

GREAT PLAINS HEALTH

DEPARTMENT: Quality Management

POLICY NUMBER: 8010-0003

SUBJECT: Antimicrobial Stewardship

EFFECTIVE DATE: 09/20/16

OWNER: Senior Director of Quality

PAGE: 1 of 2

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APPROVED BY:

Director of Quality Management

Director of Pharmacy

P&T Committee

Quality Committee

MEC

POLICY STATEMENT:

It is the policy of Great Plains Health to establish and support a multidisciplinary Antimicrobial Stewardship team. This team will coordinate a program that promotes the appropriate use of antimicrobials (including antibiotics) and improves patient outcomes through the goals of reducing microbial resistance and decreasing the spread of infections caused by multidrug-resistant organisms.

PURPOSE:

Antimicrobial resistance results in increased morbidity, mortality and costs of health care. The major objectives of antimicrobial stewardship are to achieve best clinical outcomes related to antimicrobial use while minimizing toxicity and other adverse events, thereby limiting the selective pressure on bacterial populations that drives the emergence of antimicrobial-resistant strains. Antimicrobial stewardship may also reduce excessive costs attributable to suboptimal antimicrobial use.

DEFINITIONS:

Antimicrobial stewardship refers to coordinated interventions designed to improve and measure the appropriate use of antimicrobial agents by promoting the selection of the optimal antimicrobial drug regimen including dosing, duration of therapy and route of administration.

antimicrobial/an-ti-mi-cro-bi-al/ (-mi-kro'be-al) **1.** Killing microorganisms or suppressing their multiplication or growth. **2.** An agent with such effects.

PROCEDURE:

The Society for Healthcare Epidemiology of America (SHEA), Infectious Disease Society of America (IDSA), and Pediatric Infectious Disease Society (PIDS) recommend that the Centers for Medicare and Medicaid Services (CMS) require participating healthcare institutions to develop and implement antimicrobial stewardship programs. This can be achieved by incorporating the requirement into existing regulations via expansion of interpretive guidelines of the relevant regulation(s). Accordingly, per CMS recommendations, all healthcare facilities, including hospitals, long-term care facilities, long-term acute care facilities, ambulatory surgical centers, and dialysis centers should develop and implement an antimicrobial stewardship plan. The IDSA and SHEA have developed a model plan entitled "Guidelines for Developing an Institutional Program to Enhance Antimicrobial Stewardship."

- I. Great Plains Health Antimicrobial Stewardship Program shall include:
 - a. A multidisciplinary interprofessional antimicrobial stewardship team that is physician directed or supervised. At a minimum, 1 or more members of the team should have training in antimicrobial stewardship.
Team members should include but are not limited to:
 - A physician

- A pharmacist
 - A clinical microbiologist
 - An infection preventionist
 - b. When possible, the formulary will be limited to nonduplicative antibiotics with demonstrated clinical need.
 - c. Institutional guidelines for the management of common infection syndromes through the use of order sets or protocols.
 - d. Additional interventions to improve the use of antimicrobials, including those designed to detect and eliminate:
 - i. Multidrug regimens with unnecessarily redundant antimicrobial spectra.
 - ii. Antibiotic therapy for the management of nonbacterial syndromes or cultures that represent contamination or routine colonization.
 - iii. Empiric regimens that are either inadequately or excessively broad spectrum for infection syndromes.
 - iv. Regimens that do not adequately treat infections caused by culture-confirmed pathogens.
 - e. Processes to measure and monitor antimicrobial use at the institutional level for internal benchmarking.
 - f. Periodic distribution of a facility-specific antibiogram indicating the rates of relevant antibiotic susceptibilities to key pathogens.
- II. The GPH Antimicrobial Stewardship Team will report Quarterly to the Infection Control Committee and will report up through the GPH Quality Committee. Reports will be sent through the Medical Executive Committee (MEC) and Medical Staff as indicated.
- III. Monitoring shall include:
- a. Prospective surveillance and concurrent intervention for the inappropriate use of antimicrobial agents.
 - b. National benchmarking of antimicrobial use at the institutional level based on acuity of care and patient mix.
 - i. Time to administration of appropriate therapy.
 - ii. Duration of intensive care and overall hospitalization for patients treated with antimicrobials including length of stay (LOS) and duration of therapy (DOT).
 - c. Relevant future outcome measures, which may include:
 - i. Prevalence and incidence of drug-resistant phenotypes among common clinical pathogens (eg, carbapenem-resistant Enterobacteriaceae, carbapenem-resistant Acinetobacter, extensively drug-resistant Pseudomonas, MRSA).
 - ii. Incidence of diarrhea caused by Clostridium difficile.
 - iii. Rates of adverse antimicrobial drug reactions and interactions.
- IV. Education about antimicrobial resistance and antimicrobial stewardship will be provided to staff and medical staff as indicated by trends in monitoring. Great Plains Health shall be responsible for supporting the education of the members of the antimicrobial stewardship team.
- V. Antimicrobial use data shall be collected and readily available for both inpatient and outpatient settings.

References:

IDSA/SHEA Guidelines on Antibiotic Stewardship Released. *Medscape*. Apr 14, 2016.

Society for Healthcare Epidemiology of America, Infectious Diseases Society of America and Pediatric Infectious Diseases Society. *Infection Control and Hospital Epidemiology* Vol. 33, No. 4, Special Topic Issue: Antimicrobial Stewardship (April 2012), pp. 322-327

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