Out from behind the dispensary:

Efficient use of Pharmacy Technology to Promote Pharmacist Re-deployment.

Problem statement:

Based on surveys conducted by The Pharmacy Group\(^1\), which mirrors earlier research conducted at the University of Minnesota and Ohio State University, 42-46% of pharmacists’ time is spent in medication dispensing responsibilities\(^2\). This may partially explain why less than half (45%) of respondents to a Pharmacy Post survey of pharmacy owners and managers said their pharmacy provides an adequate level of cognitive services, leaving 55% who felt they could be doing more. And why aren’t they doing more? Most pointed to a lack of time (61%), money (56%), pharmacists (40%), and too much time spent on non-pharmacy issues (42%) as the roadblocks preventing them from offering more services\(^3\). These are all areas where the use of time-saving pharmacy technology can help.

It is well known that pharmacists would like to spend more time in consultation and drug use management and less time in medication dispensing so they can feel that their skills are being properly utilized\(^4\). This was expressed in a letter to Pharmacy Practice where a new graduate wrote:

“I like the pharmacy and my boss, but I feel like I’m caught in a pharmacy time warp. I’m starting to feel discouraged and to wonder what all that studying was for if all I’m going to do is count pills”.\(^5\)

Position statement:

Pharmacy is adopting a new philosophy in which the practitioner takes responsibility for all of a patient’s drug-related needs and is held accountable for this commitment. To succeed, this philosophy requires the establishment of a therapeutic relationship with the patient, an assessment, a care plan, an evaluation, and continuous follow-up\(^6\). Although most pharmacists want to make this transition it will require a change from the current focus on medication dispensing.

The economics of today’s pharmacy environment dictates that more prescriptions must be filled in order to generate enough profit for the pharmacy to remain viable. Those pharmacists who desire to continue an effective counseling component must therefore find ways, despite the pressure of filling Rx\(s\), to spend the necessary time discussing each patient’s therapy. Another challenge comes from the fact that despite double-digit increases in prescription sales that drive the top line, the remainder of the drugstore has not shared in that growth and, as a result, retailers are feeling a margin squeeze. The challenge here is to convert traffic generated by the prescription business into sales for other merchandise sold in the drugstore (because front-end merchandise yields significantly higher margins than pharmaceuticals).\(^7\)

Unfortunately, financial reports designate pharmacy staff as an expense, not an investment that can yield savings or increased revenues. While expenses need to be controlled, investments have yields that must be managed and maximized. Our goal needs to be to show how some of the human resources consumed by the pharmacy department are not expenses but investments. To communicate
this viewpoint, we need to be able to discuss the benefits or outcomes of re-deployment in terms of
dollars realized, saved, or avoided.8

The potential for creating value from increased pharmacist / patient interactions – either through contracted disease management and patient compliance programs, or simply through ongoing patient
counseling, interventions and product recommendations – still appears to be unlimited.9

Pharmacy management desire loyalty from their patients and must realize that with increased pharmacist contact, patients exhibit higher awareness of, and satisfaction with, their pharmacists and pharmacy services.10

Indeed, patients viewed the personal attention from the pharmacist as more important to their satisfaction than the level of pharmacist-provided pharmaceutical care.11 Traditionally, topics discussed by pharmacists and patients are sports, weather, and family, rather than health-related issues. But all of this requires time that the pharmacist does not have.

And when the pharmacist does not have time for these interactions patients change pharmacies.12

While fewer than 25% of customers complain when dissatisfied with service, these dissatisfied customers tell at least 13 people about their experience. This leads to an estimated 20% of customers who are lost to the average firm in any given year due to dissatisfaction. This is a classic ‘catch-22’ situation because the pharmacist cannot act to correct the problem if he or she is unaware that it exists - precisely because they do not have the time to spend with their patients.13

Much worse than losing the patients’ business is being potentially responsible (and liable) for harming a patient, or for the loss of a patient’s life. Drug-related problems are a significant issue in North America, responsible for up to 5% of medical visits and 31% of hospital admissions of the elderly.14 Depending on whose numbers you believe, these preventable adverse events are the fourth to eighth leading cause of death in the United States15 and there is no reason to believe these statistics vary much in the Canadian healthcare system.

**Precedent:**

There is ample literature on the value of re-deployment in the institutional market, but there is also precedent in the retail market for improving pharmaceutical care – whether for direct, or indirect, profit.

The Eckerd Patient Care Center in Largo, FL16 is a facility that is open weekdays only (on appointment) and is staffed by 1 pharmacist and 1 technician. It is located in a physician outpatient building and offers comprehensive drug therapy management services, including programs for anticoagulation, asthma, diabetes, hyperlipidemia, hypertension and smoking cessation. This non-dispensing facility serves 400+ patients through initial consults of 45-60 minutes and follow up visits that usually last 20-30 minutes.

In dozens of patient care centers in New England, Brooks Pharmacy is providing comprehensive diabetes management and patient education programs, as well as an immunization program in some markets and a full blown patient compliance effort that is already yielding results. This required a change in the pharmacies: shifting most dispensing functions to increasingly skilled technicians and automating as much of the process of receiving, filling and adjudicating prescriptions as possible. The
end result, according to (then) VP of Pharmacy Dan Haron, is to position the chain for a deeper level of clinical, patient-oriented health care and an “outcomes-oriented” pharmacy practice.\textsuperscript{17}

When they see a request will take more than 5-minutes at the counter some pharmacies are telling patients, “Why don’t you come in, make an appointment and we’ll talk about this for half an hour, and here’s what it costs.”\textsuperscript{18} Those fees have been reported (2001) as: Asthma Care Management: $15-$25/20-30 minutes; Cholesterol monitoring program: $36; Dementia behaviour management: $100/hr.; Diabetes care management: $15-$25/20-30 minutes; Medication regimen review: $60/hr; Osteoporosis education: $60/hr.; Smoking Cessation: $150; Wound Care management: $60/hr.\textsuperscript{19}

**Identifying and quantifying the value of technology:**

A traditional ROI on pharmacy technology would compare the cost of technology to the value of time saved by the technology. This approach only makes sense however when the client both wants (and has the ability) to reduce staffing or where the client can find value in the time saved without reducing payroll.

Many clients either do not wish to reduce payroll, or do not have the ability (no hours of pharmacist overlap). For these clients it is increasingly important to prove the potential value of applying time saved to re-deployment of pharmacist time.

More important still is the need to show that re-deployment can have value whether the time is available in large blocks or in smaller time increments. Even if the time made available is only an extra few minutes here and there, they can be used for:

- Increased patient counseling (leading to improved patient satisfaction, increased compliance and improved patient loyalty)
- OTC assistance when they see the need (proactive vs. reactive - only on demand) leading to an increase in OTC purchases (especially in store-brands).\textsuperscript{20}
- Call back programs (leading to improved patient satisfaction, increased compliance and improved patient loyalty)
- Early refill programs (leading to increased revenue).

There is also the potential to show the value possibilities of not re-deploying all the time saved – allowing employees to work in a less hectic, fast-paced environment. Reducing stress in the pharmacy translates to reduced chances for errors and increased job satisfaction\textsuperscript{21} leading to better staff retention (thus reducing costs to find and hire new staff).

Studies like the Efficient Pharmacy Institute’s\textsuperscript{22} Efficient Pharmacy Solutions Study (EPSS) take these factors into account, illustrating the various ways “value” can be obtained, including:

- Coping with prescription growth
- Reducing wait times (improved customer service)
- Reducing medication errors (both from a patient risk aspect and from a cost-savings approach)
- Increasing revenues
- Reducing hiring needs and hiring costs
- Better use of pharmacist time (removing pharmacists from the active filling process)
- Increasing patient-pharmacist interaction
- Increasing patient counseling time
Conclusion:

Prudent use of technology in pharmacy can help pharmacists reduce their time spent in traditional dispensing functions allowing for a transition from our current focus on medication dispensing to a true therapeutic relationship with our patients.

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Efficient Pharmacy Solutions is a consulting firm with a mandate to help North American pharmacists improve their practice through pharmacy design, selection and implementation of outpatient technologies, and re-engineering of pharmacy processes – helping to ensure your investments result in maximum financial & operational performance.

Watch for the publication of: Enhancing Patient Safety: Preventing and Managing Medication Incidents in Pharmacy which will include a chapter by Caverly: Technology solutions to promote safe medication practices. Edited by Rantucci M, Stewart I, & Stewart C., the book is scheduled to be published in the Spring of 2008 by Lippincott, Williams & Wilkins, Baltimore.
Addendum: Redeployment opportunities

1. Revenue generation:
   - Fill more Rx with same staff (Rx Growth)
   - Front Shop Roamer (OTC Specialist)
   - Specialized Compounding / Specialty Pharmaceuticals.
   - Nursing Home Rxs (new or additional)
   - Immunization program

2. Expense reduction:
   - Inventory Management (Reduced drug expense)

3. Error Reduction
   - Reduce medication errors
   - Improved recognition and handling of adverse drug reactions
   - Improved patient outcomes

4. Specialty Counseling / Disease and Medication Management
   - Erectile dysfunction
   - Women’s health
   - Breastfeeding
   - Hormone replacement
   - Hypertension
   - Anticoagulant program
   - Diabetes
   - Asthma
   - Medication Reviews for Seniors
   - Dementia behaviour management
   - osteoporosis education
   - wound care management
   - depression
   - weight management / nutrition

5. Pharmacist House Calls

6. Compliance Management (F/U calls, early/proactive refills)

7. Wellness programs
   - Stress
   - Migraines
   - Ulcers
   - Smoking Cessation Clinics

8. Screening Programs:
   - Diabetes
   - Cholesterol
   - Hypertension
   - H. Pylori

9. Home Health Care:
   - Blood glucose monitoring
   - Self-injection
   - Incontinence products
   - Blood pressure monitoring
   - Infertility / impotence products
   - Air casts
   - Canes / wheelchairs

10. Employee job satisfaction / well being
    - Stress reduction
    - Efficient use of professional skills
    - Improved physician or nursing relations
References and notes:

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