

**CHAPTER OUTLINE**

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1. Understand the history of pharmacy.
2. Identify the different kinds of community pharmacies in Canada.
3. Differentiate the roles and responsibilities of pharmacy team members.
4. Define the scope of practice of pharmacists and pharmacy technicians.
5. Understand workflow in the community pharmacy.

## History of Pharmacy

The origin of pharmacy can be traced back to ancient times. For as long as humans have existed on earth medicinal plants and herbs have been used to cure ailments. From the ancient times until today there are still some symbols, images, and practices that we use. Understanding the past will help us to guide the future. Looking back in Greek mythology, the god of Medicine, Asclepius, is typically depicted holding a staff (called a caduceus) that has two serpents twined around it. The Rod of Asclepius became a medical symbol in the fifth century BCE and is still used today (“The origins and meanings of pharmacy symbols,” 2017). Asclepius had a daughter, Hygeia, the goddess of Health. Hygeia is often shown holding a snake and a bowl which were symbols for medicine and health (Okuda, 2000). The Bowl of Hygeia is the most widely recognized symbol for the profession of pharmacy today. Figure 1.1 shows the Rod of Asclepius and Figure 1.2 shows the Bowl of Hygeia.

**Figure 1.1** Rod of Asclepius.



**Figure 1.2** Bowl of Hygeia.



In ancient Babylonia, about 2600 BCE, is the earliest known record of the practising apothecaries. Clay tablets from this time recorded the symptoms of illness, the prescription, and the directions for compounding. Healers would act by identifying the illness (like a physician), preparing the prescription (like a pharmacist), and then invoking the gods (like a priest) (Bender, 1965).

Apothecaries in the eighth century were a place where herbs, minerals, oils, and syrups would be elaborately mixed to cure the ailments of those who were ill. (“The evolution of the apothecary for the apothecary,” n.d.). Apothecaries were the precursor to pharmacies and are important as they outline the evolution of pharmacy practice.

The history of pharmacy in Canada begins with Louis Hébert, a pharmacist from Paris, in 1617 when he first settled here in Canada. Hébert helped de Mons and Champlain build New France's first settlement in Nova Scotia. During this time, he helped with the health of pioneers and cultivated native drug plants (Bender, 1965). At this time, pharmacy was described as the act or practice of preparing, preserving, compounding, and dispensing drugs (Huston, M., 2013). Then began a time of great advancement in the field of medicine. In Colonial America, the first apothecary was opened in 1729 and the first hospital pharmacy was opened in 1752. John Ferriar, an English physician, discovered the first known heart medication in 1799. The United States Pharmacopeia (USP) was created in 1820. The rabies vaccine was developed by Louis Pasteur in 1885. Felix Hoffman, a German pharmacist, synthesized acetylsalicylic acid (Aspirin) in 1892 ("History of Pharmacy," 2017). In 1907, fifteen pharmacists founded the Canadian Pharmaceutical Association. Canadian scientists Frederick Banting, Charles Best, and John Macleod discovered insulin at the University of Toronto in 1921, and James Collip purified it, which led to it becoming commercially available in 1922. The world's first antibiotic, penicillin, was discovered in 1928 by Scottish physician Alexander Fleming ("History of Pharmacy," 2017). Since this time almost 100 years ago tens of thousands of prescription medications have become available in Canada.

Pharmacists have been the driving force behind pharmacy since its inception. The introduction of pharmacy technicians into the practice of pharmacy has been relatively new in the evolution timeframe. Pharmacy technicians (also called assistants prior to regulation) began working in pharmacies to assist the pharmacist with non-regulated tasks including counting medications, processing prescriptions, maintaining records, answering the phones, and assisting patients at the cash register. In the early 21st century, the National Association of Pharmacy Regulatory Authorities (NAPRA) began working with regulatory colleges and associations across Canada to raise the profile of pharmacy technicians and define the role of pharmacy technician in pharmacy practice. This was done to support pharmacists and to look at enhancing the services that pharmacies could offer to the public (Ontario College of Pharmacists, 2021b). NAPRA released two important documents that are essential to the profession and mark the beginning of the regulation of pharmacy technicians:

1. "Professional Competencies for Canadian Pharmacy Technicians at Entry to Practice" was published in 2007.
2. "Model Standards of Practice for Registered Pharmacy Technicians" was published in 2009.

In 2010, Ontario became the first province to regulate pharmacy technicians. Since then, eight more provinces now have regulated pharmacy technicians: British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland (National

Association of Pharmacy Regulatory Authorities, n.d.). When regulation was first introduced there were many pharmacy technicians working in the field who needed to be licensed in their respective provinces. To prepare for regulation across Canada, NAPRA developed a National Pharmacy Technician Bridging Education Program for pharmacy technicians so that they could upgrade their skills to align with the changes in their scope of practice and to allow them to write their national and provincial licensing exams. This was a part-time program that allowed pharmacy technicians to work in the pharmacy while going back to school. This program is no longer available in Canada, and as such anyone interested in becoming a Regulated Pharmacy Technician needs to complete a Pharmacy Technician program that is accredited by the Canadian Council for the Accreditation of Pharmacy Programs (CCAPP). As of January 1, 2020, there were 9,564 licensed pharmacy technicians in Canada (NAPRA, n.d.). Pharmacy technicians across Canada work in various settings including community pharmacies, long-term care pharmacies, hospital pharmacies, and specialty pharmacies. We will be focusing on community pharmacy practice in this book.

## **Kinds of Community Pharmacies**

Community pharmacies are direct patient care pharmacies. People can walk into the pharmacy to get their prescriptions filled and receive health care services. Each community pharmacy will provide core pharmacy services including filling prescriptions and counselling patients on the medications they receive. Some pharmacies may provide additional services including blister packaging, vaccinations, and point-of-care testing. In Canada, there are over 10,000 community pharmacies.

### **Independent Pharmacies**

Independent pharmacies are owned by a licensed pharmacist. Some independent pharmacies tailor their services to meet the needs of their patients by offering niche services such as specialty compounding, travel vaccinations, veterinary medicine, or home health care. Each province or territory has different requirements to own a pharmacy; however, most require that the pharmacy be owned in whole or majority by a pharmacist licensed in the regulated jurisdiction (Alberta College of Pharmacy, 2020; College of Pharmacists of British Columbia, 2021). Figure 1.3 shows an independent pharmacy.

**Figure 1.3** Independent Pharmacy

Photo by Courtney Thorne

### Chain Pharmacies

A chain pharmacy is typically national and can be a stand-alone pharmacy or be located inside a mass merchandiser. In Canada, Shoppers Drug Mart and Rexall pharmacies are stand-alone pharmacies. These pharmacies are corporately owned, and operating decisions are made by their head offices. Chain pharmacies located in large mass merchandiser stores include Loblaws, Costco, Sobeys, and Walmart pharmacies. Chain pharmacies located in big box stores are typically strategically placed within the store to promote sales of retail merchandise. Figure 1.4 shows a chain pharmacy.

**Figure 1.4** Chain Pharmacy

Photo by Courtney Thorne

### **Franchise Pharmacies**

A franchise pharmacy combines an independent pharmacy and a chain pharmacy into one. The owner will be a licensed pharmacist who will pay a fee for use of the banner name, the right to sell products with franchise branding. An example of a franchise pharmacy in Canada is The Medicine Shoppe.

### **Cooperative Pharmacies**

This kind of pharmacy is an independent pharmacy and very similar to a franchise pharmacy. In a cooperative, when the owner joins the banner, they are also purchasing a share in the company, meaning that the owner also becomes a shareholder. The owner can keep the shares in the company as long as they are an owner of the store. An example of a cooperative pharmacy in Canada is Pharmasave (Pharmasave, 2021).

### **Telepharmacy**

Telepharmacy allows dispensing of medication and providing patient counselling to remote communities that may not have access to a traditional brick-and-mortar pharmacy. In this model there is an accredited traditional pharmacy and a remote location; these are in different locations and will communicate using a secure videoconferencing platform (for example, Zoom, WebEx, Microsoft Teams). In this model, the pharmacy technician is operating the remote location without a pharmacist physically present onsite. The pharmacist will be present at the accredited pharmacy and will be available on demand to the pharmacy technician and patients. The pharmacy technician will prepare the prescription drug for dispensing and the pharmacist will review the patient's profile and perform a clinical check of the medication. Patients receive counselling via the secure videoconferencing platform.

### **Kiosk Pharmacy**

A kiosk pharmacy is a self-serve pharmacy where customers can speak with a pharmacist using videoconferencing technology that is embedded in the kiosk. This kind of pharmacy is like a vending machine but for medications. These are in downtown areas and some rural areas that are not serviced by other kinds of pharmacies.

### **Central Fill Pharmacy**

A central fill pharmacy is a newer kind of pharmacy that has been created to help support community pharmacies and the role that they play in the community. Community pharmacies are evolving in terms of the services that are being offered to patients. While the number of clinical services that pharmacies offer increases, the number of prescriptions does not decrease; if anything, prescription volume may be increasing. This creates an increasing workload on community pharmacies and central filling pharmacies offer

a solution. Community pharmacies can pay a portion of each prescription filled to a central fill pharmacy. The central fill pharmacy will then fill the prescriptions and blister packages for the community pharmacies.



**Check Your Understanding** How do independent pharmacies cater to specific patient populations?

## Overview of Positions

There are several different positions in community pharmacies. These include *pharmacists*, *pharmacy technicians*, and *pharmacy assistants*.

Both pharmacists and pharmacy technicians are licensed in the province that they are practising in. The Pharmacy Examining Board of Canada (PEBC) is the national certification body for the profession of pharmacy in Canada. Both pharmacists and pharmacy technicians must obtain Certificates of Qualification for their respective exams in order to attain licensure. In addition, to obtaining the PEBC Certificates of Qualification both pharmacists and pharmacy technicians must meet provincial requirements through the provincial regulatory authority in the province where they wish to practice (The Pharmacy Examining Board of Canada, 2021).

### Pharmacists

The practice of pharmacy all started with pharmacists compounding herbs and chemicals to create products that would elicit a desired effect. Over time pharmacists' education and role have evolved and now pharmacists have a Bachelor of Pharmacy degree or more commonly a Doctor of Pharmacy degree (PharmD). Community pharmacies require a pharmacist to be present in order for the pharmacy to be open to the public and for dispensing of medications to occur. In Canada, the role of the pharmacist is evolving to be more clinical. Pharmacists are experts at medication management and provide patients with clinical services such as medication reviews, immunizations, injections, wellness programs, and in some provinces, prescribing authority.

### Pharmacy Technicians

Pharmacy technicians have a diploma from a college accredited by the Canadian Council of Pharmacy Programs. Pharmacy technicians assist the pharmacist with technical functions in the pharmacy to ensure that the pharmacist is able to perform their clinical role. Pharmacy technicians maintain medication inventories, ensure that the information is accurate and meets legislated requirements, receive prescriptions from patients, maintain patient records, compound medications that are not commercially manufactured, and bill prescriptions. The role of the pharmacy technician is evolving to include completing technical checks of new and refill prescriptions, transferring

prescriptions, and receiving verbal orders. Pharmacy technicians can educate patients on how to use medical devices including blood pressure monitors, inhalers, and blood glucose monitors. A few provinces have also enabled pharmacy technicians (under the supervision of a pharmacist) to perform a procedure on tissue below the dermis with a lancet device and to supervise a remote dispensing location. Several provinces have enabled pharmacy technicians to administer injections.

### Pharmacy Assistants

Pharmacy assistants are not regulated health care professionals. Pharmacy assistants may have a college certificate but are not required to have completed any formal post-secondary education to be employed in the pharmacy. As unregulated members of the pharmacy team, the pharmacy assistant can perform many tasks in the pharmacy. These tasks include receiving a prescription from a patient, entering prescriptions into the computer, preparing products, placing and receiving orders, and maintaining inventory. It is important to know that as pharmacy assistants are not regulated health care professionals there are tasks that they are not legally allowed to perform.

### Scope of Practice

The profession of pharmacy is regulated by both federal and provincial legislation. Differences in provincial legislation determine the scope of practice in the individual provinces and territories. Both pharmacists and pharmacy technicians are regulated health care professionals, and each have their own **scope of practice**. A scope of practice describes the activities that a health care professional is legally allowed to perform. It is essential that every health care professional understands their scope of practice as well as that of other health care professionals, prior to entering the profession. Understanding scope of practice allows us to understand which activities each healthcare professional is legally allowed to perform. Here is a summary of the scope of practice for both pharmacists and pharmacy technicians across Canada.

**scope of practice** the activities that a health care professional is legally allowed to perform

### Pharmacists' Scope of Practice in Canada


The scope of practice for pharmacists varies in each province or territory. Table 1.1 outlines the scope of practice in each province or territory (at time of printing).

**Table 1.1 Pharmacists’ Scope of Practice in Canada**

PHARMACISTS’ SCOPE OF PRACTICE IN CANADA		BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NWT	NU
Prescriptive Authority (Schedule 1 Drugs)	Independently, for any Schedule 1 drug	X	✓ <sup>5</sup>	X	X	X	X	X	X	X	X	X	X	X
	In a collaborative practice setting/agreement	X	✓ <sup>5</sup>	✓ <sup>5</sup>	✓ <sup>5</sup>	X	✓	✓	✓	X	X	X	X	X
	Initiate <sup>1,2</sup>													
	For minor ailments/conditions	P <sup>7</sup>	✓	✓	✓ <sup>5</sup>	P <sup>8</sup>	✓	✓	✓	✓ <sup>5</sup>	✓	X	X	X
	For smoking/tobacco cessation	X	✓	✓	✓ <sup>5</sup>	✓	✓	✓	✓	✓ <sup>5</sup>	✓	X	X	X
	In an emergency	✓ <sup>9</sup>	✓	✓ <sup>9</sup>	✓ <sup>10</sup>	✓	✓	✓	✓	✓	✓ <sup>7</sup>	X	X	X
Adapt/Manage <sup>1,3</sup>	Independently, for any Schedule 1 drug <sup>4</sup>	X	✓ <sup>5</sup>	X	X	X	✓	X	✓	X	X	X	X	X
	Independently, in a collaborative practice <sup>4</sup>	X	✓ <sup>5</sup>	✓ <sup>5</sup>	✓ <sup>5</sup>	X	✓	✓	✓	X	X	X	X	X
	Make therapeutic substitution	✓	✓	✓ <sup>11</sup>	X	X	✓	✓	✓	✓	✓	✓	X	X
	Change drug dosage, formulation, regimen, etc.	✓	✓	✓ <sup>11</sup>	✓	✓	✓	✓	✓	✓	✓	✓	X	X
	Renew/extend prescription for continuity of care	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X
Injection Authority (SC or IM) <sup>1,5</sup>	Drugs <sup>6</sup>	✓	✓	✓	✓	X <sup>12</sup>	✓	✓	✓	✓	✓	✓	X	X
	Vaccines <sup>6</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X
	Influenza vaccine	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X
Labs	Order and interpret lab tests	X	✓	P <sup>13</sup>	✓ <sup>14</sup>	X	✓	P	P <sup>13</sup>	✓ <sup>15</sup>	X	X	X	X
Techs	Regulated pharmacy technicians	✓	✓	✓	✓ <sup>16</sup>	✓	X	✓	✓	✓	✓	X	X	X

1. Scope of activities, regulations, training requirements and/or limitations differ between jurisdictions. Please refer to the pharmacy regulatory authorities for details.  
 2. Initiate new prescription drug therapy, not including drugs covered under the *Controlled Drugs and Substances Act*.  
 3. Alter another prescriber’s original/existing/current prescription for drug therapy.  
 4. Pharmacists independently manage Schedule 1 drug therapy under their own authority, unrestricted by existing/initial prescription(s), drug type, condition, etc.  
 5. Applies only to pharmacists with additional training, certification and/or authorisation through their regulatory authority.  
 6. Authority to inject may not include all drugs or vaccines. Please refer to the jurisdictional regulations.  
 7. Implementation planned for Spring of 2023.  
 8. To be implemented on January 1, 2023.  
 9. Applies only to existing prescriptions, i.e., to provide continuity of care.  
 10. Pursuant to a Ministerial Order during a public health emergency.  
 11. Applies only to pharmacists working under collaborative practice agreements.  
 12. For education/demonstration purposes only.  
 13. Pending health system regulations for pharmacist requisitions to labs.  
 14. Authority is limited to ordering lab tests.  
 15. Authority limited to ordering blood tests. No authority to interpret tests.  
 16. Pharmacy technician registration available through the regulatory authority (no official licensing).

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 Canadian Pharmacists Association / Association des pharmaciens du Canada

## Pharmacy Technicians' Scope of Practice in Canada

Table 1.2 shows the scope of practice in the nine provinces where pharmacy technicians are regulated. As of July 2021, there were several provinces that have permitted pharmacy technicians to administer injections. Nova Scotia had changes to their Pharmacy Practice Regulations on October 5, 2020 that allow a pharmacist who is authorized to administer drug therapy by injection to delegate this authority to a pharmacy technician (Government of Nova Scotia, 2020). In New Brunswick, pharmacy technicians who are listed on the Active – Direct Client Care register may administer a drug, biological, or blood product as per the Administration of Injections Policy adopted by Council through the following routes of administration: intradermal, subcutaneous, intramuscular, or intravenously (through an established central or peripheral venous access device). Injections may be provided as long as the pharmacy technician has fulfilled the training requirements of the New Brunswick College of Pharmacists (New Brunswick College of Pharmacists, 2021). On November 10, 2021 in Ontario the provincial government amended regulations to authorize pharmacy technicians to inject the influenza vaccine once they have successfully completed an OCP-approved injection training course and register their training with OCP (Bronstein, 2021).



### Check Your Understanding

How are pharmacy technicians integral to the evolution of pharmacy in the future?

**Table 1.2 Pharmacy Technicians' Scope of Practice in Canada**

Scope of Practice	Province								
	AB	BC	MB	NB	NL	NS	ON	PEI	SK
Receive a verbal order (except for controlled substances)	✓	✓	✓	✓	✓	✓	✓		✓
Perform a technical check of a new, refill, or controlled substance prescription	✓	✓	✓	✓	✓	✓	✓	✓	✓
Transfer prescriptions	✓	✓		✓	✓	✓	✓	✓	✓
Provide instructions on how to use medical devices	✓	✓	✓	✓	✓	✓	✓	✓	✓
Perform a procedure on tissue below the dermis with a lancet device under the supervision of the pharmacist							✓		
Supervise a remote dispensing location under the supervision of a pharmacist who is not physically present		✓	✓				✓		
Administer injection to a patient				✓		✓	✓		

Source: Adapted from National Association of Pharmacy Regulatory Authorities. (2022, September). *Pharmacy Technicians' Scope of Practice in Canadian Jurisdictions*. <https://www.napra.ca/wp-content/uploads/2022/09/NAPRA-PT-Scope-of-Practice-in-Canada-chart-2021-12-EN.pdf>

## Regulation of Pharmacy Professionals

The scope of practice for any health care professionals is regulated to ensure that the standards of practice are being met to ensure public protection and safety. Each province or territory will have its own pharmacy regulatory authority. These regulatory authorities have the responsibility and legal authority to protect the public by setting and enforcing standards and guidelines for pharmacy practice in their respective province or territory. In addition, they ensure that the educational standards and training are met by their members (The College of Medical Laboratory Technologists of Ontario (CMLTO), n.d.). If a member of the public is concerned by the practice of a regulated pharmacy professional, they would report their concerns to the regulatory authority in their province or territory. The regulatory authority would receive the complaint, investigate the claims, and may facilitate either a remedial or disciplinary process based on the severity of the incident and conduct of the pharmacy professional. Both pharmacists and pharmacy technicians are accountable to the regulatory authority in their province or territory. Table 1.3 provides the regulatory authority for each province or territory in Canada. Regulatory authorities will provide their members or registrants with regular updates about any changes to federal and/or provincial or territorial legislation changes that occur. Pharmacy professionals are responsible and accountable to keep their practice up to date and ensure that they are following current legislation in their day-to-day practice.

**Table 1.3 Provincial or Territorial Regulatory Authorities**

Province or Territory	Regulatory Authority
Alberta	Alberta College of Pharmacy
British Columbia	College of Pharmacists of British Columbia
Manitoba	College of Pharmacists of Manitoba
New Brunswick	New Brunswick College of Pharmacists
Newfoundland & Labrador	Newfoundland and Labrador Pharmacy Board
Nova Scotia	Nova Scotia College of Pharmacists
Northwest Territories	Northwest Territories Regulatory Authority
Ontario	Ontario College of Pharmacists
Prince Edward Island	Prince Edward Island College of Pharmacy
Saskatchewan	Saskatchewan College of Pharmacy Professionals
Quebec	Ordre des pharmaciens du Québec
Yukon	Yukon Regulatory Authorities

**workflow** the process from the time the prescription is received by the pharmacy to when it is dispensed to the patient

## Workflow in Community Pharmacy

**Workflow** in the pharmacy describes the activities that take place from the time that the prescription is received by the pharmacy until it is received by the patient. Here are the steps that occur from the time that the patient drops off the prescription to when it is picked up.

1. **Prescription Dropoff:** This is a designated area where the patient drops off their prescription for processing. The pharmacy team member who receives the prescription will obtain patient information including:
  - a. Their name, address, and phone number
  - b. Date of birth
  - c. Allergies
  - d. Medical conditions
  - e. Insurance information

The pharmacy team member will also ask when the patient will be picking up the prescription and give an estimate of the time that the prescription is expected to be completed.



### BEST PRACTICE TIP

It is always best to overestimate the amount of time that it will take to prepare the prescription. It is best to have it completed faster than you told the patient than to have the patient waiting. If the prescription is not completed in the time stated, they may be upset and then you will have to deescalate the situation in addition to preparing their prescription.

**hardcopy** the pharmacy's legal record of who received the medication (the patient), the prescriber and drug information

2. **Data Entry:** The prescription is entered into the computer by a pharmacy team member and processed through the patient's insurance (if applicable). After the prescription is entered and processed, a label, **hardcopy**, and receipt are printed. A hardcopy is the pharmacy's legal record of who received the medication (the patient), who the prescriber was and detailed information about the drug dispensed to the patient. A hardcopy must be created for each prescription that is dispensed to a patient. The hardcopy includes:
  - a. The name and address of the person for whom the drug is prescribed
  - b. The name, strength (where applicable), and quantity of the prescribed drug
  - c. The directions for use, as prescribed
  - d. The name and address of the prescriber
  - e. The identity of the manufacturer of the drug dispensed
  - f. An identification number or other designation

- g. The signature of the person dispensing the drug and, where different, also the signature of the person receiving a verbal prescription.

NOTE: If in a jurisdiction where the pharmacy technician is able to complete a technical check of the prescription there should be two signatures: the signature of the pharmacy technician who completed the technical check and the signature of the pharmacist who completed the therapeutic (or clinical) check

- h. The date on which the drug is dispensed
- i. The price charged

**3. Prescription Dispensing:** The correct product as identified on the hardcopy is chosen and packaged accordingly (if necessary), then labelled. If this is an oral solid dosage form (i.e., tablets, capsules) a pharmacy team member will count them and package them in the appropriate vial. Care should be taken to pick the correct vial/packaging to ensure **pharmaceutical elegance**, the physical appearance and packaging of the medication.

**4. Technical Check:** Verification that the technical aspects of the prescription are correct. This includes:

- a. Patient
- b. Prescriber
- c. Drug
- d. Quantity
- e. Directions

**5. Clinical Check:** Verification that the clinical aspects of the prescription are correct. In this step, the pharmacist ensures that the medication is therapeutically appropriate for the patient, and that there are no drug–drug or drug–condition interactions or **contraindications**.

**6. Patient Pickup:** This is a designated area where the patient will pick up their prescription and pay for it (if applicable).

**7. Counselling Area/Room:** This is a private space where the pharmacist will speak with the patient about their medications and where additional professional services may take place.

### pharmaceutical elegance

the physical appearance of the medication and the packaging that is being dispensed to the patient that relays to the patient that their prescription was prepared in a professional way and has a pleasing appearance

**contraindications** an interaction with another medication or condition that would put the patient's health at risk if they started on the new medication



### PHARMACY IN ACTION

A patient comes into the pharmacy with an empty inhaler. The pharmacy technician checks their profile in the computer and sees that they do not have any refills on this medication; they also note that the patient has been taking the medication regularly. It is a Friday night, and the prescriber cannot be contacted until Monday. What should the pharmacy technician do in this situation?

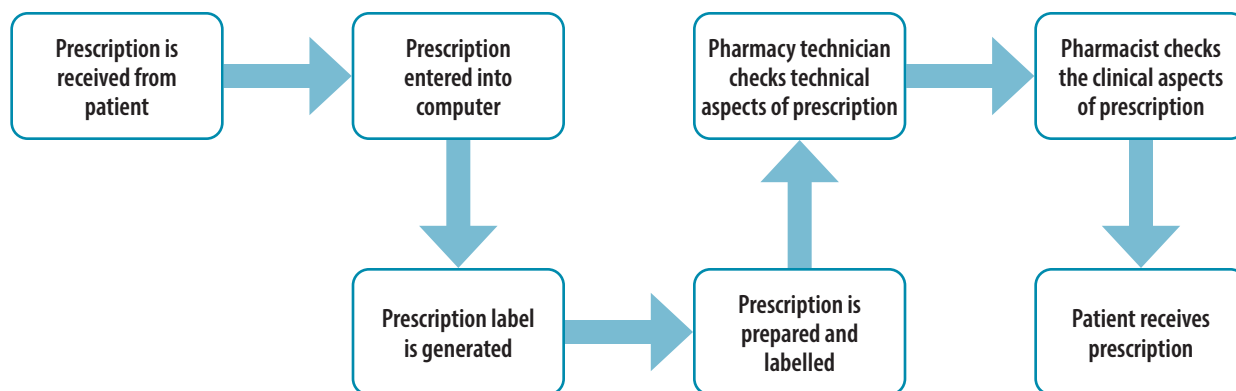
The workflow in a community pharmacy is dependent on several factors including:

1. The layout of the pharmacy
2. Prescription volume
3. Professional services that are offered by the pharmacy

### Traditional Pharmacy Workflow

In a traditional pharmacy workflow, the pharmacy assistant and/or pharmacy technician are responsible for receiving, preparing, packaging, and labelling the prescription. In this model the pharmacist will check the clinical aspects of the prescription after the medication is fully prepared. In community pharmacies where pharmacy technicians are not being utilized then step 5 – the pharmacy technician checks the technical aspects of the prescription – does not occur; instead, the pharmacist will complete both the technical and clinical checks of the prescription. Figure 1.5 outlines the steps that occur in a traditional workflow.

**Figure 1.5** Traditional Pharmacy Workflow



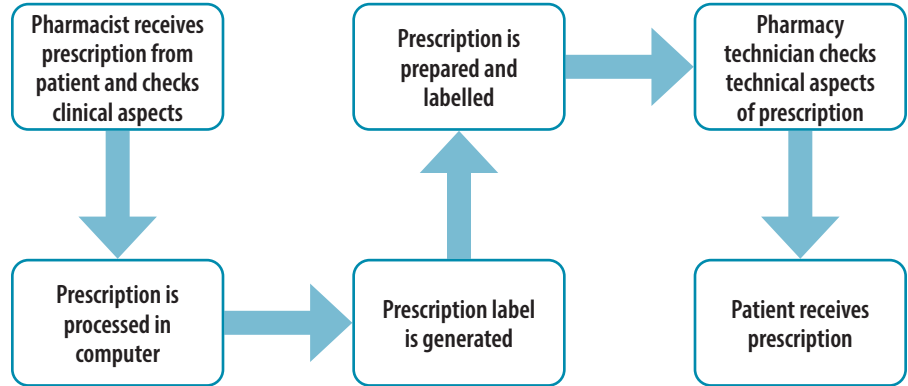
The traditional pharmacy workflow does not fully utilize the scope of practice of the pharmacy technician or the pharmacist. In this model, any pharmacy team member may receive and process the prescription. It is important to note if these tasks are completed by the pharmacy assistant or the pharmacy technician then a clinical check will not occur until the prescription is completely prepared.

### Alternative Pharmacy Workflow

In the alternative pharmacy workflow, the pharmacist is the first point of contact with the patient. This way the clinical check is completed first before

the prescription is processed and prepared by the pharmacy assistant and then checked for technical accuracy by the pharmacy technician. Figure 1.6 outlines the steps that occur in an alternative pharmacy workflow.

**Figure 1.6** Alternative Pharmacy Workflow



This workflow is being adopted by more community pharmacies as it provides greater efficiency and increased utilization of scope of practice; it also allows the pharmacist to focus on the clinical roles in the pharmacy. This change in workflow is imperative as the scope of practice of pharmacists is increasing. This means that pharmacy technicians will continue to take on greater roles and responsibilities in the pharmacy. The role of the pharmacy technician must be maximized to support the clinical activities of the pharmacist.

### Appointment-Based Model

The appointment-based model (ABM) is a newer kind of workflow that focuses on patient-centred care. In this model, the patients have a booked day to pick up all their medications and a pharmacy team member will call the patients prior to their appointment to discuss which prescriptions they need to have filled. At their appointment they will meet with the pharmacist to discuss their medications, how they are working or not working, and discuss their compliance (American Pharmacists Association Foundation, 2016). In this model, the workflow is optimized and somewhat controlled by the pharmacy team members. The pharmacy manager can schedule the staff based on the number of appointments and the minimum number of prescriptions that are expected to be filled on any given day. The pharmacist is completely focused on clinical services and offering patient-centred care. The pharmacy assistants focus on processing and preparing medications and pharmacy technicians are focused on completing technical checks. Full utilization of pharmacy professionals' scopes of practice can be achieved in this model.

## Chapter Review

- Pharmacy has existed since antiquity.
- The symbols that represent pharmacy today originated from Greek mythology.
- The history of pharmacy in Canada begins with Louis Hébert in 1617.
- Regulation of pharmacy technicians began early in the 21st century with Ontario regulating the first pharmacy technicians in 2010.
- Independent pharmacies may offer niche services and are typically owned and operated by a pharmacist.
- Chain pharmacies are corporately owned and operated.
- Franchise pharmacies are owned by a licensed pharmacist who pays a fee to use the banner name, and have the right to sell their products with the franchise branding.
- Telepharmacy has an accredited traditional pharmacy and a remote location. The pharmacy technician can operate the remote location without a pharmacist physically present but must be able to communicate with the pharmacist using a secure videoconferencing platform.
- Kiosk pharmacy is a vending machine kind of pharmacy that utilizes videoconferencing technology for patients to communicate with the pharmacist.
- Central fill pharmacy prepares prescriptions for community pharmacies for a fee to reduce workload in the community pharmacy and create efficiencies.
- Pharmacists in Canada are highly educated and provide clinical knowledge and professional services to patients.
- Pharmacy technicians are responsible for technical functions in the pharmacy which supports the pharmacist in their clinical role.
- Pharmacy assistants are not regulated health care professionals which limits the activities that they can perform in the pharmacy.
- The scope of practice describes the activities that the pharmacist and pharmacy technician can legally perform. The scope of practice varies across Canada.
- Pharmacists and pharmacy technicians are accountable to their provincial or territorial regulatory authority.
- Workflow in community pharmacy is dependent on many factors and should be adjusted to meet the unique needs of each community pharmacy.

## Knowledge Check

1. The Bowl of Hygeia is a bowl with a snake entwined around it. This symbolizes:
  - a. Medicine and health
  - b. The origin of pharmacy
  - c. Food and medicine
  - d. Herbs and disease
2. In ancient Babylonia which of the following people would work in apothecaries?
  - a. Physician
  - b. Pharmacist
  - c. Priest
  - d. Healer

3. This organization began the process of raising the profile of pharmacy technicians and defining their role in pharmacy practice:
  - a. Canadian Council for the Accreditation of Pharmacy Programs
  - b. Canadian Pharmacy Technician Educators Association
  - c. National Association of Pharmacy Regulatory Authorities
  - d. Ontario College of Pharmacists
4. Which of the following pharmacies may not be owned by a licensed pharmacist?
  - a. Independent pharmacy
  - b. Chain pharmacy
  - c. Franchise pharmacy
  - d. None of the above
5. Which kind of pharmacy is dependent on a secure videoconferencing platform?
  - a. Kiosk pharmacy
  - b. Central fill pharmacy
  - c. Independent pharmacy
  - d. Chain pharmacy
6. In which province or territory of Canada are pharmacists NOT able to inject a drug or vaccine?
  - a. Northwest Territories
  - b. Prince Edward Island
  - c. Yukon
  - d. Nova Scotia
7. The practice of pharmacy includes all of the following except:
  - a. Dispensing of medications
  - b. Supplying patients with information about health care aides
  - c. Promotion of health
  - d. Manufacturing medications
8. Pharmacy regulatory authorities in Canada have a mandate to:
  - a. Protect the public
  - b. Provide licensing exams to pharmacy professionals
  - c. Advocate for increased scope of practice on behalf of pharmacy professionals
  - d. Pass legislation to advance practice
9. Which of the following information is NOT required on a hardcopy?
  - a. The name of the patient
  - b. The directions for use
  - c. The signature of the prescriber
  - d. The signature of the person dispensing the drug
10. Which of the following provides the greatest efficiency and full utilization of scope of practice?
  - a. Traditional pharmacy workflow
  - b. Alternative pharmacy workflow
  - c. Appointmentbased method
  - d. All methods are equally efficient
11. In which province is the scope of practice for pharmacy technicians the greatest?
 

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12. What is pharmacy workflow dependent on?
 

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13. Which pharmacy team members are able to receive a prescription from a patient?
 

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