




# IMPROVING INPATIENT CARE THROUGH ANTIMICROBIAL STEWARDSHIP: A CASE-BASED APPROACH TO MANAGING ACUTE INFECTIONS

## Supplement to the *Journal of Hospital Medicine*

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Jointly sponsored by the American Academy of CME  and Global Education Exchange, Inc.   
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### Program Overview

Early and appropriate treatment of acute infections, especially in critically ill and immunocompromised patients, is paramount to successful outcomes. Appropriate empiric therapy often requires the use of multiple broad-spectrum agents that must be used judiciously to preserve antimicrobial activity over time. Critical components of antimicrobial stewardship include the selection of appropriate antibiotics, de-escalation of therapy after 2 or 3 days of empiric treatment, and a strategy for the duration and discontinuation of therapy. An evidence-based approach to these essential stewardship factors will improve patient outcomes by decreasing unnecessary antimicrobial exposures and associated unwanted effects as well as reduce the risk for emergence of antimicrobial resistance.

The intent of this educational activity is to illustrate these components of antimicrobial stewardship in a practical, case-based format. Since hospitalists and intensivists play a central role in the formation and operation of a successful antimicrobial stewardship program, special consideration will be given to strategies that they can apply in their daily practices.

### Target Audience

This activity was designed to meet the needs of hospitalists and intensivists who are involved in the diagnosis, management, and treatment of infectious diseases in the hospital setting. Other healthcare professionals are also invited to participate.

### Faculty and Topics

Empiric Antibiotic Selection Strategies for Healthcare-Associated Pneumonia, Intra-abdominal Infections, and Catheter-Associated Bacteremia

**David R. Snyderman, MD, FACP, FIDSA**

Chief, Division of Geographic Medicine and Infectious Diseases  
Tufts Medical Center

Professor of Medicine  
Tufts University School of Medicine  
Boston, Massachusetts

**After completing this article, learners should be better able to:**

- Differentiate between colonization and infection in their patients in order to devise optimal initial therapy strategies
- Identify risk factors for the development of antimicrobial resistance
- Select the appropriate therapeutic agent for their hospitalized patients based on the organism and site of infection

Antimicrobial De-escalation Strategies in Hospitalized Patients with Pneumonia, Intra-abdominal Infections, and Bacteremia

**Keith S. Kaye, MD, MPH**

Professor of Medicine  
Wayne State University  
Corporate Director, Infection Prevention, Epidemiology and Antimicrobial Stewardship  
Detroit Medical Center  
Detroit, Michigan

**After completing this article, learners should be better able to:**

- Assess the rationale behind antimicrobial de-escalation in healthcare settings and its potential healthcare benefits
- Implement effective de-escalation strategies for their patients that are pathogen-specific and minimize the emergence of resistance
- Identify common targets and opportunities for de-escalation programs in their institution

Duration and Cessation of Antimicrobial Treatment

**Thomas M. File, Jr., MD, MSc, MACP, FIDSA, FCCP**

Professor, Internal Medicine  
Head, Infectious Disease Section  
Northeastern Ohio Universities College of Medicine and Pharmacy  
Akron, Ohio

**After completing this article, learners should be better able to:**

- Develop an evidence-based approach to duration and cessation of antimicrobial therapy for their patients
- Assess clinical data in support of a shorter course of antimicrobial therapy
- Incorporate strategies for their patients to optimize antimicrobial choices, dosages, and durations of therapy in order to decrease the emergence of antimicrobial resistance

Infections, Bacterial Resistance, and Antimicrobial Stewardship: The Emerging Role of Hospitalists

**David J. Rosenberg, MD, MPH, FACP, SFHM (Chairman)**

Associate Chair for Hospital Operations

Department of Medicine

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**After completing this article, learners should be better able to:**

- Describe the role of the hospitalist in the successful implementation of an antimicrobial stewardship program to improve quality of care and outcomes
- Identify the key elements of an antimicrobial stewardship program that promote the judicious use of antibiotics in hospital settings
- Apply the critical antimicrobial stewardship elements to the care of patients in their hospital

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Consultant—for clinical trial design: CSL Behring

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Grant Recipient/Research Support (PI; funds paid to Summa Health System): Boehringer Ingelheim, Cerexa/Forest Pharmaceuticals, Gilead, Ortho-McNeil, Pfizer, Tibotec

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PI for NIH STTR grant to Cepheid (to develop TB diagnostics)—grant ended 9/10

Member, group of patent holders related to molecular beacon licenses

Employee (spouse): Bristol-Myers Squibb

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### **Media:**

Journal supplement

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