Stories from the Field

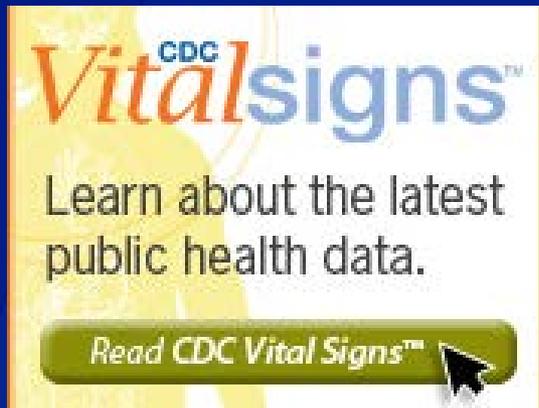
- Stories about the implementation of Public Health Practice Stories from the Field



www.cdc.gov/stltpublichealth/phpracticestories

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