Committee Spotlight
ad hoc Collaborative Pharmacy Practice

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Q1. Please describe the practice setting where the pharmacy service is located. (Include healthcare setting, practice size, patient volume, provider type(s), pharmacy/resident utilization, and type of patient interaction).

St. Jude Children's Research Hospital functions as an academic medical center whose mission is to advance cures, and means for prevention, for pediatric catastrophic diseases through research and treatment. The patient population consists of cancer, non-malignant hematology, infectious disease and central nervous system disorders. The hospital consists of 78 inpatient beds and multiple ambulatory clinics with approximately 400 patient visits per day. The hospital also provides support for a wide network of St. Jude affiliate sites across the United States as well as an international Global Medicine program. Physicians are trained in specialty areas such as Hematology/Oncology and Infectious Diseases and are employees of the institution. Hematology/oncology physicians in fellowship training and other Advanced Practice Providers are also members of the care team. Patients are referred, accepted and assigned an attending physician based on their primary disease and are consented to a research protocol or treatment plan. The Pharmaceutical Department addresses the needs of these patients across the continuum of care which includes inpatient services, ambulatory care and home infusion. Our direct patient care Clinical Pharmacy Specialists are embedded in each of these service areas and routinely provide pharmacokinetic consults, nutrition support, medication education/reconciliation and protocol management. Additionally, they are responsible for inter and intra-course pharmacokinetic modeling to target desired concentrations for medications such as methotrexate and busulfan. Broad authority for medication ordering and modification is granted to these Specialists through their appointments as credentialed members of the medical staff. An institutional protocol providing Pharmacogenomic consultation on every new consenting patient is coordinated by a Clinical Pharmacy Specialist as is the Antimicrobial Stewardship program. This group also function as preceptors for the PGY2 resident program and are affiliate faculty at the University of Tennessee College of Pharmacy.

Q2. Why was the pharmacy service developed? (Describe any compelling data collected prior to implementation).

While general clinical pharmacy services have existed for years at St. Jude, recent decisions on expansions of patient volumes, increased intensity of treatment regimens and overall higher acuity level of patients led to the decision to develop new services and add additional personnel. New

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opportunities to offer pharmacist expertise with targeted Pharmacokinetics and the development of our Pharmacogenomics and Anti-microbial stewardship teams led to establishing services for these areas. Additionally, Clinical Pharmacy Specialists now provide on call clinical support to our affiliate clinic staff for patients treated in their local area. The institutional commitment to our Global Medicine program has also created an exciting new opportunity for our department to introduce our pharmacy practice to our global partners. These efforts are in line with our longstanding conviction that the Department has the responsibility to assure optimal outcomes of medication therapy for all our patients, and we must be integrated into all medication-intensive practices.

Q3. What training, certification, credentialing, and practice agreement is utilized by the practice setting pharmacist(s)?

Clinical Pharmacy Specialists are required to have PGY2 training, or 5 years of experience in either pediatrics or oncology. Eight years ago, our Medical Executive Committee approved appointment of Clinical Pharmacy Specialists as credentialed members of the medical staff. As part of this credentialing process, specialty certification by the Board of Pharmacy Specialties is required. A collaborative practice agreement was approved and a policy defining prescriptive and monitoring authorities was developed and is maintained by the Pharmacy and Therapeutics Committee.

Q4. What outcomes are being measured to evaluate the model's success? (Clinical metrics, revenue, cost-savings, patient satisfaction, etc.)

Clinical metrics help provide an analysis of workload and include consultation services such as Pharmacokinetics, Pharmacogenomics and Nutrition support as well as medication reconciliation and protocol/non protocol medication review. Peer review in selected areas of practice provides opportunities for assessing quality of the consult services. Clinical Pharmacy Specialist manage all facets of care for patients receiving high dose methotrexate. We have established methods for early discharge and outpatient follow-up for these patients which has led to decreased hospital stay and increased patient satisfaction. Successful medication cost savings recognized through departmental efforts with prior authorization process and patient assistance programs are routinely reported.

Q5. How have you made this service sustainable? (Include billing, reimbursement, etc.)

While we are not billing for specific Clinical Pharmacy services at this time, the Clinical Pharmacy Specialists are actively involved with pursuing reimbursement opportunities for the institution. They are considered members of the research team for their respective services. They provide medication reviews for all protocol and non-protocol treatment plans prior to activation of the study. As many of our studies include the use of very expensive medications, it is an expectation for the pharmacist to seek opportunities to defray some of these costs. In some cases, they aid with pursuing industry sponsored provision of the medication for the entire study. Or in individual cases, they will help determine whether the patient may be eligible for specific patient assistant programs. These efforts have led to significant cost savings for the department and institution and are recognized by members of our executive team.

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Q6. How did you gain support of administrators, providers, and other key stakeholders to implement your practice model?

The Pharmaceutical Department is an academic department with both research and clinical responsibilities. This structure encourages collaboration with physicians on clinical trial development and allows professional relationships to prosper. Except for a group of sub-specialists from the community, all physicians/faculty are employees of the institution. This permits significant opportunities for development of collegial relationships among faculty and staff. For example, the physician chair of our Medical Executive Committee was the first to present the concept of medical staff credentialing for pharmacists to members of our department. In selected cases (Infectious Diseases and Global Pediatric Medicine), funding for additional personnel has come from those departments, reflecting their desire to assure the availability and engagement of these pharmacists in their practice areas. It is also noteworthy that members from our department have also held executive leadership positions in the institution which assisted with increasing visibility and credibility for our staff.

Q7. What are some lessons learned while implementing your practice model that you would like to share with other pharmacists?

Despite your best efforts, you must be prepared to describe and defend your practice model both internally (ex. Department Chair) and externally (ex. consultants, executive suite). Conventional metrics, documented outcomes, data collections and routine assessment of needs and workload are critical to the success of your program. A well-developed data analytics model facilitates timely provision of key information which supports services and related efforts.

Q8. What do you hope Collaborative Practice will look like in Tennessee in the next ten years?

With continued growth of this practice, I hope we that we can begin to overcome some of the barriers that currently exist with recognition of provider status and equitable reimbursement for the services that we provide our patients.