Learning Objectives
Upon successful completion of this lesson, the pharmacist will be able to:
1. Get an overview of the new elements, conditions and restrictions introduced by the “drug reform”
2. Understand the changes the drug reform is bringing to the pharmacy sector
3. Comprehend the impact of the reform on their business model and profitability
4. Become familiar with basic terms in business and their meaning; assess a business model through the fundamental terms of business
5. Expand their scope of learning about potential new revenue streams for their pharmacy
6. Learn how to analyze their pharmacy’s business and identify areas of weakness and areas of opportunity
7. Learn how to create a basic Profit and Loss (P&L) statement for their business

Instructions
1. After carefully reading this lesson, study each question and select the one answer you believe to be correct. Answer online at www.CanadianHealthcareNetwork.ca
2. To pass this lesson, a grade of 70% (14 out of 20) is required. If you pass, your CEU(s) will be recorded with the relevant provincial authority(ies). (Note: some provinces require individual pharmacists to notify them.)

How to Run a Successful Pharmacy
By Ben Shenouda

Success is a beautiful, positive word and everyone enjoys hearing that he or she is successful, but what is the definition of success? We can define success in a number of ways. In the broadest of terms, we can define success as being able to achieve a pre-set goal for yourself or your business. If we agree on that definition, what goal or objective would a pharmacy owner set in order to ensure a pharmacy is successful?

Would it be one or more of the following?
- to provide excellent patient care
- to advocate on behalf of patients
- to grow the patient base of the pharmacy
- to achieve a reasonable profit margin and maintain that profitability
- to expand the business by exploring new streams of revenue
Or perhaps, all of the above.
The profession of pharmacy is unique yet complex. Simply put, it is a healthcare professional running an intricate business that needs to sustain its profitability in order to continue to exist and provide patients with the care they need and expect.

The uniqueness of the pharmacy business model comes from the fact that the pharmacy owner is running a business that is highly regulated and guarded by moral obligations, ethics and standards of practice. In addition, this business is often reimbursed by a party other than the patient who receives the service. The reimbursement is in part through direct payment from provincial governments, insurance or individuals, while a major portion of the reimbursement used to be indirect from the generic drug manufacturers.

With the increased spending and continued rising of healthcare budgets in all provinces, provincial governments are going through what is called a “drug reform.” The implementation of the drug reform means massive price reductions on generic products and the elimination and/or the restriction of the Professional Allowance (PA) paid to pharmacies by generic drug manufacturers.

Before we go through the changes resulting from the drug reform and its impact on pharmacies, we need to review the pharmacy business model before the drug reform.

### Pharmacy Business Model Before the Drug Reform

In principle and out of necessity, the pharmacy business model is a “heavily subsidized” model. It is subsidized by the generic drug manufacturers due to the fact that the cost of providing service is either not paid at all or the amount paid by third parties (including the government) is below the actual cost of providing service.

Some examples of services provided for free are:

### FIGURE 1:
**Highlights of drug reform in Ontario, Alberta and Quebec**

<table>
<thead>
<tr>
<th>Province</th>
<th>Generic drug prices as a percentage of the comparable brand name product</th>
<th>Professional allowance and new professional services</th>
</tr>
</thead>
</table>
| Ontario  | • 25% government and 50% private insurance and cash (will be 25% on both sides by April 2012)  
  • dispensing fee will increase to $8.00:  
  - $1.00 increase from July 1, 2010 through March 31, 2011  
  - $0.65 increase from April 1, 2011 through March 31, 2012  
  - $0.35 increase from April 1, 2012 through March 31, 2013  | • banned on the government side; 50% private insurance and cash; 35% in April 2011, 25% by April 2012 and banned by April 2013 on both sides  
  • MedsCheck annual at $60.00 each  
  • MedsCheck diabetes at $75.00 each  
  • MedsCheck follow-up at $25.00 each  
  • MedsCheck home at $150.00 each |
| Alberta  | • On April 1, 2010 the price of currently available or existing generic drugs was reduced from 75% to 56% of the price of comparable brand name drugs.  
  • In October 2009, the price of new generic drugs was reduced from 75% to 45% of the price of comparable brand name drugs.  
  • All pharmacies receive a transitional allowance, where the government provides additional payments to pharmacies on top of their previous $10.93 dispensing fee for prescriptions less than $75.00:  
  - $3.00 per prescription ($13.93) from April 1, 2010 through March 31, 2011  
  - $2.00 per prescription ($12.93) from April 1, 2011 through March 31, 2012  
  - $1.00 per prescription ($11.93) from April 1, 2012 through March 31, 2013  | • no banning on PA |
| Quebec  | • Since December 2010, generic products have been priced at 37.5% of comparable brand name drugs; on April 1, 2011 this changed to 30%; on April 1, 2012 this will decrease to 25%.  
  • Wholesalers now charge pharmacies a 5% upcharge and the Quebec Ministry of Health accepts a claim of 6% from pharmacies.  
  • Dispensing fees for provincial Rx are $8.44 per Rx, reduced to $7.49 after 40,500 Rx are dispensed by the pharmacy each year.  
  • note: no obligation for 100 days’ supply  | • currently maximum 20% value of sales; on April 1, 2011 this was capped at 16.5%; on April 1, 2012 this will be capped at 15% |
• educating patients on disease and lifestyle issues by answering questions either by phone or in person
• contacting patients’ physicians to adapt a prescription, to correct a wrong dose or to substitute a drug to overcome a drug-drug incompatibility or a drug-disease incompatibility (some provinces like Alberta expect pharmacists to change prescriptions without contacting the physician first)
• contacting physicians for prescription clarifications and refills
• tailoring prescriptions to ensure compliance (e.g., flavouring, splitting pills, generic substitutions)
• contacting third-party insurance companies to solve issues related to medication coverage
• ensuring drugs ordered are appropriate for patients to ensure their personal safety
• assessing patients’ conditions and complaints with the purpose of triaging them to the proper healthcare team members
• explaining and demonstrating medical devices (e.g., glucose monitoring machines)
• educating patients about their drug plans and deductibles for both governmental and private plans

And the list goes on.
The term “indirect funding” refers to subsidies, in the form of rebate or PA, paid to pharmacies. Before the drug reform, generic manufacturers were competing for market share by using the PA to compensate pharmacies. In other words, indirect funding has been a necessary subsidy stream to balance the lack of appropriate funding by third parties.

Key Highlights of the Drug Reform
In Figure 1, the key highlights of the drug reform in three provinces—Ontario, Quebec and Alberta—are outlined. Ontario has adopted the most aggressive approach. Quebec, according to its law, has to have the lowest price in Canada. Alberta has taken a moderate consultative approach. Ontario is the only province to eliminate the PA on the public side from the first day of the implementation of the drug reform regulations. Other provinces in Canada did not regulate the PA. One can expect, however, that by reducing the price of generic drugs, the ability of the manufacturers to pay the PA will be negatively impacted.

With the implementation of the drug reform banning or significantly reducing the indirect funding from generic drug manufacturers, the business model of pharmacy has changed forever. The drug reform has negatively impacted the profitability of all pharmacies—especially independent ones—and put the sustainability of their business models in question. How and why is that possible?

How the Drug Reform Impacts the Profitability of Pharmacies
Figure 2 shows the impact of the drug reform by comparing a Profit and Loss (P&L) statement for a typical pharmacy in Ontario.

According to Ontario’s Community Pharmacies Coalition, pharmacies need to invest $0.80 on technology, system software upgrades and staff training in relation to the professional services in order to generate $1.00 in revenue from such services.

Under the previous funding model before the drug reform, this pharmacy would receive over $200,000 of allowances for its entire business, and generate a profit of almost $130,000 ($200,000-$71,000) per year—a reasonable level of profit and an industry standard. Under the drug reform where no allowances exist, the pharmacy loses $83,000.

Why the Drug Reform Impacts the Profitability of Pharmacies
To explain why the drug reform impacts the profitability of pharmacies, we should look into the cost of filling a prescription and the services associated with it.

As shown in Figure 3, the average cost incurred by a pharmacy to fill a prescription is $57.35. That includes the cost of medication, supply chain charges (also known as wholesaler upcharge) and the dispensing cost (at 2008 prices). The direct funding received from the Ontario Drug Program
for filling a prescription is $51.28, which creates a negative gap of $6.07 per prescription. Pharmacies used to use the PA provided by generic manufacturers to fill this financial gap and make a profit. Now we can see why the elimination of the PA, as part of the drug reform, will dramatically impact the profitability of pharmacies.

It is important to note that the drug reform is eliminating about $750 million in PAs from pharmacies in Ontario in the first year and about $1 billion starting in the second year, while in return the increase in dispensing fee by the government (including the transition fee) does not exceed $200 million a year.

As we now understand the drug reform and its impact on the pharmacy business and profitability, I encourage every pharmacy owner to assess and analyze his or her business model to try to find ways of saving and opportunities for new revenue streams. It is also highly recommended that owners communicate the findings of their analysis to staff pharmacists and technicians because at the end of the day success is a team effort and a passion for work should be shared by all the players on the pharmacy team.

The next section explores the available options for pharmacies to survive. One or more of the following options may be combined to achieve a successful outcome.

Options Available to Pharmacies to Increase Revenue

CREATE NEW REVENUE STREAMS THROUGH WHICH EXTRA REVENUE AND PROFIT CAN BE GENERATED

Pharmacy owners may consider adding one or more diagnostic machines to their pharmacies to provide an extra service for their patients with the potential to charge a fee for those services. Some example are:

- point-of-care testing (lipid, A1C, bone density, etc.)
- niche markets (home healthcare, travel medicine, incontinence, etc.)
- disease-specific counselling services (diabetes education, HRT, cholesterol, blood pressure, etc.)
- expanded scope of practice—currently in Alberta and in development in Ontario (injections, initial prescribing activities, ordering lab tests, adapting prescriptions, etc.)

The major challenge with new revenue stream generators is the fact that patients are not used to paying for these kinds of services. Education and dialogue between patients and pharmacists play an essential role in eliminating any potential misunder-
standing and skepticism. Pharmacy owners should keep the following guidelines in mind:

- Explain the new service to patients and how it will benefit them. Briefly explain how the cost structure of the service is structured. For example, a bone density measuring machine costs $18,000 to buy and it requires a technician to run it. The actual cost per use is $25.00 and you are charging $28.00.
- Accept feedback and welcome suggestions from patients regarding the fee structure.

INCREASE REVENUE FROM THE CURRENTLY EXISTING STREAM(S)

One of the main ways to increase revenue is to increase the dispensing fee. Most pharmacies are posting dispensing fees of approximately $10.00 per prescription. Studies in a number of Canadian provinces and American states show that the cost of dispensing a prescription ranges between $13.00–$14.00. Therefore, those with dispensing fees of $10.00 are not only losing on provincially reimbursed prescriptions but are also losing on prescriptions reimbursed by cash and private insurance.

Pharmacy owners should ask themselves, should I increase my dispensing fee and thereby lose a few patients or should I keep my dispensing fee as is and eventually lose my business? It is a difficult question; however, it is also a difficult time for pharmacy.

CHARGE PATIENTS FOR SERVICES THAT WERE ONCE FREE

Charging patients for daily services that used to be delivered for free not only reduces your operating costs but also has the potential to create a new revenue stream. Some examples of services you may considering charging for include home delivery of prescriptions, faxing or calling a doctor’s office for a repeat prescription, printing an end-of-year tax receipt, and printing a medication profile for patients. (Pharmacy owners are advised to use their discretion when choosing the kinds of service to charge for and the dollar value associated with each service.)

INCREASE THE EFFICIENCY OF THE BUSINESS OPERATION

Reviewing the pharmacy’s efficiency should be a mandatory procedure before any pharmacy owner implements other revenue generating services. In simplified terms, the profitability of a business—any business—being successful depends on the relationship between three variables:

- total revenue
- expenses and cost of goods (COGs)
- profit

As we can see in Figures 4 and 5, in order to increase profit, one can either increase revenue or decrease expenses and COGs. If pharmacies are able to reduce their COGs, they will generate a greater profit, especially if total revenue is decreasing.

One of the options available to pharmacy owners is joining a buying group. Some buying groups are able to get their member pharmacies brand name prescription medications for no upcharge (0%), which makes a significantly positive impact on the profitability of those member pharmacies.

We have discussed the different options for pharmacy owners to increase revenue. The following case studies will shed some light on the different approaches of analyzing your business’s specifics and address different ways to increase profitability or realize more savings.

Continued on next page.
Because the drug reform in Ontario is the most drastic drug reform in Canada, the following case studies illustrate business cases for pharmacies operating in Ontario. For simplicity of the following cases, rent, utilities, CPP, EI, overtime payment, tax and cost of operation other than medication costs and staff wages are not included in the analyses.

Case Study I
Manaki Pharmacy is an average size Ontario pharmacy with a total area of 1,500 square feet. The pharmacy fills 22,500 prescriptions per year and has a total prescription revenue of $1.1 million. Sixty per cent of the prescriptions are for patients covered by provincial plans while 40 per cent are for private insurance beneficiaries and cash patients. The dispensing fee is $9.99 and the hours of operation are shown in Figure 6.

Mr. Manaki, the owner, is very proud of the level of care and service he and his staff provide to patients. As a result, he tends to be open for long hours and he makes sure that his pharmacy is fully staffed to better serve his patients (Figure 7).

Under the drug reform, what would you advise the owner of Manaki Pharmacy to do in order to improve his profitability?

ANALYSIS OF CASE STUDY I
Manaki Pharmacy fills 22,500 prescriptions per year, which provides $1.1 million in

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**FIGURE 7:**
Manaki Pharmacy employees and hourly wages

<table>
<thead>
<tr>
<th>Employee</th>
<th>Hours of operation</th>
<th>Rate/hour</th>
<th>Total hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pharmacist (owner)</td>
<td>9 a.m.–5 p.m. Mon–Fri</td>
<td>$50.00</td>
<td>40 hours/week</td>
</tr>
<tr>
<td>1 staff pharmacist</td>
<td>5 p.m.–9 p.m. Mon–Fri</td>
<td>$48.00</td>
<td>36 hours/week</td>
</tr>
<tr>
<td>1 pharmacy technician</td>
<td>9 a.m.–5 p.m. Mon–Fri</td>
<td>$12.00</td>
<td>40 hours/week</td>
</tr>
<tr>
<td>1 pharmacy technician</td>
<td>5 p.m.–9 p.m. Mon–Fri</td>
<td>$11.00</td>
<td>36 hours/week</td>
</tr>
<tr>
<td>1 cashier</td>
<td>9 a.m.–5 p.m. Mon–Fri</td>
<td>$10.25</td>
<td>40 hours/week</td>
</tr>
<tr>
<td>1 cashier</td>
<td>5 p.m.–9 p.m. Mon–Fri</td>
<td>$10.25</td>
<td>36 hours/week</td>
</tr>
</tbody>
</table>

**FIGURE 8:**
Manaki Pharmacy operating expenses

<table>
<thead>
<tr>
<th>Employee</th>
<th>Hours/week</th>
<th>Rate/hour</th>
<th>Wage/week</th>
<th>Wage/year (52 weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pharmacist (owner)</td>
<td>40</td>
<td>$50.00</td>
<td>$2,000</td>
<td>$104,000</td>
</tr>
<tr>
<td>1 staff pharmacist</td>
<td>36</td>
<td>$48.00</td>
<td>$1,728</td>
<td>$89,856</td>
</tr>
<tr>
<td>1 pharmacy technician</td>
<td>40</td>
<td>$12.00</td>
<td>$480</td>
<td>$24,960</td>
</tr>
<tr>
<td>1 pharmacy technician</td>
<td>36</td>
<td>$11.00</td>
<td>$396</td>
<td>$20,592</td>
</tr>
<tr>
<td>1 cashier</td>
<td>40</td>
<td>$10.25</td>
<td>$410</td>
<td>$21,320</td>
</tr>
<tr>
<td>1 cashier</td>
<td>36</td>
<td>$10.25</td>
<td>$369</td>
<td>$19,188</td>
</tr>
<tr>
<td><strong>Total cost/year</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$279,916</strong></td>
</tr>
</tbody>
</table>

**FIGURE 9:**
Manaki Pharmacy prescription sales by time of day report (annual)
How to Run a Successful Pharmacy

The revenue per prescription is $48.89 ($1.1 million ÷ 22,500). From Figure 3, we know that the average direct funding per prescription is $51.28. As a result, Manaki Pharmacy incurs a loss of $2.39 per prescription ($51.28 - $48.89). Does the owner of Manaki Pharmacy have any opportunity to improve on the profitability?

Figure 8 shows that the cost per prescription is $12.44 ($279,916 ÷ 22,500). Manaki’s Pharmacy can benefit from improving its operational efficiency as its hours of operation are too long and it is overstaffed.

Operating costs

One of the ways to determine productivity per hour is to print a “prescription sales by time of day” report for a one-year period.

Notice in Figures 9 and 9A that from about 7 p.m. until closing at 9 p.m. the number of prescriptions is almost nil, and on Sundays the pharmacy fills very few prescriptions, which means that if Manaki Pharmacy closes at 7 p.m. on weekdays and closes on Sundays it will not lose revenue but it will positively impact its cost of operation.

In this proposed new model (Figures 10 and 11), the saving in staffing costs is $72,800 ($279,916 - $207,116) (Figure 12). It would be up to the pharmacy owner to find a way to use some of the extra profit to compensate those employees who lost on their hours as a result of the new hours of operation.
Dispensing fee
One other point that deserves attention is the dispensing fee. The pharmacy currently fills 40 per cent of its prescriptions for private and cash patients. The $9.99 dispensing fee is far below the actual cost of filling the prescription, and Mr. Manaki has the opportunity to increase the fee to $11.99 (ceiling for most private drug plans) or $12.50 (ceiling for some drug plans).

HOW WOULD THIS IMPACT THE PHARMACY’S PROFITABILITY?
The pharmacy fills 40 per cent of its 22,500 prescriptions (or 9,000 prescriptions) for private plan recipients and cash paying patients. Increasing the dispensing fee from $9.99 to $11.99 would result in an additional $18,000 of revenue per year ($2.00 x 9,000 prescriptions).

MedsCheck
Ontario Ministry of Health pays pharmacists $60.00 per consultation to review patients’ medications and provide advice to patients with three or more maintenance medications with the objectives of improving the treatment outcome and maximizing the benefits of the medications.

Manaki Pharmacy could schedule one MedsCheck per day every day of the week, which would achieve a high level of patient care and improve the treatment outcome for patients. In the meantime, it would generate a new revenue stream.

One MedsCheck per day would result in an additional $18,000 of revenue per year ($60.00 x 6 days a week x average of 50 weeks).

Pharmacy owners may want to discuss the option of reducing the hourly wage with their staff pharmacists; unfortunately the hard financial times that pharmacies are going through dictates hard decisions.

Continued on next page.
Case Study II
Swan Pharmacy is an Ontario-based independently owned pharmacy, located in a medical building with a total area of 1,000 square feet. The medical building has five family doctors and three specialists. Swan Pharmacy does not have a big front shop; it has a limited range of products for the front shop, such as basic pain killers and a few cold remedies. Although the pharmacy is not that strong in the front shop, it fills 65,000 prescriptions a year—50% of which are for Ontario Drug Benefit (ODB) recipients. The pharmacy generates $3.8 million in annual revenue and has a dispensing fee of $9.99. The owner deals with Boston wholesaler. The arrangement he has with the wholesaler is as follows:
- brand prescription products at 5.5% upcharge, with a 2% discount for prompt payment and an extra 1.5% paid to Swan Pharmacy by cheque every month
- generic prescription products at 0% upcharge, with a 2% discount for prompt payment

The total cost of staffing Swan Pharmacy (Figure 16) is $381,056, which translates into $5.86 per prescription ($381,056 ÷ 65,000 prescriptions).

Analysis of Case Study II
Swan Pharmacy is a busy pharmacy filling a large number of prescriptions. In order to analyze the operations, we need to answer few questions.

Are the operations efficient?
Is the staffing level appropriate for the workload?
Are there other opportunities for savings?
Can Swan Pharmacy generate new revenue streams?

Are the operations efficient?
One indicator could be the “efficiency ratio” (see Appendix A for definition). The efficiency ratio for Swan Pharmacy is $381,056 ÷ $3,800,000 = 10%. The efficiency ratio demonstrates that Swan Pharmacy spends 10 cents to generate one dollar, which means that the pharmacy is efficient in its operations.

Is the staffing level appropriate for the workload?
To answer this question, we need to look at the workload distribution per hour best expressed in the prescription sales by time of day report.

The report (Figure 18) shows that Swan pharmacy is busy throughout the day. Although it has a peak, the lowest point of the peak shows that it fills 30 prescriptions an hour.

Figure 14: Swan Pharmacy hours of operation
<table>
<thead>
<tr>
<th>Day</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday to Friday</td>
<td>9 a.m.–9 p.m.</td>
</tr>
<tr>
<td>Saturday</td>
<td>9 a.m.–6 p.m.</td>
</tr>
<tr>
<td>Sunday</td>
<td>11 p.m.–4 p.m.</td>
</tr>
</tbody>
</table>

Figure 15: Swan Pharmacy staffing

<table>
<thead>
<tr>
<th>Employee</th>
<th>Hours</th>
<th>Rate/hour</th>
<th>Total hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 full-time pharmacist (owner/manager)</td>
<td>9 a.m.–5 p.m. Monday–Friday</td>
<td>$50.00</td>
<td>40 hours/week</td>
</tr>
<tr>
<td>1 full-time pharmacist</td>
<td>1 p.m.–9 p.m. Monday–Friday</td>
<td>$48.00</td>
<td>54 hours/week</td>
</tr>
<tr>
<td>1 full-time technician</td>
<td>1 p.m.–9 p.m. Monday–Friday</td>
<td>$12.00</td>
<td>54 hours/week</td>
</tr>
<tr>
<td>1 full-time cashier</td>
<td>1 p.m.–9 p.m. Monday–Friday</td>
<td>$12.00</td>
<td>54 hours/week</td>
</tr>
</tbody>
</table>

Figure 16: Swan Pharmacy staffing costs

<table>
<thead>
<tr>
<th>Employee</th>
<th>Hours/week</th>
<th>Rate/hour</th>
<th>Wage/week</th>
<th>Wage/year (52 weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 full-time pharmacist (owner/manager)</td>
<td>40</td>
<td>$50.00</td>
<td>$2,000</td>
<td>$104,000</td>
</tr>
<tr>
<td>1 full-time pharmacist</td>
<td>54</td>
<td>$48.00</td>
<td>$2,592</td>
<td>$134,784</td>
</tr>
<tr>
<td>3 full-time (2 technicians + 1 cashier)</td>
<td>40 hours each (total 120 hours)</td>
<td>$12.00 each</td>
<td>$1,440</td>
<td>$74,880</td>
</tr>
<tr>
<td>2 full-time (1 technician + 1 cashier)</td>
<td>54 hours each (total 108 hours)</td>
<td>$12.00 each</td>
<td>$1,296</td>
<td>$67,392</td>
</tr>
</tbody>
</table>

Total staffing costs $381,056
Based on the number of prescriptions filled per hour, we can see that reducing the number of staff may have the potential to overload the remaining staff and carry a significant risk of unintended filling errors, which may put patients’ health and safety at risk. As well, it could jam the linear filling process and create a bottleneck in the dispensary.

Accordingly, changes to the current staffing level of Swan Pharmacy are not advised.

Are there other opportunities for saving?

Cost of goods
One of the key criteria of utmost importance at Swan Pharmacy is the brand name prescription products, on which the pharmacy spends $2,688,000 annually. Swan Pharmacy buys these products from Boston wholesaler at 5.5% and it reaches a net upcharge of 2% through the following:

- 5.5% upcharge - 2% prompt payment discount = 3.5%
- 1.5% as a volume discount to reach the net upcharge of 2%

This 2% upcharge on $2,688,000 equals $53,760 a year.

Swan Pharmacy should join a buying group that offers its members a 0% upcharge on their purchase of brand name prescription medications. Doing so would save the pharmacy $53,760 a year.

Can Swan Pharmacy generate new revenue streams?

MedsCheck
A good opportunity for revenue generation, especially in a busy dispensary like Swan Pharmacy, is MedsCheck.

According to the staffing schedule of Swan Pharmacy, the two pharmacists work together from 1 p.m. to 5 p.m. each day. They can arrange to complete four MedsCheck throughout the day, which would result in $60,000 of revenue (4 MedsCheck x 5 days/week x average of 50 week/year x $60.00).

Dispensing fee
Swan Pharmacy fills 65,000 prescriptions per year. Fifty per cent of those are through private drug insurance plans and cash. The majority of the private drug insurance plans pay $11.99 dispensing fee per prescription. Swan pharmacy currently charges $9.99 per prescription. By increasing the fee to $11.99, Swan Pharmacy would have an additional income of $65,000 per year ($2.00 x 32,500 prescriptions).

Continued on next page.
Case Study III
Roxin Pharmacy operates in the province of Alberta with a total area of 1,890 square feet. The annual revenue of the pharmacy is $1.9 million. The pharmacy employs three staff members who each work 69 hours per week: one full-time pharmacist at $43.00 per hour, one full-time technician at $12.00 per hour and one full-time cashier at $12.00 hour.

Table 20 shows the annual expenses (excluding staffing) that Roxin Pharmacy incurred during 2010.

In view of all the financial information we know about Roxin Pharmacy, is this pharmacy profitable? If so, how much profit does the owner realize by the end of the year?

ANALYSIS OF CASE STUDY III
The only way to determine the profitability of the business is to create a profit and loss (P&L) statement (see Appendix A for definition). The P&L statement will show the amount of profit the owner takes home before tax at the end of the statement period.

In addition to the items listed in Figure 20, the staffing costs of the pharmacy are as follows:

- **Pharmacist:** 69 hours/week x $43.00 x 52 weeks = $154,284
- **Technician:** 69 hours/week x $12.00 x 52 weeks = $43,056
- **Full-time cashier:** 69 hours/week x $12.00 x 52 weeks = $43,056

**Total staffing cost:** $240,396

The P&L (Figure 21) shows that Roxin Pharmacy is profitable and the owner took home $49,000 before tax for the year 2010.
Conclusion
With the introduction of the drug reform regulations, the profitability of the business portion of pharmacy is negatively impacted and under great financial pressure. As a result everybody involved in the pharmacy business model (owners, managers, staff, relief and technicians) will feel the impact one way or another.

The only possible way to survive the drastic changes associated with the drug reform is to start assessing your pharmacy business model with the objective of increasing the efficiency of the operation. The more efficient your operation is, the greater your chances are to survive the impact.

Additionally it is highly recommended to explore opportunities to create new revenue streams in order to compensate for the losses resulting from the reform.

Appendix A
BASIC BUSINESS TERMINOLOGY
It is essential to know the following business terms to be able to understand and evaluate a business model.

Assets
Assets are economic resources. Anything tangible or intangible that is capable of being owned or controlled to produce value and that is held to have positive economic value is considered an asset. Simply stated, assets represent ownership of value that can be converted into cash (although cash itself is also considered an asset).

Cost of goods (also known as COGs)
Cost of goods sold refers to the inventory costs of those goods a business has sold during a particular period. Costs include all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. COGs made by the business include material, labour and allocated overhead. The costs of those goods not yet sold are deferred as costs of inventory until the inventory is sold or written down in value.

Depreciation
This refers to two very different but related concepts:
- decline in value of assets, and
- allocation of the cost of assets to periods in which the assets are used.

The former affects values of businesses and entities. The latter affects net income. Generally the cost is allocated, as depreciation expense, among the periods in which the asset is expected to be used. Such expense is recognized by businesses for financial reporting and tax purposes. Methods of computing depreciation may vary by asset for the same business. Methods and lives may be specified in accounting and/or tax rules in a country. Several standard methods of computing depreciation expense may be used, including fixed percentage, straight line and declining balance methods. Depreciation expense generally begins when the asset is placed in service. Example: a depreciation expense of $100 per year for five years may be recognized for an asset costing $500.

Efficiency ratio
The efficiency ratio, a ratio that is typically applied to banks, in simple terms is defined as expenses as a percentage of revenue (expenses ÷ revenue), with a few variations. A lower percentage is better since that means expenses are low and earnings are high. It is related to operating leverage, which measures the ratio between fixed costs and variable costs. For example, if expenses are $40 and revenue is $80, the efficiency ratio is 0.5 or 50%. Efficiency ratio is essentially how much you spend to make a dollar. In this case, the business spends $0.50 for every $1.00 earned in revenue.

Expenses
In common usage, an expense or expenditure is an outflow of money to another person or group to pay for an item or service, or for a category of costs. For a tenant, rent is an expense. For students or parents, tuition is an expense. Buying food, clothing, furniture or an automobile is often referred to as an expense. An expense is a cost that is “paid” or “remitted,” usually in exchange for something of value. In accounting, expense has a very specific meaning. It is an outflow of cash or other valuable assets from a person or company to another person or company.

Fixed costs
Business expenses that are not dependent on the level of goods or services produced by the business are fixed costs. They tend to be time-related, such as salaries or rents being paid per month, and are often referred to as overhead costs. This is in contrast to variable costs, which are volume-related (and are paid per quantity produced).

Fixed costs are defined as expenses that do not change as a function of the activity of a business, within the relevant period. For example, a retailer must pay rent and utility bills irrespective of sales.

Along with variable costs, fixed costs make up one of the two components of total cost: total cost is equal to fixed costs plus variable costs.

Gross income (also known as gross profit)
The total revenue minus the cost of goods.

Liability
This is the value of what a business owes to someone. Or in accounting terms, a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits.
Loss leader
A loss leader is a good or service sold at a loss. Its purpose is to bring (or lead) customers into a store on the assumption that, once inside the store, customers will be stimulated to buy full priced items as well. This is very obvious in the case of some pharmacies that belong to big box stores where they have a very low dispensing fee (sometimes $4.11). This low fee is the loss leader, getting customers into the store and hoping that while waiting for their prescription they will buy a loaf of bread or a barbecue chicken at full price.

Markup
The difference between the cost of a good or service and its selling price is the markup. A markup is added onto the total cost incurred by the producer of a good or service in order to create a profit. The total cost reflects the total amount of both fixed and variable expenses to produce and distribute a product. Markup can be expressed as a fixed amount or as a percentage of the total cost or selling price. Retail markup is commonly calculated as the difference between wholesale price and retail price, as a percentage of wholesale. Other methods are also used.

Net income (also known as net profit)
The total revenue minus the total expenses.

Profit and loss (P&L) statement
A P&L statement summarizes the revenues, costs and expenses incurred by a business during a specific period of time—usually a quarter or a year. It is also known as a “statement on profit and loss,” an “income statement” or an “income and expense statement.” A sample P&L statement is shown in Figure 21.

Profit margin
Profit margin, net margin, net profit margin or net profit ratio all refer to a measure of profitability. It is calculated by finding the net profit as a percentage of the revenue.

\[
\text{Net profit margin} = \frac{\text{Net profit (after taxes)}}{\text{Revenue}} \times 100\%
\]

The profit margin is mostly used for internal comparison. It is difficult to accurately compare the net profit ratio for different entities. Individual businesses’ operating and financing arrangements vary so much that different entities are bound to have different levels of expenditure, so that comparison of one with another can have little meaning. A low profit margin indicates a low margin of safety—a higher risk that a decline in sales will erase profits and result in a net loss.

Profit margin is an indicator of a company’s pricing strategies and how well it controls costs. Differences in competitive strategy and product mix cause the profit margin to vary among different companies.

Profit margin is frequently confused with markup. It’s not uncommon for entrepreneurs to erroneously claim profit margins over 100%. Most likely these entrepreneurs are referring to the markup on a product as a percentage of product cost.

Return on investment (ROI)
ROI is also known as rate of return (ROR), rate of profit or sometimes just return, and is the ratio of money gained or lost (whether realized or unrealized) on an investment relative to the amount of money invested. The amount of money gained or lost may be referred to as interest, profit/loss, gain/loss or net income/loss. The money invested may be referred to as the asset, capital, principal or the cost basis of the investment. ROI is usually expressed as a percentage.

To calculate the ROI you would need to determine the amount of business received from investing a certain amount of money and resources. For example, the XYZ Company invested $200,000 in an advertising campaign to promote a new service. The XYZ Company received 150 phone calls from the campaign and 60 of the callers bought the new service. The amount of new business sold generated a total of $600,000. The equation to calculate ROI is:

\[
\text{ROI} = \frac{\text{return on investment} - \text{initial investment}}{\text{investment}} \times 100\%
\]

Accordingly, it means that for every $100 of investment, the company gained $200 in profit.

Revenue
Revenue is income that a company receives from its normal business activities, usually from the sale of goods and services to customers. Revenue may refer to business income in general, or it may refer to the amount of money received during a period of time, as in “Last year, XYZ Company had revenue of $42 million.”

Variable costs
Business expenses that change in proportion to the activity of a business are variable costs. Variable costs are the sum of marginal costs over all units produced. They can also be considered normal costs. Along with fixed costs, variable costs make up one of the two components of total cost. In retail the cost of goods is almost entirely a variable cost.

References
1. The “drug reform” taking place in different jurisdictions in Canada is aiming to decrease the ever-rising drug prices as a first step in controlling the healthcare budget. In the province of Quebec, which one of the following is true?
   a) On April 1, 2011, generic products were priced at 25% of the comparable name brand.
   b) Beginning April 1, 2012, generic products will be priced at 25% of the comparable name brand.
   c) Beginning April 1, 2012, generic products will be priced at 30% of the comparable name brand.
   d) On April 1, 2011, generic products were priced at 50% of the comparable name brand.

2. The Professional Allowance (PA) is considered to be a major source of indirect funding for pharmacies, usually used to compensate the losses they encounter as a result of the below-cost direct payment from the different government funded drug coverages. In the province of Ontario, which one of the following is true?
   a) Beginning April 1, 2012, Ontario will ban the PA on generic drugs sold to public drug plan users as well as private and cash payers.
   b) Beginning April 1, 2012, Ontario will restrict the PA paid on generic drugs sold to public drug plan users to 25%.
   c) Beginning April 1, 2012, Ontario will restrict the PA paid on generic drugs sold to private drug plan users to 25%.
   d) Beginning April 1, 2011, Ontario restricted the PA paid on generic drugs sold to private drug plan users to 25%.

3. In the province of Alberta, all pharmacies will receive a transitional allowance that will be added to each prescription costing less than $75.00. Through the transitional allowance, government will provide an additional payment to pharmacies on top of their previous $10.93 dispensing fee. What is the amount of the transitional allowance?
   a) $2.00 per prescription ($12.93) from April 1, 2012 through March 31, 2013
   b) $2.00 per prescription ($12.93) from April 1, 2011 through March 31, 2012
   c) $3.00 per prescription ($13.93) from April 1, 2011 through March 31, 2012
   d) $1.00 per prescription ($11.93) from April 1, 2011 through March 31, 2012

4. Ontario drug reform regulations are addressing the restriction of PAs and the chronological timeline of the phase out of the allowance and the phase in of the price reduction. In this respect, which one of the following is true?
   a) Generic drug prices on both sides of the business—public and private—will be 25% of the comparable name brand by April 2012, and the PA will be 25% on both.
   b) Generic drug prices on both sides of the business—public and private—will be 25% of the comparable name brand by April 2012, and the PA will be 35% on both.
   c) Generic drug prices on both sides of the business—public and private—will be 25% of the comparable name brand by April 2012, and the PA will be 0% on both.
   d) Generic drug prices on both sides of the business—public and private—will be 35% of the comparable name brand by April 2012, and the PA will be 25% on both.

5. The pharmacy business model is, to a great extent, a subsidized business model. Why is that? Please choose one correct explanation from the following.
   a) because prescription costs are paid for or subsidized by provincial governments and/or private drug plans
   b) because the cost of filling prescriptions is higher than what the provincial governments pay pharmacies and therefore patients subsidize the difference
   c) because historically generic drug manufacturers used to pay volume discounts to bridge the funding gap between the actual cost of filling prescriptions and the below cost payment by provincial governments
   d) because patients usually subsidize the cost of medication by paying a deductible portion of their prescription cost

6. Efficiency ratio is used to indicate how efficient the operation of a business is. How is efficiency ratio calculated?
   a) by dividing the gross profit by the total revenue of the business
   b) by multiplying the net profit by 1.5 and then dividing the result by the gross profit
   c) by dividing the expenses by the revenue
   d) by dividing the revenue by the expenses

7. Profit margin is frequently confused with markup. It’s not uncommon for entrepreneurs to erroneously claim profit margins over 100%. Most likely these entrepreneurs are referring to the markup on a product as a percentage of product cost. What is profit margin?
   a) the percentage of the net profit after tax divided by the gross profit
   b) the percentage of the net profit before tax divided by the gross profit
   c) the percentage of the gross profit before tax divided by the revenue
   d) the percentage of the net profit after tax divided by the revenue

8. Professional Allowance is considered a source of indirect funding to pharmacies. By eliminating this source of funding through drug reform, what will the average loss in revenue per pharmacy in the province of Ontario be? Choose the most correct answer.

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How to Run a Successful Pharmacy

QUESTIONS
Answer online at www.canadianhealthcarenetwork.ca, CE section, Quick Search CCCEP #1065-2011-246-I-P
10. What is the efficiency ratio for Bostech Pharmacy?
   a) 0.37
   b) 0.25
   c) 1.2
   d) 4.0

11. If Bostech Pharmacy's owner decided to join one of the buying groups that offers brand name prescription products at 0% upcharge, what potential saving would there be?
   a) $27,050
   b) $29,250
   c) $50,370
   d) $73,050

12. What is the net profit, before tax, of Bostech Pharmacy?
   a) $75,000
   b) $1,620,000
   c) $1,425,000
   d) $40,900

13. Under the drug reform, pharmacies lost a lot of revenue as a result of the elimination of the indirect funding from generic manufacturers and the reduction of generic medication prices. Bostech Pharmacy's owner wanted to increase the dispensing fee to counteract the losses the pharmacy has incurred. By increasing the fee to $12.50, what will be the annual gain?
   a) $40,000
   b) $70,000
   c) $200,000
   d) $350,000

14. Based on the table above, what would be the annual staffing cost of Dixon Pharmacy?
   a) $128,736
   b) $100,521
   c) $250,536
   d) $350,551

15. If the owner of Dixon Pharmacy decides to close at 7 p.m. instead of 9 p.m. during the week and close on Sundays, what would the annual savings be?
QUESTIONs
Answer online at www.canadianhealthcarenetwork.ca, CE section, Quick Search CCCEP #1065-2011-246-I-P

16. If you advised Dixon Pharmacy’s owner to increase the dispensing fee to $11.99, what would be the potential increase in revenue?
   a) $81,950
   b) $36,877.50
   c) $45,072.50
   d) $55,000

17. Currently, 77% of Dixon Pharmacy’s prescription mix is brand name products, and its total annual purchase of all prescription products is $2.4 million. Boston wholesaler is charging Dixon Pharmacy a 5.5% upcharge on brand name products, giving a 2% prompt payment discount and an extra 1% volume discount. If Dixon Pharmacy’s owner joined a buying group that offers brand name prescription products at 0% upcharge, what would the potential saving be?
   a) $46,200
   b) $101,640
   c) $55,440
   d) $67,890

18. The drug reform is aimed at reducing the prices of generic prescription products and either eliminating or capping the PAs paid to pharmacies by generic manufacturers. Which Canadian province will cap the PA at 15% of the generic drug price by April 1, 2012?
   a) Alberta
   b) Ontario
   c) British Columbia
   d) Quebec

19. Which one of the following statements is false?
   a) Ontario capped the PA at 35% of generic drug prices on April 1, 2011.
   b) Alberta did not regulate the PA; generic manufacturers are free to name their PA percentage with pharmacies.
   c) Quebec capped the PA at 16.5% of generic drug prices on April 1, 2011.
   d) Ontario capped the PA at 30% of generic drug prices on April 2012.

20. In such an unstable time for pharmacy, with a lot of changes recently implemented and many still looming, pharmacy owners are advised and encouraged to do all of the following except (please choose one).
   a) re-assess their business model and explore new revenue sources
   b) analyze their business with the objective of bringing more efficiency to their operation and realizing more savings
   c) reconsider their dispensing fee and study its impact on the bottom line
   d) do nothing and hope for the best

FACULTY: How to Run a Successful Pharmacy

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Ben Shenouda has a Bachelor of Pharmaceutical Science degree and a Master of Business Administration, and is a community pharmacy owner as well as the Co-founder and President of Independent Pharmacists Association of Ontario (IPO). Ben is a member of the steering committee of Ontario’s Community Pharmacies Coalition and a member of the pharmacy working group with the Ontario Ministry of Health.

Reviewers
All lessons are reviewed by pharmacists for accuracy, currency and relevance to current pharmacy practice.

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This lesson is valid until May 3, 2014. Information about running a successful pharmacy may change over the course of this time. Readers are responsible for determining the most current aspects of this topic.

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