



# The Evolution of Anti-microbial/biologic Stewardship

October 27, 2022

George D. Rodriguez, PharmD, BCIDP  
Director, Quality & Patient Safety, Regulatory Affairs  
NewYork-Presbyterian Queens  
Cell: 718-640-7851  
Email: [Gdr9005@nyp.org](mailto:Gdr9005@nyp.org)

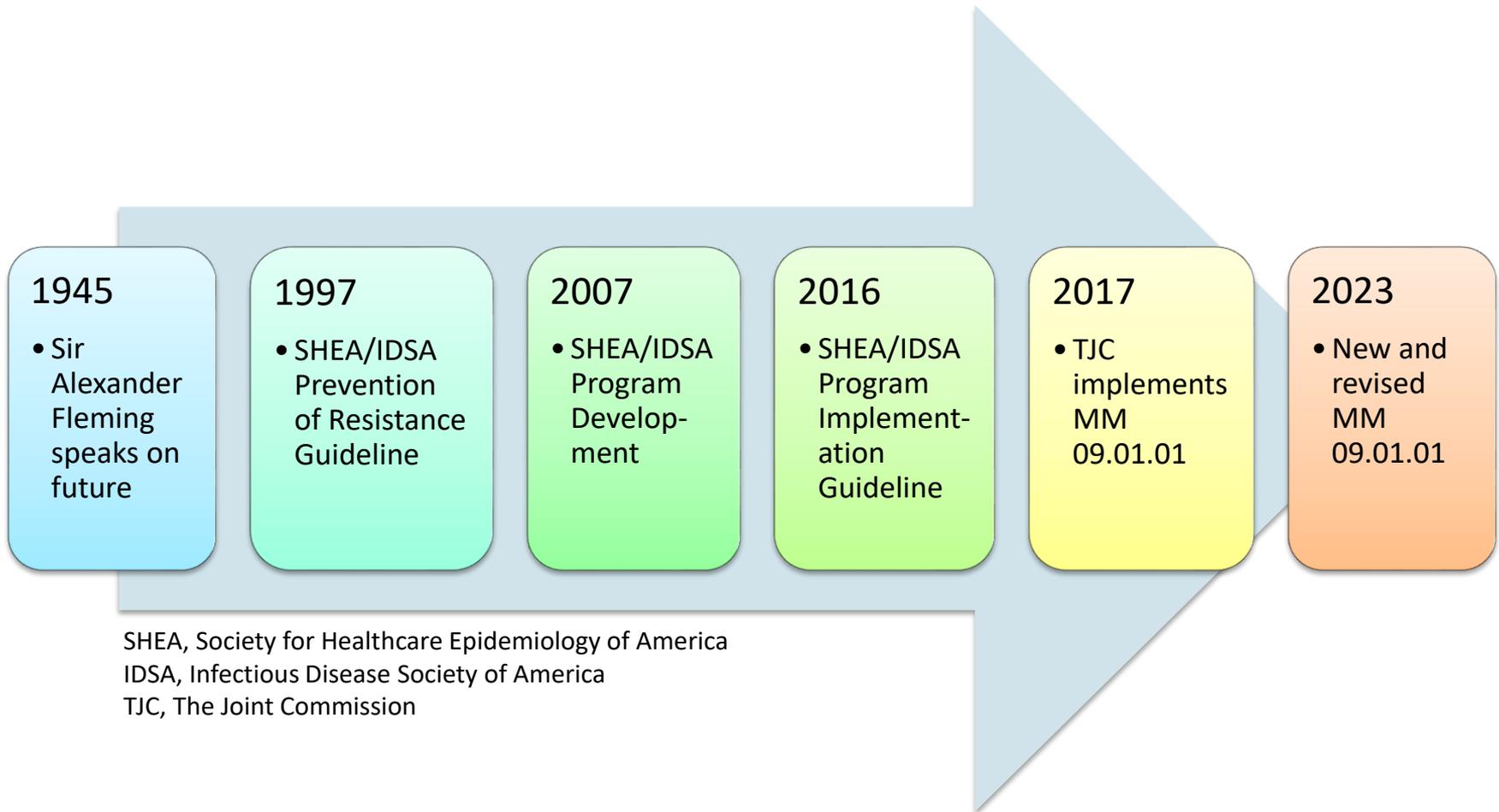
# Disclosures

- None

# Objectives

- Discuss timeline of Antibiotic Stewardship
- Identify current best practices
- Interpret new and revised requirements from The Joint Commission
- Recognize future direction and opportunities in Antibiotic Stewardship

# Antimicrobial/biotic Stewardship Program Timeline\*



*\*And so much more in between from many organizations and researchers*

### HANDICAPPED CITED FOR SCHOOL WORK

Eight Boys and Girls in the City's System Honored by Superintendent Wade

\$1,500 PRIZES BESTOWED

Courage and Self-Reliance Are Stressed at Ceremony in Education Building

Eight boys and girls who have had outstanding success in school work despite physical and other handicaps received yesterday citation and cash awards of more than \$1,500. John E. Wade, Superintendent of Schools, presented the Rebecca Elsborg Memorial Prizes, the M. Samuel Stern Memorial Prizes and the Charles E. Robertson Scholarship Awards at his office in the Board of Education Building, 110 Livingston Street, Brooklyn.

The Rebecca Elsborg awards, presented semi-annually to the boy and girl who have done most to overcome handicaps that might interfere with their school and home life, went to Mary Yarina, 13 years old, of 144 East Seventh Street, and to Nathaniel Brown, 14, of 101 East 123d Street.

The Robertson scholarships of \$215 each were presented to Elizabeth Macri, 18, of 7017 Fifteenth Avenue, Brooklyn, a graduate of Bay Ridge High School in the class of January, 1945, and to Victor Grosser, 17, of 63 Brighton 111st Street, Brooklyn, a graduate of Abraham Lincoln High School this year. The presentation was made by James L. Crofton of the City

### THEY HAVE GOOD REASONS FOR SMILING



Joseph Tropen and Grace Zelenka accepting from Dr. Stanley P. Davies awards given to the pupils of P. S. 116 by the Community Service Society for having a 100 per cent dental record. The New York Times

A 100 per cent dental care record yesterday won for the 754 pupils of Public School 116, 311 East Thirty-second Street, a citation by Mayor La Guardia and an oak leaf cluster to be added to the plaque the school received last year for the same accomplishment. Stanley P. Davies, director of

two boy members of the school's sight-observation class, Irene Subklewa, member of the graduating class, expressed the school's "deepest gratitude" in accepting the award. Capt. Clemens V. Rault, USN, chief of the Third Naval District Dental District, selected Joseph Tropen and Grace Zelenka, 7 years

### RESTAURANTS FIGHT CUT IN FOOD RATION

Average Home Meal Has More Meat and Butter Than They Serve, Leaders Assert

DINING OUT AT PEAK IN '44

Decline in First Quarter of This Year Reported—Chance for Steak Put at 1 in 400

The average meal at home contains more meat and butter than that served in a public eating place, the nation's hotel and restaurant owners argued yesterday as they warned that a further cut in their ration allotments would lead to an increase of black marketing. The Office of Price Administration announced recently that the food rations of hotels and restaurants would be reduced for July and August by as much as 20 per cent for meat and fats in some cases.

The imminent reduction in rations for public eating places was denounced at a meeting of the American Hotel Association and the National Restaurant Association at the Hotel New Yorker.

"The average housewife has more ration points for meats and butter and fats than the average public feeding establishment," said J. E. Frawley, president of the American Hotel Association.

Ratio Put at .644 to .576  
The red-stamp allotment allowed an average of .644 of a point for home meals and only .576 of a

### For Overwhelming Force

On his triumphant return home Gen. Dwight D. Eisenhower emphasized that if anything at all had been proved by the Anglo-American armies in Europe, it was that the use of maximum force was desperately needed to keep our losses at a minimum in the Pacific.

"If you apply overwhelming force," he admonished, "losses for your side are negligible." To continue to translate this theme into reality, as America did for the war in Europe, it is imperative that the financial resources of the nation flow into production in an uninterrupted stream.

Your War Bonds, converted into "overwhelming force," will save lives that otherwise might be spent. Who could fail to buy an extra bond today if he realized that it might be the means of sparing one American's life?

### PENICILLIN'S FINDER ASSAYS ITS FUTURE

Sir Alexander Fleming Says Improved Dosage Method Is Needed to Extend Use

Sir Alexander Fleming, discoverer of penicillin, said last night that a better method of administering the drug than by injection every two or three hours as at present was needed to extend its use. The British scientist warned, however, in speaking at a dinner in his honor in the Hotel Waldorf-Astoria, that administration by mouth would lead to "self-medication."

### NARROWS TUNNEL TO COST \$73,500,000

Brooklyn-Staten Island Tubes Only Await Decision on Financing Method

REPORT SENT TO DEWEY

Amortization in 40 Years Will Give City Property as Well as \$31,000,000 Surplus

Construction of the proposed vehicular tunnel under the Narrows connecting Brooklyn and Staten Island is planned as "an essential facility" on the basis of national and State, as well as local, necessity," according to a final report of the New York City Tunnel Authority to Governor Dewey and the Legislature made public yesterday.

It was said that twin tubes, providing the first physical link between Staten Island and the rest of the city, could be built in five years at a cost of \$73,500,000. This total includes the cost of buying land and constructing necessary approaches "an \$11,500,000 item which it was proposed the city itself assume because of the benefits it would derive from the project. The report, drafted by Ole Singstad, chief engineer of the Authority, and submitted under the signature of Alfred B. Jones, chairman, said that the project "operated as a toll facility, can be financed on a self-supporting and self-liquidating basis with only a small part of its cost required as a grant." This statement was predicated on an estimate that tolls, ranging from 60 cents for passenger cars

### Copper From Used Shells Doooms War's 'White Penny'

Special to The New York Times. PHILADELPHIA, June 25— "White" pennies, those annoying wartime substitutes, that resemble dimes, are disappearing from circulation, chiefly because copper for the old-fashioned kind of penny is being reclaimed from the cases of expended shells and cartridges, the United States Mint explained today.

Edwin H. Dressel, superintendent of the local mint, said that the "white" pennies had not been recalled, but added: "They're coming back fast without any suggestion from us."

### DELIVERERS UNION MEETS PUBLISHERS

Representatives of the Newspaper and Mail Deliverers Union, an independent organization, and of the Publishers Association of New York City conferred all day yesterday at the association's office, 1475 Broadway, on the union's demands for wage increases and other readjustments and adjourned without reaching an agreement. The union has scheduled a strike vote for Friday.

After yesterday's meeting, Louis Waldman, counsel for the union, said progress was made at the morning session "but progress minus during the afternoon." While there were no plans for resumption of negotiations, he said, "there is never an abandonment of the possibility for a peaceful settlement." Later, William Mapel, vice president of the Publishers Association, issued this statement: "The publishers made a proposal to the union and the union made counter proposals to the publishers. Agreement was not reached and the meeting adjourned with the publishers, at least, understanding that both sides were to give the matter full consideration. That the publishers are doing."

### SURPLUSS LIKELY TO DROP CANDIDACY

His Committee Holds a Night Session and Final Decision Is Promised for Today

THIS IS DAY FOR FILING

First Batch of Petitions for O'Dwyer Already In—ALP Notification Tonight

Withdrawal of Magistrate Abner C. Surpluss of Brooklyn as a candidate for the Republican nomination for Mayor became a distinct possibility last night as his campaign committee met to consider his chances for success in the primary and its probable cost. If Mr. Surpluss fails to file designating petitions by the deadline today, General Sessions Judge Jonah J. Goldstein of Manhattan, who has the backing of the five Republican County leaders, will have a clear field for the nomination.

George H. Itelstein, Magistrate Surpluss' campaign manager, said last night after the Surpluss campaign committee had been in executive session for more than an hour, that a final decision would be made today. Mr. Surpluss, at an earlier conference with Mr. Itelstein, agreed to abide by whatever decisions the committee reaches.

First O'Dwyer Petitions Filed  
The first batch of petitions designating District Attorney William O'Dwyer of Brooklyn for the Democratic nomination were filed yesterday with the Board of Elec-

# Early Evidence of Antibiotic Stewardship

## PENICILLIN'S FINDER ASSAYS ITS FUTURE

Sir Alexander Fleming Says  
Improved Dosage Method Is  
Needed to Extend Use

Sir Alexander Fleming, discoverer of penicillin, said last night that a better method of administering the drug than by injection every two or three hours as at present was needed to extend its use. The British scientist warned, however, in speaking at a dinner in his honor in the Hotel Waldorf-Astoria, that administration by mouth would lead to "self-medication and all its abuses."

## Self-Medication Decried

"But the public will demand a preparation which can be taken by mouth, and doubtless they will get it. Then will begin an era of self-medication with penicillin, with all its abuses. The wrong source of infection will be treated, but this does not matter so much so long as large doses are not taken. It will only mean disappointment to one individual.

"The greatest possibility of evil in self-medication is the use of too-small doses, so that, instead of clearing up the infection, the microbes are educated to resist penicillin and a host of penicillin-fast organisms is bred out which can be passed on to other individuals and perhaps from there to others until they reach someone who gets a septicemia or a pneumonia which penicillin cannot save.

"In such a case the thoughtless person playing with penicillin treatment is morally responsible for the death of the man who finally succumbs to infection with the penicillin-resistant organism. I hope this evil can be averted."

The New York Times

Published: June 26, 1945

Copyright © The New York Times

# Early Evidence of Antibiotic Stewardship

## PENICILLIN'S FINDER ASSAYS ITS FUTURE

"I hope this [collateral of inappropriate antibiotic use] evil can be averted."

-Sir Alexander Fleming, 1945

Sir Alexander Fleming, discoverer of penicillin, said last night that a better method of administering the drug than by injection every two or three hours as at present was needed to extend its use. The British scientist warned, however, in speaking at a dinner in his honor in the Hotel Waldorf-Astoria, that administration by mouth would lead to "self-medication and all its abuses."

### Self-Medication Decried

"But the public will demand a preparation which can be taken by mouth, and doubtless they will get it. Then will begin an era of self-medication with penicillin, with all its abuses. The wrong source of infection will be treated, but this does not matter so much so long as large doses are not taken. It will only mean disappointment to one individual.

"The greatest possibility of evil in self-medication is the use of too-

septicemia or a pneumonia which penicillin cannot save.

"In such a case the thoughtless person playing with penicillin treatment is morally responsible for the death of the man who finally succumbs to infection with the penicillin-resistant organism. I hope this evil can be averted."

The New York Times

Published: June 26, 1945

Copyright © The New York Times

# 52 Years Later

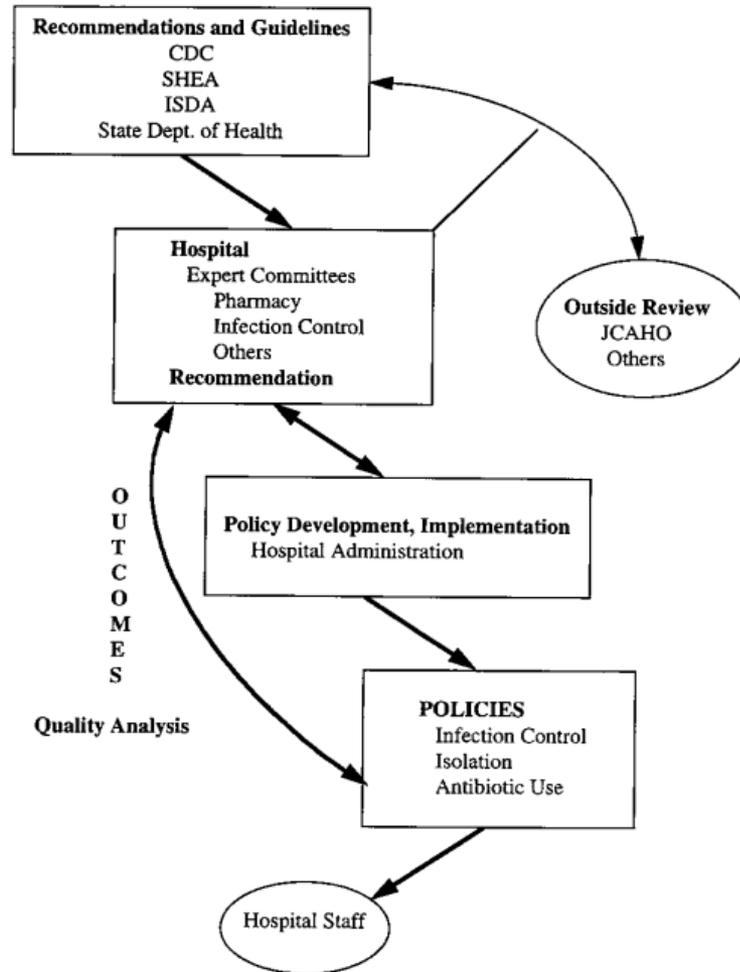
## **Society for Healthcare Epidemiology of America and Infectious Diseases Society of America Joint Committee on the Prevention of Antimicrobial Resistance: Guidelines for the Prevention of Antimicrobial Resistance in Hospitals**

**David M. Shlaes, Dale N. Gerding, Joseph F. John, Jr.,  
William A. Craig, Donald L. Bornstein,  
Robert A. Duncan, Mark R. Eckman, William E. Farrer,  
William H. Greene, Victor Lorian, Stuart Levy,  
John E. McGowan, Jr., Sindy M. Paul, Joel Ruskin,  
Fred C. Tenover, and Chatrchai Watanakunakorn**

*From Wyeth-Ayerst Research (Dr. Shlaes), Pearl River, New York; Veterans' Affairs Lakeside Medical Center (Dr. Gerding), Chicago, Illinois; UMDNJ-Robert Wood Johnson Medical School (Dr. John), New Brunswick, New Jersey; William S. Middleton Memorial Veterans' Hospital (Dr. Craig), Madison, Wisconsin; SUNY Health Science Center (Dr. Bornstein), Syracuse, New York; Lahey Clinic (Dr. Duncan), Burlington, Massachusetts; Duluth Clinic Limited (Dr. Eckman), Duluth, Minnesota; St. Elizabeth Hospital (Dr. Farrer), Elizabeth, New Jersey; University Hospital (Dr. Greene), State University of New York, Stony Brook, New York; Bronx-Lebanon Hospital Center (Dr. Lorian), Bronx, New York; Tufts University School of Medicine (Dr. Levy), Boston, Massachusetts; Grady Memorial Hospital (Dr. McGowan), Atlanta, Georgia; New Jersey Department of Health (Dr. Paul), Trenton, New Jersey; Kaiser Permanente Medical Center (Dr. Ruskin), Los Angeles, California; Centers for Disease Control and Prevention (Dr. Tenover), Atlanta, Georgia; and St. Elizabeth Hospital Medical Center (Dr. Watanakunakorn), Youngstown, Ohio*

Antimicrobial resistance results in increased morbidity, mortality, and costs of health care. Prevention of the emergence of resistance and the dissemination of resistant microorganisms will reduce these adverse effects and their attendant costs. Appropriate antimicrobial stewardship that includes optimal selection, dose, and duration of treatment, as well as control of antibiotic use, will prevent or slow the emergence of resistance among microorganisms. A comprehensively applied infection control program will interdict the dissemination of resistant strains.

# Vision



**Figure 1.** Flow of information, recommendations, and policies for the development of hospital policies to prevent the emergence and dissemination of resistance. Expert committees of the hospital, taking

# SHEA/IDSA 2007

## Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America Guidelines for Developing an Institutional Program to Enhance Antimicrobial Stewardship

**Timothy H. Dellit,<sup>1</sup> Robert C. Owens,<sup>2</sup> John E. McGowan, Jr.,<sup>3</sup> Dale N. Gerding,<sup>4</sup> Robert A. Weinstein,<sup>5</sup> John P. Burke,<sup>6</sup> W. Charles Huskins,<sup>7</sup> David L. Paterson,<sup>8</sup> Neil O. Fishman,<sup>9</sup> Christopher F. Carpenter,<sup>10</sup> P. J. Brennan,<sup>9</sup> Marianne Billeter,<sup>11</sup> and Thomas M. Hooton<sup>12</sup>**

<sup>1</sup>Harborview Medical Center and the University of Washington, Seattle; <sup>2</sup>Maine Medical Center, Portland; <sup>3</sup>Emory University, Atlanta, Georgia; <sup>4</sup>Hines Veterans Affairs Hospital and Loyola University Stritch School of Medicine, Hines, and <sup>5</sup>Stroger (Cook County) Hospital and Rush University Medical Center, Chicago, Illinois; <sup>6</sup>University of Utah, Salt Lake City; <sup>7</sup>Mayo Clinic College of Medicine, Rochester, Minnesota; <sup>8</sup>University of Pittsburgh Medical Center, Pittsburgh, and <sup>9</sup>University of Pennsylvania, Philadelphia, Pennsylvania; <sup>10</sup>William Beaumont Hospital, Royal Oak, Michigan; <sup>11</sup>Ochsner Health System, New Orleans, Louisiana; and <sup>12</sup>University of Miami, Miami, Florida

---

# SHEA/IDSA 2016

*Clinical Infectious Diseases*

IDSA GUIDELINE



## Implementing an Antibiotic Stewardship Program: Guidelines by the Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America

**Tamar F. Barlam,<sup>1,a</sup> Sara E. Cosgrove,<sup>2,a</sup> Lillian M. Abbo,<sup>3</sup> Conan MacDougall,<sup>4</sup> Audrey N. Schuetz,<sup>5</sup> Edward J. Septimus,<sup>6</sup> Arjun Srinivasan,<sup>7</sup> Timothy H. Dellit,<sup>8</sup> Yngve T. Falck-Ytter,<sup>9</sup> Neil O. Fishman,<sup>10</sup> Cindy W. Hamilton,<sup>11</sup> Timothy C. Jenkins,<sup>12</sup> Pamela A. Lipsett,<sup>13</sup> Preeti N. Malani,<sup>14</sup> Larissa S. May,<sup>15</sup> Gregory J. Moran,<sup>16</sup> Melinda M. Neuhauser,<sup>17</sup> Jason G. Newland,<sup>18</sup> Christopher A. Ohl,<sup>19</sup> Matthew H. Samore,<sup>20</sup> Susan K. Seo,<sup>21</sup> and Kavita K. Trivedi<sup>22</sup>**

<sup>1</sup>Section of Infectious Diseases, Boston University School of Medicine, Boston, Massachusetts; <sup>2</sup>Division of Infectious Diseases, Johns Hopkins University School of Medicine, Baltimore, Maryland; <sup>3</sup>Division of Infectious Diseases, University of Miami Miller School of Medicine, Miami, Florida; <sup>4</sup>Department of Clinical Pharmacy, School of Pharmacy, University of California, San Francisco; <sup>5</sup>Department of Medicine, Weill Cornell Medical Center/New York–Presbyterian Hospital, New York, New York; <sup>6</sup>Department of Internal Medicine, Texas A&M Health Science Center College of Medicine, Houston; <sup>7</sup>Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, Georgia; <sup>8</sup>Division of Allergy and Infectious Diseases, University of Washington School of Medicine, Seattle; <sup>9</sup>Department of Medicine, Case Western Reserve University and Veterans Affairs Medical Center, Cleveland, Ohio; <sup>10</sup>Department of Medicine, University of Pennsylvania Health System, Philadelphia; <sup>11</sup>Hamilton House, Virginia Beach, Virginia; <sup>12</sup>Division of Infectious Diseases, Denver Health, Denver, Colorado; <sup>13</sup>Department of Anesthesiology and Critical Care Medicine, Johns Hopkins University Schools of Medicine and Nursing, Baltimore, Maryland; <sup>14</sup>Division of Infectious Diseases, University of Michigan Health System, Ann Arbor; <sup>15</sup>Department of Emergency Medicine, University of California, Davis; <sup>16</sup>Department of Emergency Medicine, David Geffen School of Medicine, University of California, Los Angeles Medical Center, Sylmar; <sup>17</sup>Department of Veterans Affairs, Hines, Illinois; <sup>18</sup>Department of Pediatrics, Washington University School of Medicine in St. Louis, Missouri; <sup>19</sup>Section on Infectious Diseases, Wake Forest University School of Medicine, Winston-Salem, North Carolina; <sup>20</sup>Department of Veterans Affairs and University of Utah, Salt Lake City; <sup>21</sup>Infectious Diseases, Memorial Sloan Kettering Cancer Center, New York, New York; and <sup>22</sup>Trivedi Consults, LLC, Berkeley, California

# The Joint Commission

## Proposed Standard for Antimicrobial Stewardship

Effective January 1, 2017



• Issued June 22, 2016 •

## Prepublication Requirements

The Joint Commission has approved the following revisions for prepublication. While revised requirements are published in the semiannual updates to the print manuals (as well as in the online E-dition®), accredited organizations and paid subscribers can also view them in the monthly periodical *The Joint Commission Perspectives*®. To begin your subscription, call 877-223-6866 or visit <http://www.jcinc.com>.



### New Antimicrobial Stewardship Standard

APPLICABLE TO HOSPITALS AND CRITICAL ACCESS HOSPITALS

Effective January 1, 2017

#### Medication Management (MM)

##### Standard MM.09.01.01

The [critical access] hospital has an antimicrobial stewardship program based on current scientific literature.

##### Elements of Performance for MM.09.01.01

- Leaders establish antimicrobial stewardship as an organizational priority. (See also LD.01.03.01, EP 5)

*Note: Examples of leadership commitment to an antimicrobial stewardship program are as follows:*

- Accountability documents
- Budget plans
- Infection prevention plans
- Performance improvement plans
- Strategic plans
- Using the electronic health record to collect antimicrobial stewardship data

- The [critical access] hospital educates staff and licensed independent practitioners involved in antimicrobial ordering, dispensing, administration, and monitoring about antimicrobial resistance and antimicrobial stewardship practices. Education occurs upon hire or granting of initial privileges and periodically thereafter, based on organizational need.
- The [critical access] hospital educates patients, and their families as needed, regarding the appropriate use of antimicrobial medications, including antibiotics. (For more information on patient education, refer to Standard PC.02.03.01)

*Note: An example of an educational tool that can be used for patients and families includes the Centers for Disease Control and Prevention's Get Smart document, "Viruses or Bacteria—What's got you sick?" at <http://www.cdc.gov/getsmart/community/downloads/getsmart-chart.pdf>.*

- The [critical access] hospital has an antimicrobial stewardship multidisciplinary team that includes the following members, when available in the setting:
  - Infectious disease physician
  - Infection preventionist(s)
  - Pharmacist(s)
  - Practitioner

*Note 1: Part-time or consultant staff are acceptable as members of the antimicrobial stewardship multidisciplinary team.*

*Note 2: Telehealth staff are acceptable as members of the antimicrobial stewardship multidisciplinary team.*

- Ⓢ The [critical access] hospital's antimicrobial stewardship program includes the following core elements:
  - Leadership commitment: Dedicating necessary human, financial, and information technology resources.
  - Accountability: Appointing a single leader responsible for program outcomes. Experience with successful programs shows that a physician leader is effective.
  - Drug expertise: Appointing a single pharmacist leader responsible for working to improve antibiotic use.
  - Action: Implementing recommended actions, such as systemic evaluation of ongoing treatment need, after a set period of initial treatment (for example, "antibiotic time out" after 48 hours).
  - Tracking: Monitoring the antimicrobial stewardship program, which may include information on antibiotic prescribing and resistance patterns.

Key: A indicates scoring category A; C indicates scoring category C; Ⓢ indicates that documentation is required; Ⓜ indicates Measure of Success is needed; ⚠ indicates an Immediate Threat to Health or Safety; ⚡ indicates situational decision rules apply; Ⓡ indicates direct impact requirements apply; Ⓜ indicates and identified risk area

# Leadership

- Recognized and supported by senior leadership for its need and potential
- Financial support
- Accountability
- Inf Prev/PI Plans
- Electronic health record

# Employee Education

- Education provided to all employees involved with antibiotic use
  - Ordering, dispensing, administration, monitoring
- Frequency: Upon hire and annually thereafter
- Content: Not specified

# Patient/Family Education

- Originally designed to educate patient and family members regarding antimicrobials
- Removed from standard due to feasibility

# Multidisciplinary Team

- Team includes the following members
  - Infectious Disease Physician
  - Infection Preventionist(s)
  - Pharmacist(s)
  - Practitioner

\*Part-time, consultant, and/or telehealth staff are acceptable

# Core Elements

- Leadership commitment
- Accountability (program lead)
- Drug expertise (pharmacist lead)
- Action (Processes)
- Tracking (Outcomes)
- Reporting
- Education

# Organization-approved Protocols

- Antibiotic Formulary Restriction
- Pre-authorization protocol
- Surgical Prophylaxis
- Plan for IV to PO Antibiotic Conversion
- Disease specific protocols
- Others

# Collect, Analyze, and Report Data

- Process measures
- Outcomes measures
- Analyze data to monitor trends and identify areas of opportunity
- Report data to necessary audiences

# Performance Improvement

- The hospital takes action on improvement opportunities identified
  - Education
  - Modify/add protocols
  - Non-specific

# Best Practices

- Leadership
  - Financial, prioritize, culture
- Employee education
  - Annual hospital training, orientation, department-specific, incorporate into daily processes
- Multidisciplinary Team
  - Collaboration, communication
  - Strategize meetings



<https://www.humanenergistics.com/blog/constructive-culture-blog/details/constructive-culture/2020/09/15/there-is-a-right-culture!>

# Best Practices

- Core Elements/Collect, Analyze, Report Data
  - Trend interventions by type, location
  - Trend DOTs/1000 Pt Days using software/EMR
  - Submit data to NHSN and trend SAAR
  - Trend resistance data using Antibiogram
  - Other data as it pertains to PI project
  - Report at meetings, unit level
- Protocols
  - Incorporate antibiogram, evidence
  - Operationalize within EMR/pathways
  - Eliminate those not used

# Best Practices

- Performance Improvement
  - Antibiotic use/resistance
  - Disease-specific approach
  - Rapid Diagnostics
  - New Treatment
  - Covid-19
  - Research

# APIC Resources



Please Sign In  
My APIC ▾

Store  
Books, webinars & more

[Membership](#)

[Consumers](#)

[Professional Practice](#)

[Education & Certification](#)

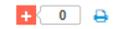
[Resources](#)

[Public Policy](#)

[About](#)

[Home](#) > [Resources](#) > [Topic-Specific Infection Prevention](#) > [Antimicrobial Stewardship](#)

## Antimicrobial Stewardship



Antimicrobial stewardship is a coordinated program that promotes the appropriate use of antimicrobials (including antibiotics), improves patient outcomes, reduces microbial resistance, and decreases the spread of infections caused by multidrug-resistant organisms.

Misuse and overuse of antimicrobials is one of the world's most pressing public health problems. Infectious organisms adapt to the antimicrobials designed to kill them, making the drugs ineffective. People infected with antimicrobial-resistant organisms are more likely to have longer, more expensive hospital stays, and may be more likely to die as a result of an infection. This page contains antimicrobial stewardship resources and education for both healthcare professionals and consumers.

**For Healthcare Professionals**

For Consumers

The following links are APIC resources on antimicrobial stewardship for healthcare professionals.

### Statements and position papers

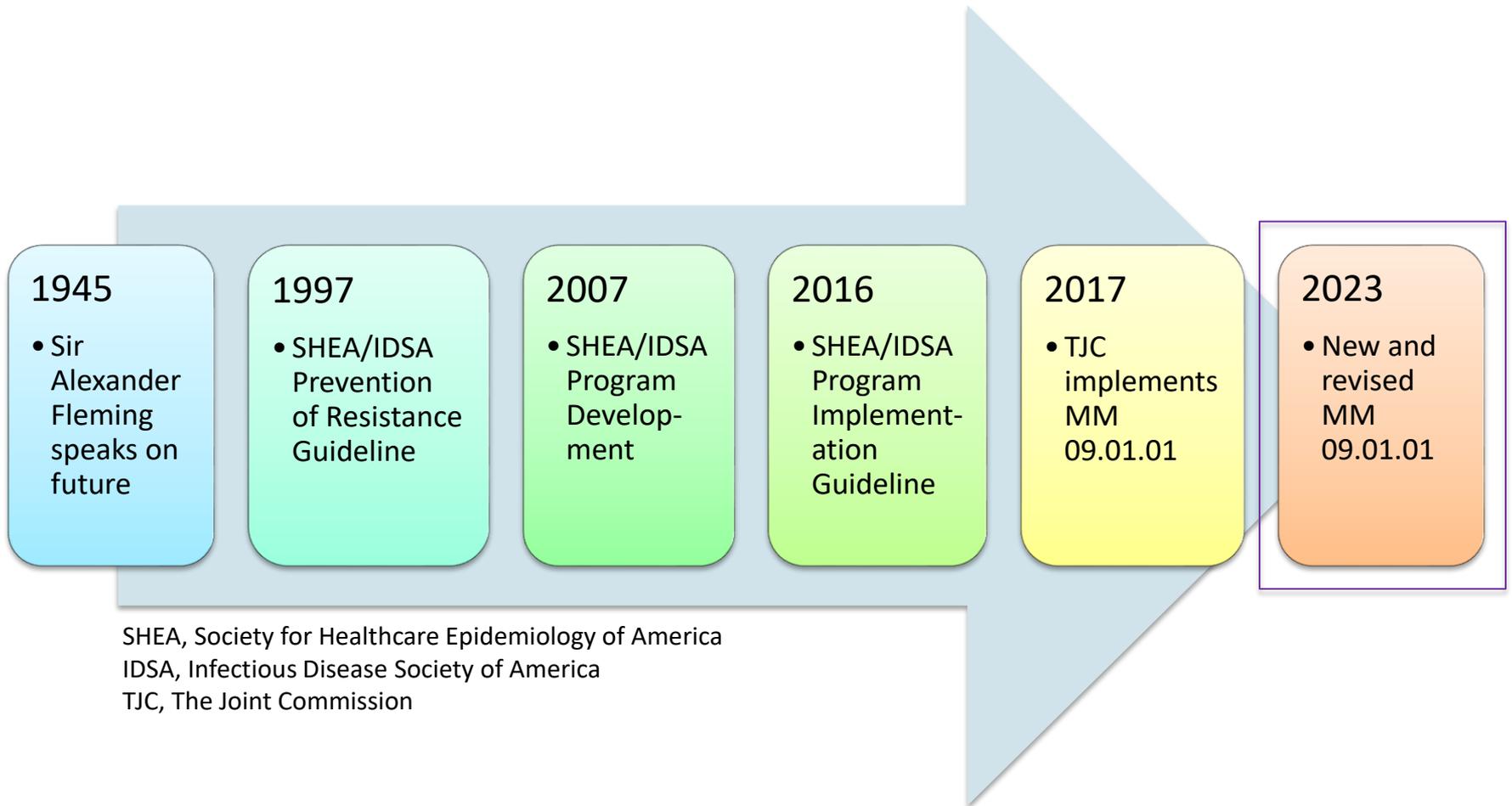
- [NEW! Antimicrobial stewardship and infection prevention – Leveraging the synergy: A position paper update, April 2018](#)
- [APIC statement in support of the National Action Plan for Combating Antibiotic-Resistant Bacteria, March 27, 2015](#)
- [Antimicrobial stewardship: A collaborative partnership between infection preventionists and health care epidemiologists—APIC and the Society for Healthcare Epidemiology of America, March 2012](#)

### Implementation guides and tools

- [Guide to Preventing \*Clostridium difficile\* Infections \(2013\)—Implementation Guide](#)
- [Guide to the Elimination of Methicillin-Resistant \*Staphylococcus aureus\* \(MRSA\) Transmission in Hospital Settings, 2nd Edition \(2010\)—Implementation Guide](#)
- [Guide to the Elimination of Methicillin-Resistant \*Staphylococcus aureus\* \(MRSA\) in the Long-Term Care Facility \(2009\)—Implementation Guide](#)
- [Guide to the Elimination of Multidrug-resistant \*Acinetobacter baumannii\* Transmission in Healthcare Settings \(2010\)—Implementation Guide](#)
- APIC Text (subscription required)
  - [Chapter 26, "Antimicrobials and Resistance"](#)

<https://apic.org/resources/topic-specific-infection-prevention/antimicrobial-stewardship/>

# Antimicrobial/biotic Stewardship Program Timeline\*



*\*And so much more in between from many organizations and researchers*

# 6 years later...what have we learned?

## R<sup>3</sup> Report | Requirement, Rationale, Reference

A complimentary publication of The Joint Commission

Issue 35, June 20, 2022

Published for Joint Commission-accredited organizations and interested health care professionals, *R3 Report* provides the rationale and references that The Joint Commission employs in the development of new requirements. While the standards manuals also may provide a rationale, *R3 Report* goes into more depth, providing a rationale statement for each element of performance (EP). The references provide the evidence that supports the requirement. *R3 Report* may be reproduced if credited to The Joint Commission. Sign up for [email](#) delivery.

### **New and Revised Requirements for Antibiotic Stewardship**

Effective January 1, 2023, new and revised antibiotic stewardship requirements will apply to all Joint Commission-accredited hospitals and critical access hospitals. The 12 elements of performance (EPs) are included in the "Medication Management" (MM) chapter (Standard MM.09.01.01) and expand upon the current expectations for antibiotic stewardship programs in the hospital setting.

# EP 10 (new)

- The hospital allocates financial resources for staffing and **information technology** to support the antibiotic program

# EP 11 (revised)

- The **governing body appoints** a physician and/or pharmacist who is qualified through education, training, or experience in infectious diseases and/or antibiotic stewardship as the leader(s) of the antibiotic stewardship program
- Appointment based on recommendations of medical staff leadership and pharmacy leadership

# EP 12 (revised)

- Leaders(s) responsible for
  - Developing/implementing program
  - Documenting activities
  - Communicating and collaborating with medical staff, **nursing leadership**, pharmacy leadership, **infection prevention and control, and QAPI programs** on antibiotic issues
  - Provide **competency-based training and education for staff**, including medical staff, on the **practical applications of antibiotic stewardship guidelines, policies, and procedures**

# EP 13 (revised)

- Multidisciplinary committee
  - May include **medical staff**, pharmacy services, **IPC, nursing**, microbiology, **IT, QAPI**

# EP 14 (revised)

- The antibiotic stewardship program **demonstrates coordination** among all components of the hospital responsible for use and resistance
  - IPC
  - QAPI
  - Medical staff
  - Nursing services
  - Pharmacy services

# EP 15 (revised)

- The antibiotic stewardship program **documents the evidence-based use** of antibiotics in all departments and services of the hospital

# EP 16 (new)

- The antibiotic stewardship program monitors the hospital's antibiotic use by analyzing
  - Days of Therapy (DOT) per 1000 days present or patient days **OR**
  - Reporting antibiotic use data to the National Healthcare Safety Network's Antibiotic Use Option of the AU/AR Module

# EP 17 (new)

- The antibiotic stewardship program implements one or both of the following
  - Preauthorization for specific antibiotics that includes review and approval process
  - Prospective review and feedback regarding antibiotic prescribing practices, **including the treatment of positive blood cultures**, by a member of the antibiotic stewardship program

# EP 18 (new)

- The antibiotic stewardship program implements at least two evidence-based guidelines to **improve antibiotic use** for the most common indications
  - Community-acquired pneumonia
  - Urinary Tract Infection
  - Skin and Soft Tissue Infection
  - *Clostridioides difficile* infection
  - Others

# EP 19 (new)

- The antibiotic stewardship program **evaluates adherence** (including selection and duration, where applicable) to at least one of the guidelines implemented
  - Group level (department, unit, clinician subgroup) or Individual prescriber level
  - Adherence data may be obtained for a sample of patients from relevant areas using EMR or conducting chart reviews

# EP 20 (revised)

- The antibiotic stewardship program collects, analyzes, reports data to **hospital leadership and prescribers**
  - Resistance patterns
  - Prescribing patterns
  - Evaluations of activities

# EP 21 (revised)

- The **hospital takes action** on improvement opportunities identified by the antibiotic stewardship program

# Future Direction

- New and revised standards designed to elevate us to even higher standards for patient care and safety
- Data driven
- Structure
- Accountability
- Collaboration
- Communication
- Culture
- **Creativity and Bespoke approach**

# Standard LD.04.03.08: Reducing health care disparities for the hospital's patients is a quality and safety priority



Our Websites: ▾

Search this site.

Accreditation & Certification ▾

Standards ▾

Measurement ▾

Performance Improvement ▾

[Home](#) > [Standards](#) > [Prepublication Standards](#) > [New and Revised Requirements to Reduce Health Care Dispar](#)

## New and Revised Requirements to Reduce Health Care Disparities

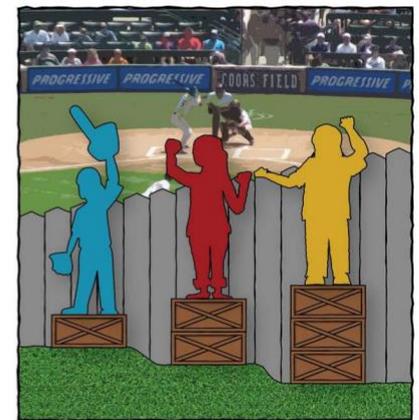
Effective January 1, 2023, new and revised requirements to reduce health care disparities will apply to Joint Commission-accredited ambulatory health care organizations, behavioral health and human services organizations, critical access hospitals, and hospitals.

A new standard in the Leadership (LD) chapter with 6 new elements of performance (EPs) has been developed to address health care disparities as a quality and safety priority. Standard LD.04.03.08 will apply to the following Joint Commission-accredited organizations:

<https://www.jointcommission.org/standards/prepublication-standards/new-and-revised-requirements-to-reduce-health-care-disparities/>



**EQUALITY**



**EQUITY**

<http://www.socialventurepartners.org/wp-content/uploads/2018/01/Problem-with-Equity-vs-Equality-Graphic.pdf>

# What Can I Do Tomorrow?

- Designate antibiotic stewardship as a standing agenda item at your IPC meeting with official report out
- Consider incorporating antibiotic stewardship into your orientation education
- Collaborate and begin reporting AU data to NSHN
- Provide list of + blood cultures to antibiotic stewardship team
- Breakdown any silo that may exist between IPC and antibiotic stewardship (think: Quality and Patient Safety)
  - Learn from each other!
- Consider collaborating on Performance Improvement initiatives
- Incorporate health care disparities when analyzing data to further optimize the safety and quality of care you provide everyday



# The Evolution of Anti-microbial/biologic Stewardship

October 27, 2022

George D. Rodriguez, PharmD, BCIDP  
Director, Quality & Patient Safety, Regulatory Affairs  
NewYork-Presbyterian Queens  
Cell: 718-640-7851  
Email: [Gdr9005@nyp.org](mailto:Gdr9005@nyp.org)