1. **Title**

*Antibiotic Stewardship*

1. **Purpose**

To improve the utilization of antibiotics by reducing exposure, resistance, toxicity, costs, and hospital length of stay, while increasing patient and staff education on proper utilization.

1. **Policy**

An antibiotic stewardship committee will consist of key support staff including: pharmacy, clinicians, infection control, laboratory, nursing, and administration, to establish and review antimicrobial clinical outcomes.

1. **Procedures**

Pharmacy will designate a stewardship program leader and a single pharmacy leader who will co-lead the program.

The program will include an ongoing process for antimicrobial medication monitoring designed to detect and intervene on medication –related issues for inpatients and applicable outpatients.

Electronic surveillance tools will be utilized by Pipeline Rx to perform the core actions of the program. Pipeline will be provided with Cogdell patient’s antimicrobial reports in order to perform surveillance.

**Core actions will be:**

* Daily Antimicrobial Utilization Review
* Best Practice Updates
* Professional Education
* Reporting

1. **Patient Specific Features**
2. Restricted Antibiotics
3. Monitored Antibiotics
4. Hospital location
5. Patients on 3 or more antibiotics
6. Extended length of therapy
7. **Daily prospective review and patient monitoring**
8. Patient clinical evaluation
9. Therapy evaluation
10. Evaluate for De-escalation
11. IV to PO Evaluation
12. Recommendations or adjustment per protocol
13. **Documentation in client electronic health record**
14. **Documentation of interventions and activities in PowerGridRx clinical module**
15. **Hospital Staff education**
    * 1. Quarterly newsletter for medical staff with practice-changing updates
      2. newsletter for medical staff with practice-changing updates
      3. management
16. Treatment guidelines
17. New formulary agents and formulary restrictions
18. General topics regarding the appropriate use of antimicrobials

**VI. Reporting**

1. Program Performance (As applicable per facility workflow)
2. Number of patients monitored in ASP
3. Evaluate prescriber compliance with facility treatment guidelines
4. Percent of patients identified during review who were prescribed antibiotics upon admission who did not meet criteria for antibiotics
5. Percent of patients where cultures were obtained before antibiotics were initiated
6. Percent of patients where the correct diagnostic testing done for the suspected infection
7. Percent of patients where the antibiotic was dosed correctly
8. Incidence rate of hospital-onset *C. difficile* infection
9. Incidence Rates of Infections or Colonization with a multi drug-resistant organism (MDRO)
10. Extended-Spectrum Beta-Lactamase-Producing Enterobacteriaceae(ESBLE)
11. Methicillin-Resistant *Staphylococcus aureus* (MRSA)
12. Carbapenem-Resistant Enterobacteriaceae (CRE)
13. Antimicrobial-Resistant *P. aeruginosa*
14. Antimicrobial-Resistant *A. baumannii*

**VII. Interventions with prescribers**

A. Number and type of interventions and/or recommendations made

1. De-escalations

2. IV to PO conversions

3. Alternative Regimen Due to Toxicity

1. Alternative Regimen Due to Allergy
2. Modify Length of Therapy
3. Recommend ID Consult
4. Dose Optimization
5. Renal or Hepatic Dose Adjustment
6. Drug-Bug Mismatch
7. Therapeutic Drug Monitoring
8. Discontinuation of Therapy-Infection Criteria Not Met
9. Broaden Coverage
10. Alternative Regimen per Guideline Recommendations
11. Discontinuation of Redundant Therapy
12. Rates of clinician acceptance of recommendations

Antimicrobial Stewardship Metrics for Measure of Success

* Pipeline Tier 2 metrics to be evaluated as needed.

1. **References**

The Joint Commission: New Antimicrobial Stewardship Standard, June 22, 2016. Prepublication Requirements. Mm09.01.01

CDC. Core Elements of Hospital Antibiotic Stewardship Programs, Atlanta, GA: US Department of Health and Human Services, CDC; 2019. <http://www.cdc.gov/getsmart/healthcare/implementation/core-elements>

1. **Dates Approved or Amended**

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| *Reviewed with Changes* | *Reviewed without Changes* |
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1. **Contact Information**

Medication Management Director