

Business Case for Additional Pharmacist FTE

Currently at the Summerville Family Health Team there is a 1.0 FTE pharmacist position (started in October 2007 part-time and phased in). The pharmacist currently provides a variety of clinical pharmacy services including patient medication assessments, responses to drug information questions from patients and health care providers, drug information updates for FHT staff for new drug and safety information, health care provider education, and committee involvement for program development. The pharmacist is currently accountable to 4 sites within the FHT which includes 25 physicians, 6 nurse practitioners and a number of other health care professionals. All three sites are within a 16 km distance. The pharmacist's office is located at the central site where the majority of patient and health care provider contact occurs. The pharmacist also spends ½ day in 2 of the other 3 clinic sites each week.

Proposal: Addition of 1 FTE Pharmacist at this time

Background Development of the Pharmacist Role

Although pharmacists have been working in primary care family practice teams in a small number academic teaching centres for 10 years, the expansion of pharmacist's involvement in family practice teams and community sites is more recent. Previous research on the integration of pharmacists into primary care practice (IMPACT project and others) has suggested that role integration takes time, requires a learned understanding and negotiation of the pharmacist's role and access of the pharmacist is critical for the full development of the role. The pharmacist's role at the Summerville Family Health Team is continuing to grow and evolve.

The pharmacist's involvement in patient care is highly collaborative. In providing independent comprehensive medication assessments in the family practice setting, the FHT pharmacist must interact and collaborate directly on site with physicians and other health care providers on a regular basis in order to identify and solve drug-related problems identified during the medication assessment. On site access to the pharmacist is also important for 'just in time' answers to drug information questions for patient care.

In addition, pharmacists in primary care practice across Ontario have begun to expand their clinical role of conducting patient medication assessments to further integrate their activities into medication management systems within the office setting (e.g. refills, anticoagulation management) and to further support the patient's medication-taking practice (e.g. chronic disease management and education).

Opportunities for Clinical Pharmacy Service Coverage, Program Development and Health Care Professional Education

Expansion of Pharmacist Coverage to All 4 Sites

At the current time of role integration into the FHT team, health care providers are utilizing the clinical pharmacist most when there is on site access to the pharmacist. Increasing pharmacist coverage and time at all sites would improve pharmacist integration and improve access to on site drug information and patient care consultations to meet the needs of the practice site. For example, with an additional 1.0 FTE pharmacist, coverage could be increased to 0.5 FTE (2.0-2.5 half days) per site. This would provide a ratio of 1 pharmacist for 10 to 13 physicians and 2-4 nurse practitioners. This would also provide pharmacist back up for vacation and out of office periods.

Patient care and medication assessments achieve the best outcomes when follow up and monitoring can occur on a regular basis. Monitoring of patient medication-related outcomes for each of the 4 sites would be best achieved with a pharmacist on site for a greater portion of the time. Elderly patients, which are a large source for medication assessments, often would like to see a pharmacist on a referral basis when they are at their physician's appointment. Greater coverage would allow for more flexibility in booking pharmacist appointments to meet the needs of the patients.

Integration and Development of Additional Patient Care Activities

Integration of the clinical pharmacist in patient care activities for chronic disease management initiatives with a large medication burden such as hypertension, dyslipidemia and diabetes would be beneficial to help achieve outcomes related to medication education, meeting treatment targets and support of patients self-management. A variety of studies have identified that medication management and patient education by pharmacists can improve clinical outcomes in patients with hypertension, dyslipidemia and diabetes. More recently the use of medical directives by clinical pharmacists for making dose adjustment to optimize drug therapy (e.g. to achieve target blood pressure or cholesterol) has provided support to health care professionals, and has improved patient outcomes. Pharmacist involvement in program development in the Chronic Disease and Health Promotion Teams could be expanded. In addition the pharmacist could play an active role in Quality Improvement Teams and in the Family Health Team Learning Collaborative could be expanded.

Further development and integration of the pharmacist's role in medication-related tasks in the medication use process at each site, such as anticoagulation monitoring, medication refills, and annual medication review, could be beneficial to free up health care provider time. Full development of the pharmacist's role in these patient care activities would require some cross coverage and back up. Up to 25% of hospitalizations have been reported to be related to drug therapy and 7.5% are related to medication adverse effects. Expanded pharmacist involvement at all 4 sites and identifying system supports to impact this could be investigated.

In addition to drug information the clinical pharmacist can also serve as a mentor and facilitator for optimal drug use for health care professionals within the FHT. Drug therapy information is changing frequently and a health care professional focused on drug therapy can provide support for this constantly changing practice. The clinical pharmacist also serves as a link to community pharmacists in the area with the goal of reducing fragmentation of medication-related information.

Patient registries have to yet been populated and created (EMR system currently in the initial stages of implementation) but could be used as a means to identify patients who may benefit from pharmacist consultations (e.g. polypharmacy, suboptimal control of HTN).

Potential Benefits for Increased Clinical Pharmacist Coverage

Benefits for the FHT

- Increased pharmacist coverage would better meet the needs of each of the health care professionals in the 4 sites for onsite drug information and of patients by being more available and having more flexibility for pharmacist consultations.
- Further development and integration of the pharmacist's role in medication-related tasks in the medication use process at each site could free up time for other health care providers.
- Integration of the clinical pharmacist in chronic disease management initiatives (e.g. patient assessment, use of medical directives, patient education) can provide support for other health care professionals, help the FHT meet chronic disease management goals and improve patient outcomes related to medications.
- Pharmacist coverage during vacation times and away from office periods.

Benefits for Patients

- Increased availability for medication assessment appointments and follow up.
- Expand medication-related education and monitoring for high risk patients.
- There is a potential to develop clinical care programs at all four sites that would aim to improve clinical outcomes for chronic disease (e.g. hypertension, dyslipidemia, diabetes) by improving the optimization of drug therapy (by meeting treatment targets), and education the patient for a better understanding the efficacy and safety of their chronic medication regimen and supporting the patient in medication and disease self-management.

Benefits for Teaching Health Professional Students

Currently the Summerville Family Health Team is in the process of consideration and approval for becoming an academic family medicine residency teaching site affiliated with the University of Toronto. Clinical pharmacists have played an active role in teaching structured pharmacotherapy sessions, role modeling and interprofessional education for medical residents in residency programs. In addition training sites for Doctor of Pharmacy and BSc Pharmacy students are in need, especially for access to experiences in primary care teams in FHTs. The additional involvement of the pharmacist in these activities would require more allocated time.

Cost and Space Analysis

Potential Cost Savings

- Potential to free up time of other staff in medication-related activities with further pharmacist integration.
- Reduced time and cost reimbursement for travel between the 4 sites.

Space Allocation

- A pharmacist could potentially be housed in one of the other 3 FHT sites based on geographical location and space availability.

Cost Analysis (per Year)

- Salary for 1.0 FTE pharmacist including benefits and pension: \$85,000 + 20% benefits
- Equipment: computer (possible), reference texts: \$2500
- Continuing education: \$2000

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