Name of Policy: **Antimicrobial Stewardship**	THE UNIVERSITY OF TOLEDO **MEDICAL CENTER**
Policy Number: 3364-100-70-16	
Department: Hospital Administration	
Approving Officer: Chief Executive Officer Chief of Staff	
Responsible Agent: Director of Pharmacy	**Effective Date**: 10/01/2023
Scope: University of Toledo Medical Center and its Medical Staff	Initial Effective Date: 1/1/2017

_____ New policy proposal	_____	Minor/technical revision of existing policy
_____ Major revision of existing policy	x	Reaffirmation of existing policy

(A) Policy Statement

The University of Toledo Medical Center will implement, develop, and support an antimicrobial stewardship program (ASP) based on current scientific literature.

(B) Purpose of Policy

Antimicrobial resistance is a public health threat and leads to at least two million illnesses and 23,000 deaths annually in the United States[1]. In September 2014, the President's Council of Advisors on Science and Technology (PCAST) prepared a report providing recommendations on combating antimicrobial resistance. One of these key recommendations focuses on improving stewardship of existing antibiotics and by 2017 the Centers for Medicare and Medicaid Services (CMS) require hospitals and long-term care facilities "to develop and implement robust antibiotic stewardship programs that adhere to best practices"[2].

The ASP at the University of Toledo Medical Center will follow best practices to combat antimicrobial resistance and improve appropriate antibiotic use according to the following mission, goals, and objectives.

(C) Procedures

1. Mission
   a. Improve the quality of patient care through appropriate use of anti-infective agents

2. Overall Goals
   a. Improve patient outcomes
   b. Improve patient safety
   c. Minimize resistance/collateral damage
   d. Minimize cost

3. Specific Objectives
   a. Acheivement of the goals of the ASP will be monitored and evaluated via specific objectives as outlined in the Antimicrobial Stewardship PMAAR (Plan, Measure, Analyze, Act, Review)
   b. The results of the Antimicrobial Stewardship PMAAR will be reported quarterly to the Antimicrobial Subcommittee then disseminated institutionally via the Pharmacy and Therapeutics Committe

4. <u>Antimicrobial Subcommittee</u>
   a. Core Members
      i. Executive Owner
         1. Chief Medical Officer
      ii. Chair
         1. Antimicrobial Stewardship Program Director
      iii. Secretary
         1. Antimicrobial Stewardship Pharmacist
      iv. Regular Members
         1. Infectious Diseases Physicians
         2. Pharmacy
         3. Microbiology
         4. Infection Prevention and Control
         5. Quality
         6. Information Technology
         7. Critical Care Physician
         8. Hospitalist Physician
         9. Surgical Physician

   b. Responsibilities
      i. Develop and implement initiatives to ensure rational and appropriate use of antimicrobial agents and promote data-driven, evidence-based strategies to optimize antimicrobial use
      ii. Oversee the implementation and utilization of computer-based surveillance tools to track antimicrobial stewardship interventions
      iii. Review antimicrobial susceptibility rates via annual reports from the clinical microbiology laboratory
      iv. Review antimicrobial formulary for changes regarding antimicrobial agents as necessary
      v. Establish mechanisms to effectively assess and measure antimicrobial therapy
      vi. Improve awareness and knowledge of antimicrobial stewardship through facility-wide educational efforts
      vii. Provide quarterly report of activities and recommendations to the Pharmacy and Therapeutics Committee

5. <u>Key Strategies</u>
   a. Prospective monitoring with intervention and feedback
      i. Antimicrobial stewardship pharmacist reports (e.g., positive culture results)
      ii. Reviewed daily with direct interaction and feedback to the prescriber and documentation in pharmacy intervention system
   b. Formulary restriction/preauthorization or criteria-monitored antimicrobials
   c. Pathways for empiric use and antimicrobial order forms
      i. Evidence-based, customized for local microbiology and resistance patterns
   d. Education
   e. Streamlining or de-escalation of therapy
      i. Automatic stop dates
      ii. De-escalation upon culture finalization
      iii. Reduction in duplicate therapies (e.g., double β-lactam or double anaerobe)
      iv. Discontinuation of unnecessary or inappropriate antimicrobial therapy

    f.   Dose optimization
        i. Automatic renal adjustments and pharmacy dosing services
        ii. PK/PD dosing adjustment recommendations
        iii. Pharmacist credentialing/privileging for monitoring/ordering of pertinent labs
    g. Parenteral to oral conversion
        i. Automatic IV to PO policy

6. <u>Conclusion</u>
The antimicrobial stewardship program at the University of Toledo Medical Center aims to optimize antimicrobial therapy and minimize unintended consequences due to antimicrobials. Core members of the antimicrobial stewardship team include individuals from the department of infectious diseases, pharmacy, microbiology, infection prevention and control, quality, and information technology. In order to achieve desired outcomes, collaboration and support from hospital administration, medical staff leadership, and local providers is also necessary. Routine evaluation of progress toward overall goals and adjustment of policies and practices will be led by the antimicrobial stewardship program director and reported to hospital administration. This will be achieved in conjunction with other core members of the antimicrobial stewardship team via regularly scheduled antimicrobial subcommittee meetings. Recommendations from this committee will be presented quarterly to the Pharmacy and Therapeutics committee.

Approved by:	Review/Revision Date: 2/20/2020 8/14/2023
/s/ ———————————————————— ——————— Richard Swaine Date Chief Executive Officer /s/ ———————————————————— ——————— Puneet Sindhwani, MD Date Chief of Staff *Review/Revision Completed By:* *Pharmacy*	
	Next Review Date: 8/1/2026
Policies Superseded by This Policy:	

References:
1. Centers for Disease Control and Prevention. Antibiotic Resistance Threats in the United States, 2013. http://www.cdc.gov/drugresistance/threat-report-2013/
2. President's Council of Advisors on Science and Technology. Report to the President on Combating Antibiotic Resistance. September 2014. http://1.usa.gov/1qhDgF6