

Partnering with Pharmacists

A Collaborative Approach to Chronic Disease Management



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Introduction

Primary health care is built on the four pillars of teams, information, access, and healthy living.¹ The primary health care team in Leader currently consists of three physicians, a nurse practitioner, a public health nurse, a mental health/home care nurse, a dietician, and other support staff. What the team lacks is a full-time, co-located pharmacist. Currently the pharmacist plays a role in the primary health care team but from afar. The pharmacist is available to assist the other team members but isn't readily accessible due to location. As well the pharmacist lacks the time and resources to truly play a role in the primary health care team and provide pharmaceutical care to patients. As a fulltime team member the pharmacist will enhance primary health care in Leader by providing a valuable resource in terms of timely access to medication-related information that can be relayed to both patients and other team members. At present any effort that the pharmacist is making to play a role on the primary health care team is currently compensated for in full by Stueck Pharmacy.

Medications can be cost-effective therapy for many diseases. However, inappropriate use can lead to consumption of a significant portion of the health region's monetary and non-monetary resources that could otherwise be allocated elsewhere. It is estimated that each year, inappropriate use of medications is the cause of 10% of all hospital admissions, up to 25% of hospital admissions for the elderly, and over 20% of all nursing home admissions.² In addition, studies show that 50% of Canadians do not take their medications exactly as prescribed.² The consequences of noncompliance include; delayed recovery, increased severity of illness, additional treatments and diagnostic tests, more visits to the doctor and the emergency room, and an increased rate of hospital admissions.

Pharmacists are trained in health promotion, disease prevention, patient screening, treatment and management of diseases, management of self care conditions, and patient education.² In other countries, and in some Canadian locations (West Winds Primary Health Centre in Saskatoon Health Region), pharmacists in primary health care practices provide patient care services including: medication reviews, therapeutic consultations, telephone follow-up, home visits, patient education, and follow-up appointments for chronic disease management. Services to the health care professionals within these practices include: education, academic detailing, therapeutic recommendations following diagnosis, responding to drug information requests, conducting drug utilization reviews, comparing actual practice to nationally accepted guidelines, and implementing health promotion strategies developed by the primary health care team.²

Pharmacists are drug experts who have the potential to significantly contribute to the health and wellbeing of patients by participating in primary health care teams. Pharmacists can use their skills to assist patients and health care providers with medication management.³ Pharmacists can identify patients at risk of complications, under-treated patients, and noncompliant patients. Pharmacists are knowledgeable about

disease states in addition to medications and have the ability to educate patients on lifestyle modifications.

Pharmacists can encourage compliance by identifying and addressing patient concerns, i.e. explaining the risks and benefits of treatment, side effects, interactions and discussing monitoring requirements and what action to take if symptoms occur. Medication reviews can be used to identify suboptimal treatment and monitoring, identify problems with medicine taking, provide education on disease and treatment and explain reasons for changes that are being made to treatment.⁴

Optimal and appropriate antibiotic use is essential to decrease the amount and frequency of drug resistance in the community. For example, fluoroquinolone resistance and MRSA are becoming more and more common both nationally and locally and should be addressed on a continual basis. Pharmacists in a clinical practice have the resources and knowledge to perform chart audits on patients who have recently received antibiotics or had an infectious disease treated.

In his report ‘Caring for Medicare: Sustaining a Quality System’, Ken Fyke stated that health care professionals can accomplish a lot more if they use their skills to work as part of a team, rather than as individual practitioners. He recognized that health needs are complex and involve more than physical symptoms; thus a primary health care team can work together to ensure that the right set of skills is applied for each situation and information is shared so that the “whole person” is considered.⁵

The movement toward collaborative teams and the growing emphasis on medication management directly impacts the role of pharmacists and makes them increasingly important members of the health care team. Traditional scopes of practice need to evolve as pharmacists and other health care providers are expected to play more active roles as the health care focus shifts to prevention and promotion. Romanow foresaw an expanded role for pharmacists that would allow them to consult with physicians and patients, monitor patients’ use of drugs and provide better information and communication on prescription drugs.⁶

The Fyke Report and Romanow Commission have shown that there is broad acceptance of the need for collaboration in health care.⁴ This proposal will show that pharmacists are vital members of the primary health care team and the pharmacist should be actively participating in the team from the practice site.

Operational Plan

a. Chronic Disease Education

The pharmacist will participate in public education sessions in conjunction with the nurse practitioner, public health nurse, dietician, etc. Proposed topics for education sessions are coronary artery disease, diabetes mellitus, hypertension, depression, chronic pain, COPD, asthma, and public health issues. The pharmacist will participate in at least

one education session every three months. In September 2007, the pharmacists from Stueck Pharmacy collaborated with the public health nurse to provide the community with an informational session on head lice.

b. Medication Reviews

Patients will either be self-referred or referred by other team members. Appointments with the pharmacist will be booked through reception at Leader Primary Health Care Centre. The pharmacist will spend sixty minutes with each patient; reviewing their current medications, explaining the purpose of each and answering related questions. The pharmacist will ensure that the patient is receiving appropriate and optimal treatment for each disease state. Any necessary lab tests and other medication-related recommendations will be relayed to the appropriate practitioner. It is estimated that thirty minutes of time will be required to prepare for each patient visit. The pharmacist will be available to see a minimum of four patients per week.

The pharmacist will follow-up with each patient in three months time to determine whether the patient and practitioner are following recommendations as well as to assess any new issues that arise. If necessary a follow-up appointment will be booked with the patient. Telephone follow-up will be done if deemed necessary in the interim.

c. Chart Reviews

The pharmacist will review all active patients' charts over a six month period to ensure clinical practice guidelines are being adhered to and to determine whether the patient is receiving optimal treatment for each disease state. The pharmacist will utilize PIP to access a current medication list for each patient. The pharmacist will spend thirty minutes reviewing each chart. If necessary an appointment will be book with the patient; any therapeutic recommendations will be passed on to the appropriate practitioner.

d. Medication Expertise

With a pharmacist on-site at Leader Primary Health Care Centre, his/her expertise will be readily accessible to other team members. The pharmacist will be available to do quick consults; including academic detailing, drug information requests, and therapeutic recommendations, or to accept patient referrals from other team members.

e. Appropriate Medication Use

The pharmacist will spend five hours each month ensuring the proper utilization of antibiotics. The pharmacist will identify patients who have received specific antibiotics (i.e. ciprofloxacin) or who have received antibiotics for certain conditions (i.e. acute otitis media, pneumonia, urinary tract infection). The pharmacist will then review the patients' charts to determine whether the prescribed antibiotics are appropriate considering culture & sensitivity results, that treatments are initiated only when necessary

(watchful waiting guidelines are followed), that patients are compliant and that therapies are successful. If the pharmacist finds that inappropriate or irrational prescribing is occurring then the pharmacist will provide a short in-service for the physicians and nurse practitioner. The pharmacist will document all findings and summarize data monthly.

f. Enhanced Long-Term Care Services

Currently the pharmacist provides medication reviews every three months for each long-term care resident as part of the contract between Stueck Pharmacy and the health region. The pharmacist spends approximately thirty minutes on each medication review. The pharmacist also goes over and above this duty and attends rounds along with the physician and charge nurse every week for two hours. In addition the pharmacist will provide thirty minute educational in-services to the facility's staff (RNs, LPNs, & SCAs); including clarification of drug products used for bowel care, list of medications which cannot be crushed, etc.

Outcome Measures

Successful collaboration between the pharmacist and the primary health care team at Leader Primary Health Care Centre will be measured by a number of outcomes. Surveys will be designed to measure team member and patient satisfaction with the process. These surveys will be forwarded to key players (team members, patients that attended education sessions or medication review appointments) three months after the start of this initiative. Collected surveys will be reviewed and changes will be immediately implemented based on constructive feedback. Medication/chart reviews will also be evaluated based on a measure of the difference between baseline values and guidelines adhered to versus those measured at each three month follow-up. Documentation of the number of follow-ups performed and the date in relation to the primary visit; the number of consults with team members and a brief overview of each, and the number of pharmacist interventions recommended at long-term care rounds (both accepted and non-accepted). Data will be recorded each month following the drug utilization review and will be measured against the previous month's data.

Challenges

The biggest challenges that pharmacists face when trying to collaborate with an inter-professional team are physical isolation from other health professions, limited access to patient records, and inadequate financial support. This contract will eliminate those hurdles. Other challenges include lack of time for team activities and attitudes of other professions (especially regarding the commercial characteristics of traditional pharmacy). All team members will need to be educated about the role that other health care professionals can play on the team and how they can work together within their scopes of practice to complement one another and provide the best service to the patient. The pharmacist may be involved with the team regardless of whether or not a prescription is present as often non-drug therapy is the most effective, efficient and safest treatment option.² It is important that the team's primary concern is the needs of the patient; each

member should be respectful of the strengths and skills of their teammates. Issues such as “turf protection” are detrimental to the entire process and can cause needless delay of treatment or even harm to the patient. The health region should be responsible for ensuring that all team members are working on the same page and can accept one another; any issues regarding the pharmacist’s role as a team member should be immediately addressed.

Funding

Stueck Pharmacy will sign a formal contract with Cypress Health Region. A contract specifically with the pharmacy will enable more than one pharmacist to provide services to patients as part of the primary health care team. This is important as the staff pharmacists at Stueck Pharmacy have different areas of expertise. This will also allow for coverage of services when one pharmacist has other commitments. If the pharmacy can provide its employees with a clinical experience, such as being part of a primary health care team, this will lead to increased job satisfaction as well as recruitment and retention of young and highly skilled pharmacists. A contract between Cypress Health Region and Stueck Pharmacy will also eliminate the paperwork involved in a contract between the health region and an individual pharmacist; union issues, tax deductions, holiday time, etc.

Stueck Pharmacy proposes that the two parties sign a two-year contract with a six month probationary period after which the pharmacist will provide outcome measures to Cypress Health Region and both parties can discuss the success of the program and implement any changes needed for further operation. Thereafter the pharmacist will provide Cypress Health Region with outcome data twice yearly. A pharmacist from Stueck Pharmacy will provide a maximum of 20 hours per week of clinical services (as outlined above) as part of the primary health care team at Leader Primary Health Care Centre. In return Cypress Health Region will provide the pharmacist with an office, a telephone and an internet hook up in-facility at Leader Primary Health Care Centre. The administrative staff at Leader Primary Health Care Centre will take care of booking patient appointments with the pharmacist. The pharmacist will be given reasonable accommodation for supplies needed to provide the above mentioned programs.

References

1. *Primary health care pamphlet*. Saskatchewan Health.
2. *'Pharmacy Coalition on Primary Care'* Canadian Society of Hospital Pharmacists (Saskatchewan Branch); College of Pharmacy and Nutrition, University of Saskatchewan; Representative Board of Saskatchewan Pharmacists; Saskatchewan Pharmaceutical Association.
3. *'Pharmacy Coalition on Primary Care'* Canadian Society of Hospital Pharmacists (Saskatchewan Branch); College of Pharmacy and Nutrition, University of Saskatchewan; Representative Board of Saskatchewan Pharmacists; Saskatchewan Pharmaceutical Association.
4. Petty, D. *Drugs and professional interactions: the modern day pharmacist*. *Heart*. 89 (Suppl II):ii31-ii32:2003.
5. Fyke, K. *Caring for Medicare: Sustaining a Quality System*. Commission on Medicare. 2001.
6. Romanow, R. *Building Values: The Future of Health Care in Canada*. Commission on the future of health care. 2002.
7. The IMPACT Program – Pharmacist Toolkit. 2006