

Status **Active** PolicyStat ID **16997040**



Origination 03/2019  
Last Approved 12/2024  
Effective 12/2024  
Last Revised 12/2024  
Next Review 12/2027

Owner Sherie Goldbach:  
Project Coordinator  
Policy Area Infection Prevention  
Applicability UNC Medical Center

## Carolina Antimicrobial Stewardship Program Policy

### I. Description

This policy outlines the duties, responsibilities, and reporting structure of the UNC Hospitals Carolina Antimicrobial Stewardship Program (CASP).

### II. Policy

#### A. Definitions

- CASP promotes the appropriate use of antimicrobials, minimizes adverse effects, contributes to slowing antimicrobial resistance, and improves patient outcomes. CASP's multidisciplinary team provides guidance and tools to support clinical decision-making, aligned with national professional societies (including the Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America), the US Centers for Disease Control and Prevention's Core Elements of Hospital Antibiotic Stewardship, The Joint Commission Antimicrobial Stewardship Standard, and the Centers for Medicaid and Medicare Services Conditions of Participation. The team is responsible for the appropriate use of antimicrobials in both inpatient and outpatient areas of UNC Hospitals.

#### B. Service Hours & Contact Information

##### 1. Hours of Operation:

a. Monday – Friday: 0800 – 1700

i. Weekends/Holidays: 0800 – 1700 by pager only

- ii. 24/7 for *C. difficile* order approvals (during business hours, Epic chat or indicated pagers; after business hours, pager only)

b. Contact:

- i. UNC Antimicrobial Stewardship pager: 2162398
- ii. Infectious Diseases Pediatrics Antimicrobial Stewardship pager: 1234031
- iii. 24/7 *C. difficile* approval pager: 347-0311
- iv. Epic group chat: UNC Infectious Diseases - Carolina Antimicrobial Stewardship Program (CASP)
- v. CASP members may also be contacted via their UNC email.

## C. Program Responsibilities

1. Provide clinical antimicrobial education, training, and resources to support patient care activities at UNC Hospitals.
2. Develop and implement policies/procedures that support evidence-based antimicrobial use.
3. Identify, implement, and track CASP strategies each fiscal year.
4. Collect and assess antimicrobial use data to inform quality improvement activities. This includes participation in the CDC's National Healthcare Safety Network's Antimicrobial Use and Resistance module.
5. Collaborate with the microbiology lab and Infection Prevention to harness diagnostic stewardship opportunities.
6. Collaborate with Infection Prevention to identify and control outbreaks through focused monitoring and/or restriction of antimicrobials in targeted units.
7. Regularly report antibiotic use and resistance information to prescribers, pharmacists, nurses, and hospital leadership.

## D. Staff Roles & Responsibilities

1. This program is led by adult and pediatric infectious diseases (ID) physicians and ID clinical pharmacists. CASP is supported by a data analyst, a program manager, clinical microbiologists, epidemiologists, and electronic medical record system specialists. Representatives from non-ID physicians, nursing, and the Information Services Division (ISD) also collaborate and provide input, primarily via the hospital-wide CASP stakeholder group.
2. **CASP Medical Director:** ID physician responsible for the overall direction of CASP,

physician education, and quality improvement strategy development, implementation, and monitoring.

- a. Ensure therapeutic guidelines, antimicrobial restriction policies, and other CASP products and activities are evidence-based, providing safe and effective therapy for patients.
  - b. Provide recommendations on policies and decisions regarding the use of antimicrobials at UNC Hospitals to the Pharmacy & Therapeutics (P&T) Committee.
  - c. Intervene on antimicrobial decisions utilizing a hybrid strategy of prospective audits and authorization of restricted antimicrobials with the support of the CASP pharmacists.
  - d. Provide consultation on antimicrobial treatment of complex cases as determined by the CASP pharmacists.
  - e. Document clinical interventions and uptake of recommendations.
  - f. Liaise between the Department of Pharmacy, Department of Medicine – Infectious Diseases Division, Microbiology, and Infection Prevention to ensure activities related to antimicrobial use and infection prevention are coordinated and consistent.
3. **CASP Lead Pharmacist:** ID pharmacist responsible for co-leadership of the program in collaboration with the CASP Medical Director and facilitation of clinical pharmacist activities relating to antimicrobial stewardship.
- a. The Lead Pharmacist is supported by a team of CASP pharmacists: ID pharmacists responsible for daily antimicrobial alert review and interventions, consulting with clinicians, and performing duties in collaboration with the CASP Medical Director.
  - b. Together, CASP Pharmacists:
    - i. Ensure therapeutic guidelines, antimicrobial restriction policies, and other CASP products and activities are evidence-based, providing safe and effective therapy for patients.
    - ii. Provide recommendations on policies and decisions regarding the use of antimicrobials at UNC Hospitals to the P&T Committee.
    - iii. Responsible for weekday review of surveillance alerts as prioritized by CASP. These alerts are based on patient-level microbiology results and antimicrobial pharmacotherapy.
    - iv. Intervene on antimicrobial decisions as appropriate, utilizing a hybrid strategy of prospective audits of antimicrobials and

authorization of restricted antimicrobials with the support of the CASP medical director.

- v. Be available for consultation by UNC Hospitals clinicians regarding judicious use of the antimicrobials.
- vi. Document clinical interventions and associated outcomes.
- vii. Conduct medication use evaluations related to antimicrobials as prioritized by CASP.
- viii. Periodically review antimicrobial use and resistance reports from the CDC's National Healthcare Safety Network and report trends to stakeholders.

#### 4. **CASP Children's Leadership:**

- a. **CASP Pediatric Director:** Pediatric Infectious Diseases Physician responsible for direction of pediatric clinician education, and quality improvement strategy development, implementation, and monitoring.
- b. **CASP Pediatric Pharmacist:** ID pharmacist responsible for co-leadership of the CASP Children's program in collaboration with the CASP Pediatric Director and facilitation of clinical pharmacist activities relating to antimicrobial stewardship, including those described in section 2b.
- c. **Together, CASP Children's Leadership:**
  - i. Ensure therapeutic guidelines, antimicrobial restriction policies, and other CASP products and activities are evidence-based, coordinated, and consistent with existing UNC Hospitals' activities, policies, and procedures.
  - ii. Provide recommendations on policies and decisions regarding the use of antimicrobials at UNC Hospitals to the P&T Committee.
  - iii. Where necessary and appropriate, lead or contribute to the development of therapeutic guidelines, clinical decision support, and other clinical guidance documents within UNC Children's.
  - iv. Intervene on antimicrobial prescribing utilizing a hybrid strategy of prospective audits and authorization of restricted antimicrobials with the support of the CASP pharmacists.
  - v. Provide consultation on antimicrobial treatment of complex patients as determined by CASP pharmacists.
  - vi. Document clinical interventions and associated outcomes.

#### 5. **CASP Program Manager**

- a. Direct and manage non-clinical aspects of the program, including support to individual quality improvement strategies, development of work plans, and project and program monitoring and reporting.
- b. Liaise with management and stakeholders to communicate program goals and strategies, solicit input, and coordinate across UNC Hospitals, which may include convening and directing *ad hoc* working groups.
- c. Manage communication and outreach to extend CASP's influence.
- d. Prepare the team for Joint Commission and state surveys by maintaining accessible, up-to-date materials.

#### **6. CASP Data Analyst/Project Manager**

- a. Manage CASP quality improvement projects including data management, project scope, work breakdown structure, project breakdown structure, team communication, monitor project execution, and maintain project documentation.
- b. Manage and lead CASP participation in external data-sharing projects such as those with CDC NSHN.
- c. Utilize data analysis, data visualization, and quality improvement tools such as Tableau, SAP BusinessObjects, REDCap, and Microsoft Excel to maximize project quality, effectiveness, and efficiency.
- d. Provide project consultancy to additional CASP projects to drive additional efficiencies and further support CASP goals.

#### **7. CASP Administrative Director**

- a. Usher contracts and budgets through internal administrative processes.
- b. Liaise with senior hospital leadership for resources.
- c. Ensure alignment with accreditation and standards.
- d. Provide general oversight of program administration.

#### **8. CASP Attending Physicians**

- a. Intervene on antimicrobial decisions utilizing a hybrid strategy of prospective audits and authorization of restricted antimicrobials with the support of the CASP pharmacists.
- b. Provide consultation on antimicrobial treatment of complex cases as determined by CASP pharmacists.
- c. Document clinical interventions and associated outcomes.
- d. Assist with weekday reviews led by CASP pharmacists(s). Review positive

blood culture and restricted antibiotics and cover the ASP pager during weekends.

- e. Contact teams when there is a need for intervention and round with the CASP team.
- f. Participate in CASP meetings, plan, and facilitate educational activities.
- g. Serve as lead/co-lead for selected stewardship quality improvement projects, strategies, and outreach.

## **E. Functions of CASP Advisory Staff**

### **1. Director, Clinical Microbiology (or designee)**

- a. Collaborate with the CASP on projects that optimize antimicrobial use at UNC Hospitals.
- b. Prepare and distribute antibiograms, specific to community, inpatient, and intensive care populations periodically.

### **2. Director, Infection Prevention (or designee)**

- a. Provide expertise in surveillance and study design to evaluate the effects of antimicrobial stewardship initiatives.
- b. Gather data on healthcare-associated infections to aid the stewardship team's initiative planning and evaluation of outcomes and strategies.

### **3. Director of Pharmacy, Department of Pharmacy**

- Provide guidance and expertise to CASP via its steering committee.

### **4. Pharmacy Data Analytics and Outcomes, Department of Pharmacy**

- Assist in the abstraction, organization, and analysis of data related to antimicrobial use and resistance at UNC Hospitals.

### **5. Nursing Leader, Division of Nursing**

- Collaborate with CASP on projects designed to optimize antimicrobial use at UNC Hospitals.

### **6. Hospital Leadership**

- Establish antimicrobial stewardship as an organizational priority.
  - i. Ensure program leadership has appropriate resources (including staffing, budgetary, and IT support).
  - ii. Provide regularly scheduled opportunities to report stewardship activities, resources, and outcomes to senior executives and the

hospital board.

- iii. Meet regularly with CASP leaders to assess resources needed to accomplish goals.

## F. Reporting Structure

1. CASP reports to the UNC Hospitals Director of Pharmacy (pharmacist personnel) and the CASP Administrative Director/Director of Infection Prevention (all other personnel), who reports to the Associate Vice President, Office of Quality Excellence.
2. CASP provides routine reports, recommendations, and guidance to the UNC Hospitals' Hospital Infection Control Committee (HICC), the UNC Hospitals P&T Committee, the UNC SOM Division of Infectious Diseases, and the Regional Director of Pharmacy Services. HICC and P&T report to the Medical Staff Executive Committee. Periodic reports may be provided to other hospital safety and quality committees on an *ad hoc* basis.

## III. Responsible for Content

Carolina Antimicrobial Stewardship Program, Department of Infection Prevention, UNC Hospitals Hospital Infection Control Committee, UNC Hospitals Anti-Infective Pharmacy & Therapeutics Subcommittee, and UNC Hospitals Pharmacy & Therapeutics Committee

### Approval Signatures

Step Description	Approver	Date
Policy Stat Administrator	Judith Strubin: Mgr Program-IP	12/2024
	Thomas Ivester: CMO/VP Medical Affairs	12/2024
	Emily Vavalle: Dir Epidemiology	12/2024
	Sherie Goldbach: Project Coordinator	11/2024

### Applicability

UNC Medical Center