Clinical Pharmacy Specialist: Antimicrobial Stewardship

Position Summary: This pharmacist will assist the Associate Director for Antimicrobial Stewardship and the Medical Director of Antimicrobial Management with the task of improving antimicrobial utilization. Through collaborative work efforts, the person in this position will also help to implement processes to improve the clinical and microbiological effectiveness of antimicrobials. This will include use of computer systems including computerized provider order entry, microbiology and online medical records. This candidate will assist in the tracking and trending of antimicrobial resistance particularly as it relates to utilization. He/she will participate in the education of prescribers and other healthcare providers including pharmacists and nurses toward improvements in the process of maximizing antibiotic efficacy and cost-effectiveness. They will work toward identification of adverse drug reactions and plans to avoid future events as well as improvements in patient care through potentially decreased length of stay. They will participate in antimicrobial Formulary optimization to help realize further cost benefits and improve congruence with evidence based practice.

Primary Duties and Responsibilities:

1. Practices pharmacy with a focus on antimicrobial management in accordance with the laws, rules and regulation of the Massachusetts Board of Registration in Pharmacy, Department of Public Health, the Food and Drug Administration, and the Drug Enforcement Administration and in accordance with established policies and procedures. Maintains certification and credentials in accordance with the Board of Registration and submits proof to department of certification annually.

2. Assumes responsibility for daily activities of the Stewardship program including pre-prescriptive approval reviews, post prescriptive review and feedback, Vigilanz alerts relative to drug duplication, bug-drug mismatches, therapeutic drug monitoring and intravenous to oral conversions.
   a. Reviews patient specific data and identifies opportunities for intervention such as
      • De-escalation based on microbiologic data
      • Dosing optimization based on microbiologic data/patient specific PK
      • Medication adjustments to avoid clinically significant Interactions

3. Assists the Antimicrobial Management Directors in the preparation of monthly/quarterly summaries of interventions to include:
   a. Quantification and qualification of interventions by: acceptance rate, cost avoidance, service and unit specific trends.
4. Participates in the planning and implementation of clinical staff development for pharmacists toward antimicrobial management. Serves as a mentor to the pharmacy staff in terms of pharmacy practice and patient care.

5. Participates actively on the Antibiotic Subcommittee to P&T Committee through the following activities.

   a.) Submits items for the monthly agenda.

   b.) Assists in the preparation of anti-infective drug Formulary reviews
       i.) This will include literature searches and retrieval for a summative and evaluative review of basic science and clinical literature. A written summary in a format that is standardized and complete will need to be compiled. Within this summary, a recommendation for the addition or substitution of drugs on Formulary will be written a rationale according to hospital utilization and published evidence.

   c.) Assists in the performance of drug utilization reviews by any of the following categories:
       1. Drug based: drugs with high use, drugs associated with high costs, drugs with narrow safety margins.
       2. Pathogen based: pathogens with high frequency, pathogens associated with high costs.
       3. Resistance trending: identify potential relationships between utilization and local resistance.

   d.) Assists in Guideline development relevant to antimicrobials and/or infectious diseases through work with multidisciplinary groups to devise and implement drug specific guidelines and disease state specific guidelines, particularly around core measure initiatives.
       • This will involve literature searches and retrieval for a summative and evaluative review of basic science and clinical literature.
       • From this, a gradation of evidence based practice will be compiled
       • A written draft will be prepared.

   e.) Participates in Guideline Quality Assurance and dashboard metrics through identification and tracking of key core measures as well as preparation of monthly/quarterly/annual report summaries

   h.) Works collaboratively and systematically to review the current standard antimicrobial susceptibility reports based on site of infection and pathogen. Assists in the evaluation of the impact of panel changes on antimicrobial ordering.

6.) Contributes to physician education programs aimed to build awareness about institution-specific best practice relative to antimicrobial utilization.

7.) Works with the Associate Director to test and continually evaluate clinical decision support changes in cPOE relative to antimicrobial utilization.
8.) Assists the Medical and associate Director to ensure the components of Clinical Pharmacy Services relative to antimicrobials meet the requirements necessary for TJC accreditation.

9.) Assists in the implementation of departmental short and long term goals, and participates in accomplishing agreed-upon goals. Assists in the coordination, implementation, administration and quality assessment of clinical pharmacy programs.

**Qualifications/Skills & Knowledge Requirements:**

At a minimum, a Bachelor of Science in Pharmacy or a PharmD from an accredited College of Pharmacy and licensure to practice in the Commonwealth of Massachusetts from the Board of Registration in Pharmacy is required.

PGY2 Residency or other advanced training/Infectious Diseases certification and related experience preferred. Must possess excellent interpersonal skills, verbal and written communication skills, and critical thinking skills and demonstrate the ability to work under minimal supervision.

Must possess excellent interpersonal skills, verbal and written communication skills as well as experience with clinical program development and/or clinical management skills.