



Building a Joint Commission-Ready Antimicrobial Stewardship Program

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Disclosure Statement

Consultant :

American Society Health System Pharmacists



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Learning Objectives

- Describe the elements of performance incorporated in the Joint Commission Antimicrobial Stewardship Standard
- Discuss different evidence-based stewardship initiatives that will meet the individual elements of performance
- Describe available resources for implementation of Antimicrobial Stewardship activities
- Explain the benefits of participation in the Georgia Honor Roll for Antibiotic Stewardship



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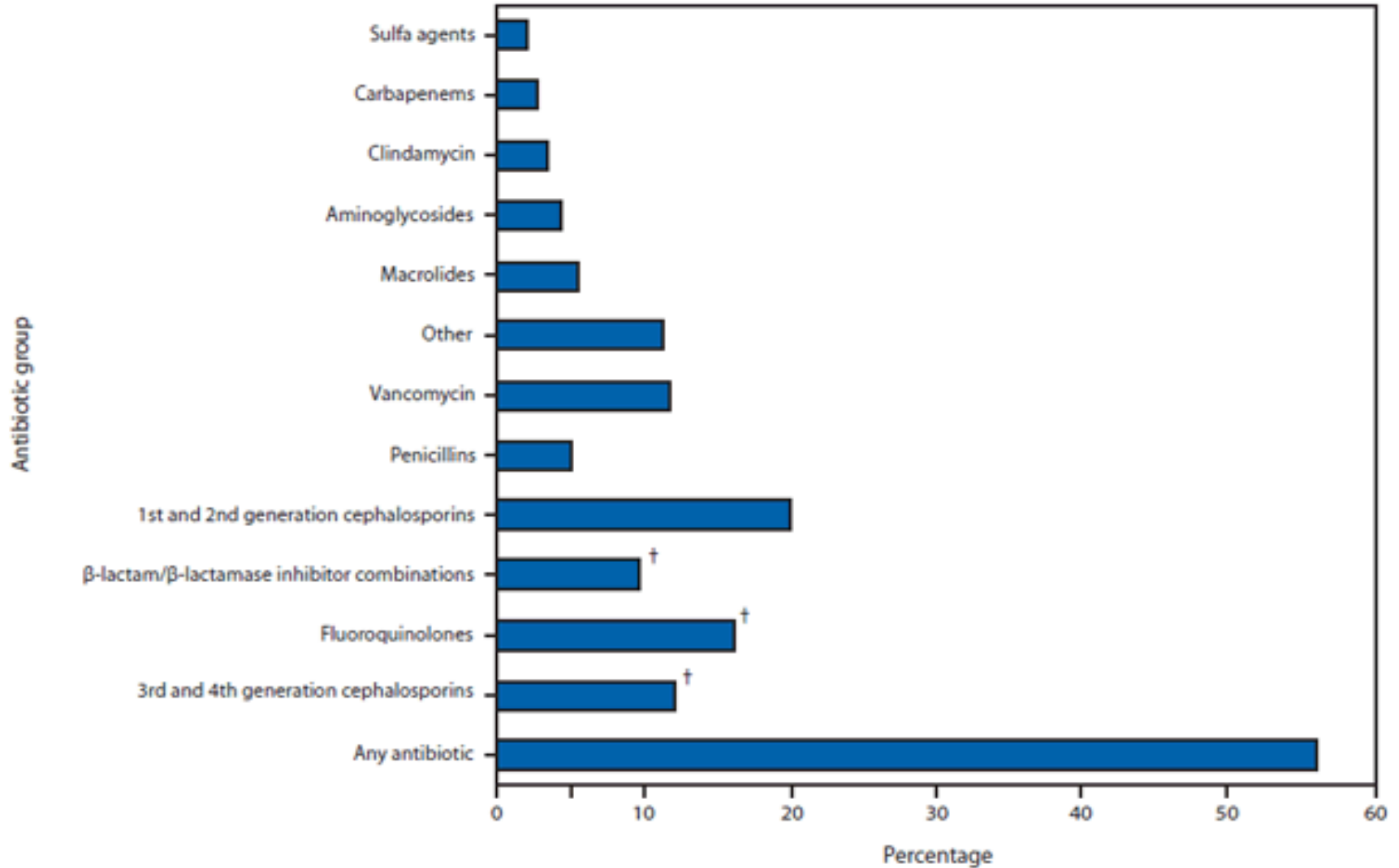
NATIONAL SUMMARY DATA

Estimated minimum number of illnesses and
deaths caused by antibiotic resistance*:

At least  **2,049,442** illnesses,
 **23,000** deaths

**bacteria and fungus included in this report*

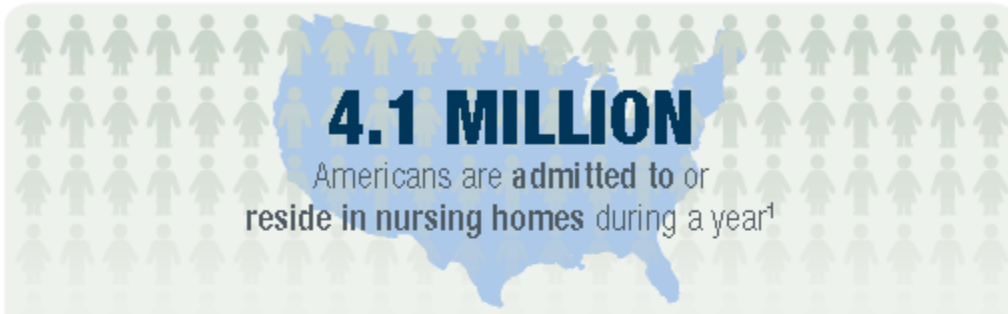
Percentage Hospital Discharges At Least One Antibiotic Day MMWR March 7, 2014



Data provided by Truven Health MarketScan Hospital Drug Database
(+) Antibiotics from these groups administered to 29.8% of patients



Antibiotic Stewardship in Nursing Homes



UP TO **70%**
of nursing home residents
received antibiotics during a year²



UP TO **75%**
of antibiotics are
prescribed incorrectly^{3,4}



CDC recommends
7 CORE ELEMENTS

for antibiotic stewardship in nursing homes

- Leadership Commitment
- Accountability
- Drug Expertise
- Action
- Tracking
- Reporting
- Education

¹Incorrectly = prescribing the wrong drug, dose, duration or reason

²JHCA Quality Report 2013.

³Lim C, Kong DCM, Stuart PL. Reducing inappropriate antibiotic prescribing in the residential care setting: current perspectives. Clin Interv Aging. 2014; 9:166-177.

⁴Nicolle LE, Bentley D, Garibaldi R, et al. Antimicrobial use in long-term care facilities. Infect Control Hosp Epidemiol 2000; 21:537-46.



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

Improve Antibiotic Use to Combat Antibiotic Resistance



CDC is working to reduce unnecessary antibiotic use

National Action Plan to Combat Antibiotic-Resistant Bacteria (CARB)

Goal: By 2020, reduce inappropriate outpatient antibiotic use by 50%

Find out when antibiotics are necessary. Visit: <http://www.cdc.gov/getsmart>

Centers for Disease Control and Prevention (2012).
Fleming-Dutra, K et al. Prevalence of inappropriate antibiotic prescriptions among US ambulatory care visits, 2010-2011.
Journal of the American Medical Association, May 2016.



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

Strengthening Antimicrobial Stewardship to meet Goals National Action Plan

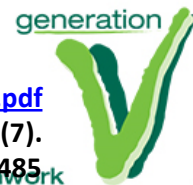
- **CDC - Core Elements ASP programs in hospitals (2014), nursing homes (2015) and outpatient settings (2016)**
- **The Joint Commission**
 - Development of an antibiotic stewardship standard for hospitals, critical access hospitals, and nursing care centers. Effective January 1, 2017
- **Centers for Medicare and Medicaid Services, Conditions of Participation (CoP)**
 - Proposed rule change to Infection Control CoP published June 2016 to require ASP programs in hospitals and critical access hospitals
 - In LTCFs, ASP program required implementation by November 28, 2017
- **CDC - Development of Antimicrobial Use Measure**
 - Risk-adjusted summary measure of antimicrobial use in hospitals
 - Benchmark for hospitals and health systems
 - Endorsed by National Quality Forum January 2016

<http://www.hhs.gov/ash/carb/march3031meeting/paccarb-draft-report1-march-2016.pdf>

Joint Commission Perspectives. July 2016. Volume 36 (7).

Federal Register. June 16, 2016. HHS CMS 42 CFR Parts 482 and 485

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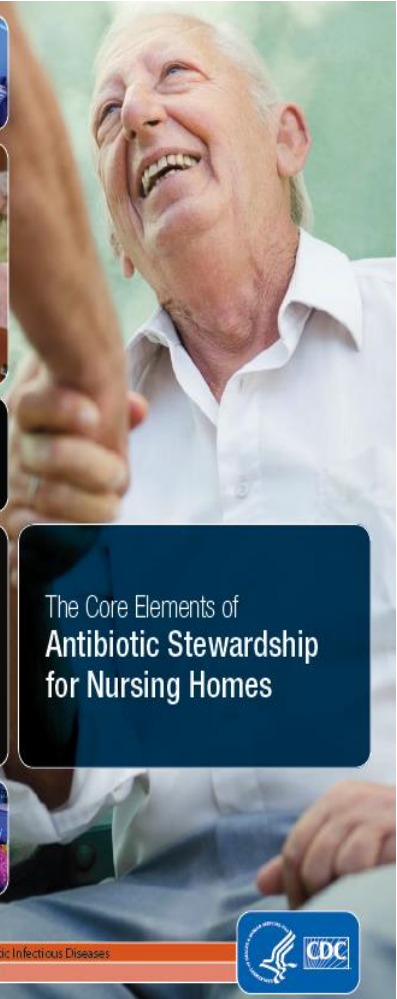
Core Elements



Core Elements
of Hospital Antibiotic
Stewardship Programs

- Leadership Commitment
- Accountability
- Drug Expertise
- Action- Specific Interventions
- Tracking
- Reporting
- Education

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



The Core Elements of
Antibiotic Stewardship
for Nursing Homes

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



<http://www.cdc.gov/antibiotic-use/healthcare/implementation/core-elements.html>

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Self Assessment Question #1

Which Core element is most important for effective antimicrobial stewardship programs?

- 1) Leadership commitment from administration
- 2) Tracking and Reporting on antimicrobial utilization and resistance
- 3) Specific interventions
- 4) Accountability from single leader responsible for outcomes
- 5) Educating healthcare providers on antimicrobial use and resistance
- 6) All of the above are important



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Self Assessment Question #1

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The Joint Commission

Standards for Antimicrobial Stewardship

Standard MM.09.01.01: Effective January 1, 2017

Organization has an antimicrobial stewardship program (ASP) based on evidence-based national guidelines.

- **EP 1:** Leaders establish ASP as an organizational priority
- **EP 2:** Educate staff and licensed independent practitioners involved in antimicrobial ordering, dispensing, administration, and monitoring about antimicrobial resistance and antimicrobial stewardship practices.
- **EP 3:** Educate patients, and their families as needed, regarding the appropriate use of antimicrobial medications, including antibiotics.

The Joint Commission Perspectives. MM.09.01.01; July 2016, Volume 36, Issue 7

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The Joint Commission Standards for Antimicrobial Stewardship

- **EP 4:** Organization has an antimicrobial stewardship multidisciplinary team
- **EP 5:** ASP includes CDC's Core Elements of Antibiotic Stewardship Programs
- **EP 6:** ASP uses organization-approved multidisciplinary protocols
- **EP 7:** Organization collects and analyzes data on its ASP, including antimicrobial prescribing and resistance patterns.
- **EP 8:** Organization takes action on improvement opportunities

Self Assessment Question # 2

Which statement best describes the requirement by the Joint Commission for Antimicrobial Stewardship Programs (ASP) in acute care hospitals, critical access hospitals and nursing homes.

1. The ASP includes CDC's Core Elements for Antimicrobial Stewardship Programs
2. The leader of the AS Program must be a physician with postgraduate training in infectious diseases
3. Pharmacist(s) on the ASP team must have postgraduate specialty residency training in infectious diseases
4. Education to patients and families on the appropriate use of antimicrobial agents is required

The Joint Commission Perspectives. MM.09.01.01; July 2016, Volume 36, Issue 7



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Self Assessment Question # 2

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The Joint Commission Perspectives. MM.09.01.01; July 2016, Volume 36, Issue 7



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Georgia Department Public Health

Georgia Honor Roll

Antibiotic Stewardship

- Established 2014 by the Healthcare Associated Infections Advisory Committee
- Goal – Provide incentive for acute care facilities and critical access hospitals to engage in antimicrobial stewardship activities
- Original Program – 2 phases
 - Engagement Phase: Demonstrate Commitment to Antimicrobial Stewardship
 - Implementation Phase: Demonstrate Successful Implementation of a Stewardship Intervention

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

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Georgia Department Public Health

Georgia Honor Roll

Antibiotic Stewardship

- Revised Program due to Joint Commission Standards and CMS Proposed Rule Change
 - Stewardship activities are based on CDC's Core Elements for Antimicrobial Stewardship
 - Assist facilities to build sustainable stewardship programs
 - Enhance existing programs with evidence-based practices
 - Facilities apply for Gold, Silver, Bronze status
 - Documentation required of implementation of at least one activity per CDC Core Element
 - Status is based on degree of challenge associated with examples of stewardship activity
- Current Honor Roll members grandfathered into Bronze status
- Renewal Process: reapply every 3 years from initial award date

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

Georgia Honor Roll for Antibiotic Stewardship Toolkit

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Georgia Honor Roll Status Requirements

- Gold – Meet at least one criteria per core element and at least 4 advanced criteria
- Silver – Meet at least one criteria per core element and at least 4 intermediate criteria
- Bronze – Meet at least one criteria per core element

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

7



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Georgia Honor Roll

Benefits of Participation

- Alignment of your facility's stewardship program with evidence-based practices
 - Facilitate preparation for accreditation processes
- Assistance from state partnership with developing and or sustaining an effective stewardship program
- Public recognition of your stewardship program's achievement on the Department of Public Health (DPH) website
- Certificate of achievement endorsed by the Commissioner of DPH

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



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The Joint Commission Standards for Antimicrobial Stewardship

- **EP 1: Leaders establish Antimicrobial Stewardship as an organizational priority**
 - Accountability Documents, Budget Plans, Infection Prevention Plans
 - Performance Improvement Plans, Strategic Plans
 - Using the HER to collect ASP data

The Joint Commission Perspectives. MM.09.01.01; July 2016, Volume 36, Issue 7



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Georgia Honor Roll

- **CDC Core Element – Leadership Commitment**
 - Basic
 - Signed Statement of Commitment from Senior Leadership (CEO, CMO)
 - Patient Care Policy
 - Intermediate
 - Job Description includes stewardship related duties for ASP lead
 - Annual performance reviews for ASP leads include stewardship duties
 - Advanced
 - Dedicated budget for stewardship activities

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

Appendix E. Resources for Leadership Commitment

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Georgia Honor Roll

- **CDC Core Element – Accountability**
 - Basic
 - ASP policy has been developed outlining the purpose
 - ASP policy includes at least two program elements
 - Intermediate
 - ASP policy includes more than two program elements
 - ASP policy includes performance improvement plans
 - Advanced
 - ASP policy includes mandated annual training for all healthcare providers

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

Appendix E. Resources for Accountability and Drug Expertise

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The Joint Commission Standards for Antimicrobial Stewardship

- **EP 2: Educate staff and licensed independent practitioners involved in antimicrobial ordering, dispensing, administration, and monitoring about antimicrobial resistance and antimicrobial stewardship practices.**
 - Employee Orientation, Annual Education, Granting of Privileges

The Joint Commission Perspectives. MM.09.01.01; July 2016, Volume 36, Issue 7



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Georgia Honor Roll

- **CDC Core Element – Education for Healthcare Providers**
 - Basic
 - Education to healthcare providers reviewing stewardship topics is provided on an as needed basis
 - What prompted need for education
 - Intermediate
 - Education to healthcare providers reviewing advanced stewardship topics is provided on a recurring basis
 - How often does education occur
 - Advanced
 - Education to healthcare providers involved in antimicrobial ordering, dispensing, administration and monitoring occurs upon hire and recurs periodically
 - Employee Orientation
 - Required Competency through Computer Based Learning
 - Documentation of Education required in performance evaluation

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

Appendix E. Resources for Healthcare Provider Education

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The Joint Commission Standards for Antimicrobial Stewardship

- **EP 3: Educate patients, and their families as needed, regarding the appropriate use of antimicrobial medications, including antibiotics.**
 - Removed for acute care and critical access hospitals effective 10/1/17
 - Still required for nursing care centers

The Joint Commission Perspectives. MM.09.01.01; July 2016, Volume 36, Issue 7
https://www.jointcommission.org/assets/1/23/JC_Online_Oct._4.pdf



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Georgia Honor Roll

- **CDC Core Element – Education for Patient and Family**
 - Basic
 - Education regarding antimicrobial use is provided as needed
 - CDC Fact Sheets; “Be Antibiotics Aware”, “Viruses or Bacteria-What’s got you sick?”
 - Intermediate
 - Education regarding antimicrobial resistance and use is available
 - Information Posters
 - Advanced
 - Education regarding antimicrobial use is integrated in discharge process for all patients discharged on antibiotics

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

Appendix E. Resources for Patient Education
<https://cdc.gov/antibiotic-use/>



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The Joint Commission Standards for Antimicrobial Stewardship

- **EP 4: Organization has an antimicrobial stewardship multidisciplinary team**
 - Infectious Disease Pharmacist
 - Clinical Pharmacist
 - Infectious Disease Physician
 - Practitioner
 - Infection Preventionist
 - Part-time or consultant staff are acceptable
 - Telehealth staff are acceptable

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Telehealth

- Use of electronic information and electronic communication technologies
- Supports long-distance activities
 - Clinical health care
 - Provide timely, cost-effective care to resource-limited populations
 - Patient and professional health-related education
 - Public health and health administration
 - Expand coverage of ID-led public health services
 - Infection control and prevention
 - Antimicrobial stewardship programs
 - Patient care related to outpatient parenteral antimicrobial therapy

<http://www.telehealthresourcecenter.org/toolbox-module/types-telemedicine-specialty-consultation-services>

www.idsociety.org/Telehealth/

Siddiqui, J et al. CID 2017; 64 (3): 237-42

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TeleMed2U

Antimicrobial Stewardship Program

Sonoma Valley Hospital, California

- 83 bed rural, acute care hospital
- Date of Implementation – January 2007
- Goal
 - Improve antibiotic prescribing
 - Reduce bacterial resistance
- Key elements via telemedicine
 - Monitoring of prescribing habits
 - Educational initiatives
 - Daily reviews of orders for specific antimicrobial agents
 - Fluoroquinolones and Piperacillin/Tazobactam first targets
 - Weekly infectious disease rounds
 - Periodic presentations & discussion at department meetings



<http://www.telemed2u.com/services/programs>

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Sonoma Valley Hospital Results

	Fluoroquinolones		Piperacillin/Tazobactam	
	2008	2011	2008	2011
Hospital Expenditures	\$10,169	\$2,359 (↓77%)	\$51,363	\$14,624 (↓72%)
Percent Susceptibility				
	2007	2011	2007	2011
<i>E. coli</i>	85%	84%	96%	100%
<i>Pseudomonas aeruginosa</i>	79%	91%	93%	96%

<https://innovations.ahrq.gov/profiles/telemedicine-based-antimicrobial-stewardship-program-improves-prescribing-reduces-bacterial>



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Georgia Honor Roll

- **CDC Core Element – Drug Expertise**
 - **Basic**
 - Multidisciplinary Antimicrobial Stewardship Committee (ASP)
 - Access to Infectious Disease Physician or Pharmacist
 - **Intermediate**
 - ASP leads have stewardship training: SIDP, MAD-ID, SHEA
 - ASP leads have post-graduate education in infectious diseases
 - **Advanced**
 - ASP committee shares best practices with others
 - » Collaborative among facilities in community
 - » Presentations at local, regional, national conferences

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



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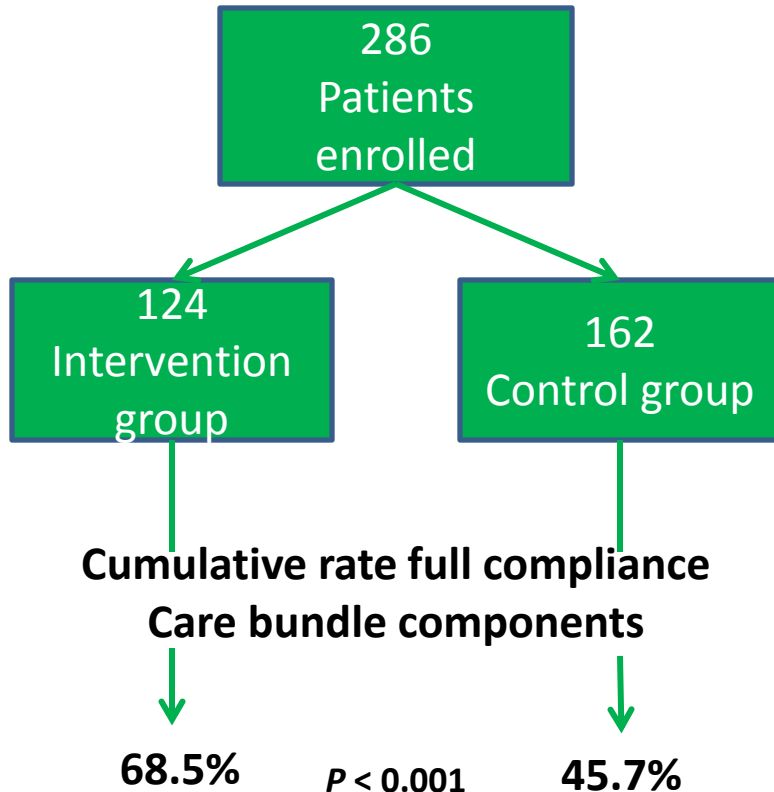
Pharmacy Generalists performing Antimicrobial Stewardship Services

- **Study Design**
 - Six months, prospective, repeated treatment, quasi-experimental
 - 802 bed academic, tertiary care facility
 - Existing antimicrobial stewardship program
 - Three month intervention period, Three month control period
- **Intervention Months**
 - Generalists trained in antimicrobial stewardship care bundle approach
 - Prospective audit and feedback by pharmacy generalists
- **Control Months**
 - Pharmacy Generalists not trained in antimicrobial stewardship
- **Primary Endpoint**
 - Compliance with care bundle antimicrobial stewardship metrics



Carreno JJ, et al. Am J Health Syst Pharm. 2015;72:1298-1303
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Pharmacy Generalists performing Antimicrobial Stewardship Services



Care Bundle Components

- Documentation of indication for treatment in the medical record
- Selection empiric therapy according to facility guidelines
- Documentation appropriate cultures
- De-escalation therapy when appropriate

CLINICAL PRACTICE: Ellie J. C. Goldstein, Section Editor

The Critical Role of the Staff Nurse in Antimicrobial Stewardship—Unrecognized, but Already There

Richard N. Olans,¹ Rita D. Olans,² and Alfred DeMaria Jr³

¹Hallmark Health System, Inc., Melrose-Wakefield Hospital, ²MGH Institute of Health Professions - School of Nursing, Boston, and ³Bureau of Infectious Disease, Massachusetts Department of Health, William A. Hinton State Laboratory Institute, Jamaica Plain, Massachusetts

An essential participant in antimicrobial stewardship who has been unrecognized and underutilized is the “staff nurse.” Although the role of staff nurses has not formally been recognized in guidelines for implementing and operating antimicrobial stewardship programs (ASPs) or defined in the medical literature, they have always performed numerous functions that are integral to successful antimicrobial stewardship. Nurses are antibiotic first responders, central communicators, coordinators of care, as well as 24-hour monitors of patient status, safety, and response to antibiotic therapy. An operational analysis of inpatient admissions evaluates these nursing stewardship activities and analyzes the potential benefits of nurses’ formal education about, and inclusion into, ASPs.

Keywords. antimicrobial stewardship; antimicrobial stewardship program; antibiotic resistance; nursing; turnaround time.

Overlapping Nursing Activities with Function in ASP Models

- **Patient Admission**
 - Triage and Appropriate Isolation
 - Medication Allergy Reconciliation
 - Early and Appropriate Cultures
 - Specimen Collection
 - Timely Antibiotic Initiation
 - Antibiotic Infusion
 - Medication Reconciliation
- **Daily Clinical Progress Monitoring**
 - Preliminary Microbiology Results and Antibiotic Adjustment
 - Antibiotic Dosing and De-escalation

Olans RN, et al. CID 2016; 62 (1): 84-89

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Nursing Activities with Function in ASP Models

- **Central Communicator among:**
 - Prescribers
 - Pharmacy
 - Laboratory
 - Discharge Planners
 - Consultants
- **Primary Information Source for Patients and Families**

The Joint Commission Standards for Antimicrobial Stewardship

- **EP 5: ASP includes CDC's Core Elements of Hospital Antibiotic Stewardship Programs (corresponds with acute care, critical access hospitals, and nursing homes)**
 - Leadership, Accountability, Drug Expertise, Action, Tracking, Reporting, Education

The Joint Commission Perspectives. MM.09.01.01; July 2016, Volume 36, Issue 7

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The Joint Commission Standards for Antimicrobial Stewardship

- **EP 6: ASP uses organization-approved multidisciplinary protocols (policies and procedures)**
 - Antimicrobial Guidelines, Assessment of Appropriateness of Antibiotics (CAP, UTI, SSTI)
 - Care of the patient with *Clostridium difficile*
 - Antibiotic Formulary Restrictions, IV to PO Conversion, Surgical Prophylaxis (Hospitals)
 - Preauthorization Requirements for Specific Antimicrobials

The Joint Commission Perspectives. MM.09.01.01; July 2016, Volume 36, Issue 7



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Georgia Honor Roll

- **CDC Core Element – Action**

- **Basic**

- Implementation of antibiotic time out protocol
 - IV to PO conversion
 - Antibiotic guidelines for various infectious disease states

- **Intermediate**

- Prospective audit and feedback in place for specific units
 - Antimicrobial restriction with preauthorization
 - Protocol requiring indications for all antimicrobial prescriptions

- **Advanced**

- Facility wide prospective audit and feedback
 - Automatic stop dates
 - Collaborative projects with other services (infection control – Cdif)

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

Appendix E. Resources for Action

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Incidence and Economic Impact of Redundant Antimicrobial Therapy

- Premier Database
 - Constitutes nation's largest outcomes database for quality and safety improvement
 - Captures patient discharge data from ~ 26% US hospital discharges
- Study Design
 - Retrospective analysis of acute care inpatient administrative data from 505 US hospitals
 - Patients discharged between January 1, 2008 and December 31, 2011
 - Redundant antimicrobial therapy: administration of two agents providing activity against the same organism(s) for at least two consecutive days during same hospitalization

Schultz, L et al. *Infect Control Hosp Epidemiol* 2014; 35 (10): 1229-1235

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Incidence and Economic Impact of Redundant Antimicrobial Therapy

- Results
 - 23 Antimicrobial Combinations
 - Anti-anaerobic: Metronidazole plus Piperacillin-tazobactam (53%)
 - Anti-MRSA: Vancomycin plus Linezolid (5%)
 - Dual Beta-Lactams: Ceftriaxone plus Piperacillin-tazobactam (3%)
 - 78% Hospitals had 1 of 23 unnecessary drug combinations ordered for ≥ 2 days, representing 32,507 cases
 - 70% of cases represented by 3 drug combinations for anaerobic infections
 - Metronidazole plus piperacillin-tazobactam
 - Metronidazole plus ampicillin-sulbactam
 - Metronidazole plus ertapenem
 - Mean days combination redundant antimicrobial therapy: 3-6 days
 - 148,589 days of potentially inappropriate redundant antibiotic therapy
 - Greater than \$12 million in potentially avoidable healthcare costs

Schultz, L et al. *Infect Control Hosp Epidemiol* 2014; 35 (10): 1229-1235

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The Joint Commission Standards for Antimicrobial Stewardship

- **EP 7: Organization collects, analyzes and reports data on its ASP, including antimicrobial prescribing and resistance patterns.**

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- **CDC Core Elements – Tracking and Reporting**
 - **Basic**
 - Antibiotic use tracked on recurring basis (annually)
 - Local antibiogram disseminated to medical staff
 - Antibiotic use and resistance data presented to hospital staff
 - **Intermediate**
 - Track and report DOT or DDD of selected antibiotics
 - Develop unit specific antibiogram
 - Create dashboard to report antimicrobial use, infection rates
 - **Advanced**
 - Track clinical outcomes associated with antimicrobial use data
 - Use antibiogram to implement practice change (formulary)
 - Report data in NHSN AU and/or AR modules

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

Appendix E. Resources for Tracking and Reporting

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Clinical Outcomes and Process Metrics Antimicrobial Stewardship Programs

Clinical Outcomes	Process
Length of stay	Appropriateness of therapy
30 day readmission rates	Time to appropriate therapy
Clinical cure/failure rates	Adherence to hospital specific guidelines
Rates of resistance	Antibiotic time-out
In-Hospital Mortality due to infection	Rate of de-escalation/streamlining

Dodds Ashley, ES et al. CID 2014; 59 (suppl 3): S112-21

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Economic Outcomes and Unintended Consequences Antimicrobial Stewardship Programs

Economic Outcomes	Unintended Consequences
Antibiotic Utilization (DDD or DOT)	Clostridium difficile infection rate
Duration of therapy	Proportion patients with MDR pathogens
Total cost hospitalization from onset of infection to discharge	Adverse events due to antimicrobials
IV/PO Conversion Rates	Administration of anti-infective to which patient is allergic
Hospital wide Antimicrobial Costs	

Dodds Ashley, ES et al. CID 2014; 59 (suppl 3): S112-21

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National Healthcare Safety Network

Antimicrobial Use Option

- Captures electronic data on antibiotics **administered**, along with admission/discharge/transfer data
- Calculates rates of administration for use:
 - Monitor interventions on single units or facility wide
 - Collect aggregate information on antibiotic use at a local, regional and national level
 - Evaluate trends of antimicrobial usage over time at the facility and national level
 - May suggest areas where further review is needed
 - Facilitate risk adjusted inter-facility and intra-facility benchmarking (e.g. presence of ICUs, hospital size)

<http://www.cdc.gov/nhsn/PDFs/pscManual/11pscAURcurrent.pdfJanuary2016>

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Standardized Antibiotic Administration Ratio (SAAR)

- CDC's first attempt to develop a quality improvement measure for antibiotic use
 - January 2016, endorsed by National Quality Forum
- Expresses observed antibiotic use compared to predicted use
 - Observed - Antimicrobial Days of Therapy
 - Predicted - Calculated using predictive modules developed by CDC applied to nationally aggregated AU data
 - Specific to 5 antimicrobial use categories

$$\text{SAAR} = \frac{\text{Observed Antimicrobial Use}}{\text{Predicted Antimicrobial Use}}$$



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<http://www.cdc.gov/nhsn/PDFs/pscManual/11pscAURcurrent.pdf> January 2016

Standardized Antibiotic Administration Ratio (SAAR)

- High SAAR – *May* indicate excessive antimicrobial use
- Low SAAR – *May* indicate antimicrobial underuse
- SAAR = 1.0 – Antimicrobial use is equivalent to reference population's antimicrobial use

SAAR alone – not definitive measure of appropriateness of antimicrobial use

Any SAAR may warrant further investigation

<http://www.cdc.gov/nhsn/PDFs/pscManual/11pscAURcurrent.pdf> January 2016

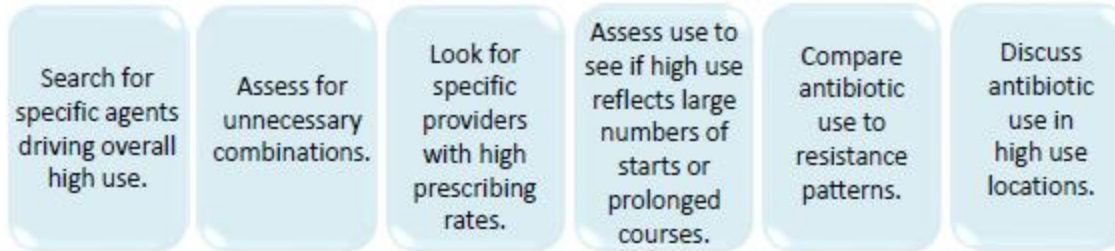


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SAAR or other indicators of antibiotic use show higher than expected values



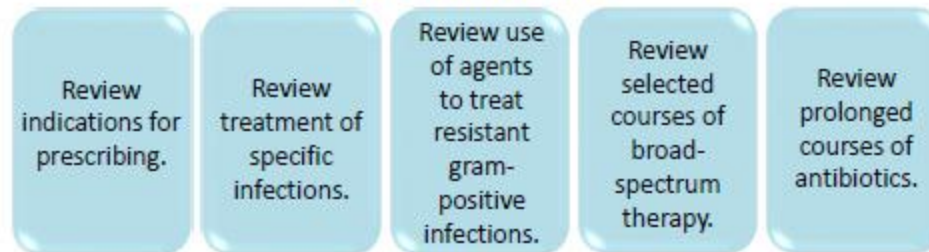
General Assessments



Narrow investigation targets Medication use evaluations



Detailed Reviews



Stewardship Actions



Self Assessment Question # 3

The CDC's standard measure of antibiotic use in the Antibiotic Use option is called the:

- 1) Standardized Infection Ratio
- 2) Standardized Antibiotic Administration Ratio
- 3) Antibiotic Benchmark Ratio
- 4) Antibiotic Quality Use Measure

Self Assessment Question # 3

The CDC's standard measure of antibiotic use in the Antibiotic Use option is called the:

- 1) Standardized Infection Ratio
- 2) Standardized Antibiotic Administration Ratio**
- 3) Antibiotic Benchmark Ratio
- 4) Antibiotic Quality Use Measure

The Joint Commission Standards for Antimicrobial Stewardship

- **EP 8: The organization takes action on improvement opportunities identified in its antimicrobial stewardship program.**
 - Quality Performance Initiatives

The Joint Commission Perspectives. MM.09.01.01; July 2016, Volume 36, Issue 7
https://www.jointcommission.org/assets/1/23/JC_Online_Oct._4.pdf



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Assessment of Antibiotic Use to Treat UTIs in 36 Hospitals

Treatment	Number	(%)
Patients treated for UTI present on admission, without indwelling catheter	111	—
Urine culture not ordered, although standard practice before treatment	18	16.2
Urine culture was positive, but no documented symptoms were present	23	20.7
Urine culture was negative, and no documented symptoms were present	3	2.7
No. of patients with potential for improvement in prescribing	44	39.6

MMWR March 7, 2014; 63 (09): 194-200

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Improved Antibiotic Appropriateness for Community Acquired Pneumonia

- Large urban multicampus academic medical center convened multidisciplinary team to address CMS suboptimal performance rates for CAP antibiotic selection
- Quality Performance Process
 - “Plan, Do, Check, Act” with Antimicrobial Stewardship oversight
 - Intervention included CAP treatment algorithm for ED providers
 - CAP kit included IV ceftriaxone and oral azithromycin packaged in an automated dispensing management system, triggered by CAP diagnosis
 - Antibiotics bundled with treatment algorithm
 - Study Design: Quasi-experimental



Ostrowsky B et al. *Infect Control Hosp Epidemiol* 2013; 34 (6): 566-572
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Improved Antibiotic Appropriateness for Community Acquired Pneumonia

- Results
 - Pilot ED
 - Appropriate antibiotic selection 54.9% before intervention (2008), 93.4 % after intervention (2011); $p < .001$
 - Second ED
 - Appropriate antibiotic selection 64.6% before intervention (2008), 91.3% after intervention (2011); $p = .004$
 - Sustained Prescribing Improvements

Self Assessment Question # 4

The benefits of participating in the Georgia Honor Roll for Antibiotic Stewardship include all of the following except:

- 1) Alignment of your facility's stewardship program with evidence – based practices
- 2) Preparation for Joint Commission accreditation process
- 3) Public recognition of your stewardship program's achievement on the DPH website
- 4) Assistance from state partnership with developing and or sustaining an effective stewardship program
- 5) Public recognition of your stewardship program's achievement on the CDC website



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Self Assessment Question # 4

The benefits of participating in the Georgia Honor Roll for Antibiotic Stewardship include all of the following except:

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- 4) Assistance from state partnership with developing and or sustaining an effective stewardship program
- 5) **Public recognition of your stewardship program's achievement on the CDC website**



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Key Points

- **CDC's Core Elements For Hospital and Nursing Home Antibiotic Stewardship Programs**
 - **Leadership Commitment**
 - **Accountability**
 - **Drug Expertise**
 - **Action**
 - **Tracking**
 - **Reporting**
 - **Education**



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Key Points

- **The Joint Commission Medication Standard on Antimicrobial Stewardship: MM.09.01.01**
 - **Effective January 1, 2017**
 - **Applies to acute care and critical access hospitals and nursing care centers**
 - **The hospital has an antimicrobial stewardship program that includes the CDC’s “Core Elements of Hospital Antibiotic Stewardship Programs”**
 - **The nursing care center has an antimicrobial stewardship program that includes the CDC’s “Core Elements of Antibiotic Stewardship for Nursing Homes”**

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Key Points

- **Georgia Honor Roll for Antibiotic Stewardship**
 - **Goal: Provide incentive for acute care facilities and critical access hospitals to engage in antimicrobial stewardship**
 - **Benefits of Participation**
 - **Alignment of facility's stewardship program with evidence-based practices, which in turn may facilitate preparation for accreditation processes**
 - **Assistance from state partnership with developing and or sustaining an effective stewardship program**
 - **Public recognition of your stewardship program's achievement on the Department of Public Health (DPH) website**
 - **Certificate of achievement endorsed by the commissioner of DPH**
 - **Resources for implementation of stewardship activities**
 - **Available at the DPH website, Appendix E**
 - **<https://dph.georgia.gov/georgia-honor-roll-antibiotic-stewardship>**

