PURPOSE:

To comply with evidence-based guidelines or best practices regarding antimicrobial prescribing and
promote rational and appropriate antimicrobial therapy while improving clinical outcomes while
minimizing unintentional side-effects of antimicrobial use, including toxicity and emergence or
resistant organisms.

RESPONSIBILITIES:

- Physician/Providers
- Pharmacist
- Infection Preventionist
- Quality Director
- Laboratory Manager
- Facility Nursing Staff

DEFINITIONS:

- SMHA Sheridan Memorial Healthcare Association
- De-escalation mechanism whereby the provision of effective initial antibiotic treatment is achieved while avoiding unnecessary antibiotic use that would promote the development of resistance.

POLICY:

- The Antimicrobial Stewardship Program (ASP) will monitor compliance with evidence-based guidelines or best practices regarding antimicrobial prescribing which may include but is not limited to the following activities:
 - Streamlining or de-escalation therapy
 - Educational activities
 - Anitmicrobial management protocols and guidelines
 - Surveillance monitoring

PROCEDURE:

- 1. Streamlining or De-escalation Therapy
 - a. Streamlining is the prospective audit of antimicrobial use with the intervention and feedback. The ASP shall review antimicrobial regimens on selected patients for:
 - i. Appropriate use
 - ii. Local resistance patterns
 - iii. Dose optimization
 - iv. Preferred route of administration
 - v. Duration of therapy
 - vi. Duplication of therapy
 - vii. Drug interactions
 - viii. Potential for toxicity
- 2. ASP shall:

- a. Review culture and sensitivity reports of selected patients for potential adjustments to antimicrobial regimens (i.e. de-escalation or combination therapy). Refer to the following Pharmacy Clinical Policies and Procedures:
 - i. IV to PO Conversion
 - ii. Pharmokinetic Service
 - iii. Renal Dosing Protocols
 - iv. Antibiotic Use Monitoring
- b. Communicate pertinent antimicrobial therapy adjustment recommendations, as per evidence-based protocols and best practices.
- c. Pharmacist shall document and interventions and outcomes (accepted vs. rejected recommendations) in electronic health record medication order entry system.
- d. ASP daily activities shall include:
 - i. Daily review of appropriate utilization of highly resistant antimicrobials. (SMHA will determine these medications through careful examination of resistance patterns within our patient community.)
 - ii. Escalation and De-Escalation
 - iii. IV to PO conversions
 - iv. Pharmokinetic monitoring
 - v. Renal dosing adjustments
- 3. Educational Activities
 - a. Education to prescribers and other relevant staff regarding evidence-based guidelines or best practices including antimicrobial management will occur upon hire and at minimum annually thereafter.
- 4. Antimicrobial Management Protocols and Guidelines
 - a. ASP shall develop/update/ implement evidence-based practice protocols and guidelines that incorporate local microbiology and resistance patterns. Recommendations shall be presented to Medical Staff for approval and discussion as needed. Providers should utilize available protocols to ensure patients are receiving antimicrobial therapy that is appropriate, as per evidence-based guidelines or best practices.
- 5. Surveillance Monitoring
 - a. Surveillance monitoring will be conducted by Infection Prevention staff, Laboratory staff and compiled for ASP committee monthly.