Policy Statement:
The purpose of this policy is to ensure the proper and safe use of antimicrobials throughout the facility.

Purpose:
The purpose of antimicrobial stewardship is to promote the appropriate use of antimicrobials by selecting the appropriate agent, dose, duration and route of administration in order to improve patient outcomes, while minimizing toxicity and the emergence of antimicrobial resistance. The purpose of the antimicrobial stewardship program is to improve antimicrobial stewardship practices at (INSERT HOSPITAL NAME) and to monitor outcomes and antimicrobial use (consumption).

Definitions:

Antimicrobial Stewardship is a coordinated program that ensures the optimal selection, dose, and duration of an antimicrobial therapy that leads to the best clinical outcome for the treatment or prevention of an infection while producing the fewest toxic effects and the lowest risk for subsequent resistance.

The Antimicrobial Stewardship Program is coordinated through a (COMMITTEE or SUBCOMMITTEE) which is a multi-disciplinary workgroup that reports through Pharmacy and Therapeutics or a similar hospital committee on a monthly, bi-monthly or quarterly recurring schedule and is charged with the responsibility of promoting optimal antimicrobial utilization.

Policy:
The goal of Antimicrobial Stewardship is to improve appropriate antimicrobial utilization in order to improve patient outcomes, minimize toxicity and the emergence of antimicrobial resistance. The goal of the Antimicrobial Stewardship Program is to promote optimal antimicrobial utilization at (INSERT HOSPITAL NAME HERE) and to track antimicrobial stewardship outcomes. In order to assure appropriate and quality utilization of antimicrobial agents, an Antimicrobial Stewardship Committee has been developed and consists of the following:

- Designated administrative or leadership champion
- Designated antibiotic stewardship program leader (INSERT LEADER DESIGNATED TITLE, E.G., INFECTIOUS DISEASES PHYSICIAN, PHARMACIST)
- Designated physician leader (INSERT INFECTIOUS DISEASES SPECIALTY, IF APPLICABLE)
- Designated pharmacist leader (INCLUDE INFECTIOUS DISEASES TRAINED, IF APPLICABLE)
- Microbiology personnel for collaboration
- Infection prevention and control personnel for collaboration
- Informational Technology support as needed

(NOTE: ADDITIONAL PHARMACISTS, PHYSICIANS, or QUALITY ASSESSMENT AND PERFORMANCE IMPROVEMENT REPRESENTATIVES MAY BE INCLUDED DEPENDING ON THE HOSPITAL)
The objective of the Antimicrobial Stewardship Program will be to improve patient outcomes through optimization of antimicrobial therapy by selection of appropriate antibiotic dose, route and duration of treatment.

Potential benefits include the following:

- Improve patient safety by decreasing side effects and toxicity
- Support the education of all healthcare providers, patients and families about antimicrobial stewardship practices including; antimicrobial resistance and appropriate antimicrobial use
- Minimize the development of antimicrobial resistance by appropriately selecting antibiotics
- Reduce the rates of hospital-acquired infections
- Control of Clostridium difficile infections and the emergence of multidrug-resistant organisms
- Reduce length of stay and patient-associated hospitalization cost
- Reduce pharmacy expenditures on antimicrobials

Procedure
Antimicrobial stewardship will be performed as an ongoing practice involving several disciplines throughout (INSERT HOSPITAL NAME). The Antimicrobial Stewardship Committee will develop strategies and initiatives to promote appropriate antimicrobial use.

A. The antimicrobial stewardship program (COMMITTEE OR SUBCOMMITTEE) will be responsible for the following (REVISE ACCORDING TO HOSPITAL):

1. Compliance with The Joint Commission Standards and Centers for Medicare and Medicaid Conditions of Participation related to Antimicrobial Stewardship
2. Coordination among all components of the hospital responsible for antibiotic use and resistance, including, but not limited to, the infection prevention and control program, the quality assessment and performance improvement program, the medical staff, nursing services, and pharmacy services
3. Documentation of the evidence-based use of antibiotics in all departments and services of the hospital
4. Demonstration of improvements, including sustained improvements, in proper antibiotics use, such as through reductions in C. difficile infection and antibiotic resistance in all departments and services of the hospital
5. Adherence to nationally recognized guidelines, as well as best practices, for improving antibiotic use
6. Reflection of the scope and complexity of the hospital services provided
7. Development or revision of existing policies, procedures, protocols and guidelines related to infectious diseases (e.g., restricted antimicrobials, treatment guidelines based on local susceptibilities)
8. Development and distribution of an antibiogram at least annually as well as assessing trends of antimicrobial resistance within the facility
9. Providing recommendations to the Pharmacy and Therapeutics Committee about antimicrobial selection, dose, and duration of therapy
10. Providing ongoing healthcare practitioner education (e.g., newsletters, in-services, and one-on-one interaction) regarding antimicrobial stewardship initiatives
11. Educating patients, and their families as needed, regarding the appropriate use of antimicrobial medications, including antibiotics
12. Collecting, tracking and analyzing antimicrobial consumption though (SELECT ALL THAT APPLY: days of therapy, defined daily dose, or purchasing costs)
13. Collecting, tracking and analyzing resistance patterns
14. Regularly reporting antimicrobial stewardship measures to relevant healthcare practitioners and hospital administration
B. In accordance with the CDC Core Elements of Hospital Antibiotic Stewardship Program recommendations, all prescribers are required to perform the following:

1. Document in the medical record or during order entry the following:
   i. Antibiotic indication
   ii. Antibiotic dose
   iii. Duration of antimicrobial therapy

2. Review appropriateness of any antibiotics prescribed after 48-72 hours from the initial orders (e.g., antibiotic time out)

C. Pharmacists are required to perform interventions approved by the Pharmacy and Therapeutics Committee which include the following (REVISE ACCORDING TO HOSPITAL):

1. Intravenous to oral conversion of antimicrobials
2. Renal dosing of antimicrobials
3. Therapeutic interchanges
4. Antibiotic streamlining
5. Antimicrobial restrictions

D. Roles and Responsibilities (REVISE ACCORDING TO HOSPITAL):

1. Appointed antibiotic stewardship leader (champion: e.g., infectious diseases physician or pharmacist)
   i. The development and implementation of the hospital’s antibiotic stewardship program based on nationally recognized guidelines, to monitor and improve the use of antibiotics
   ii. All documentation, written or electronic, of antibiotic stewardship program activities
   iii. Communication and collaboration with medical staff, nursing, and pharmacy leadership, as well as the hospital’s infection prevention and control and quality assessment and performance improvement programs, on antibiotic use issues
   iv. Competency-based training and education personnel and staff, including medical staff, and, as applicable, personnel providing contracted services in the hospital, on the practical applications of antibiotic stewardship guidelines, policies, and procedures

2. A infectious disease fellow/physician advisor
   i. Provides oversight to team functions
   ii. Provides clinical guidance and enforcement
   iii. Provides monitoring of patients receiving selected unrestricted antimicrobials
   iv. Responsible for program outcomes

3. A pharmacist(s)
   i. Provides co-leadership in improving antibiotic use
   ii. Provides (SELECT ONE: daily, bi-weekly, TIW, weekly) monitoring of patients receiving selected antimicrobials
   iii. Provides (SELECT ONE: daily, bi-weekly, TIW, weekly) monitoring of microbiological data
   iv. Collaborates with physicians regarding adjustment of antimicrobial therapy related to pharmacist monitoring activities

4. Microbiology personnel
   i. Guide the proper use of tests and the flow of results
   ii. Work collaboratively to ensure that lab reports present data in a way that supports optimal antibiotic use
   iii. Contribute to antibiogram development and education
5. Infection control personnel
   i. The development and implementation of facility-wide infection surveillance, prevention, and control policies and procedures that adhere to nationally recognized guidelines.
   ii. All documentation, written or electronic, of the infection prevention and control program and its surveillance, prevention, and control activities.
   iii. Communication and collaboration with the hospital’s QAPI program on infection prevention and control issues.
   iv. Competency-based training and education of hospital personnel and staff, including medical staff, and, as applicable, personnel providing contracted services in the hospital, on the practical applications of infection prevention and control guidelines, policies and procedures.
   v. The prevention and control of HAIs, including auditing of adherence to infection prevention and control policies and procedures by hospital personnel.
   vi. Communication and collaboration with the antibiotic stewardship program.

6. Informational Technology
   i. Assist with integrating stewardship protocols into existing workflow
   ii. Implement clinical decision support for antibiotic use
   iii. Create prompts for action to review antibiotics in key situations and facilitating the collection and reporting of antibiotic use data
   iv. Assist with creation of a score card to track success of antimicrobial stewardship program

Note: At the time of development, the Centers for Medicare and Medicaid Services (CMS) finalized Conditions of Participation were unavailable. Hospitals should incorporate these into their policy and procedure as they become available.