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TechWise

Hiring Smart

A Project of the Council
of the
College of Pharmacists of British Columbia

COLLEGE *of* PHARMACISTS
OF BRITISH COLUMBIA

Introduction

The profession of pharmacy is experiencing considerable change. With an aging population, extended pharmacy hours and a continual increase in practice sites, pharmacists are spread very thin.

Increased enrollment in pharmacy programs, fast-track programs, and the possibility of a satellite pharmacy school may help in the long-term. The short-term outlook is another story. A quick-fix is needed to ensure that pharmacy practice in B.C. continues to be at the forefront of the profession in Canada.

Considering the issues carefully, the College Council identified an opportunity with pharmacy technicians. As a result of the unemployment situation, government-sponsored training programs are actively promoting pharmacy technician courses. The supply of pharmacy technicians appears to be increasing with many programs being offered. The Council initiated the TechWise project to assist pharmacists in British Columbia with:

- Hiring qualified pharmacy technicians to meet the needs of the profession
- Assessing the qualifications and skills of pharmacy technician candidates
- Appropriately utilizing pharmacy technicians for non-professional duties

As a result of the TechWise project, the Council has developed this resource package. It contains tools that are both informative and functional. The tools are:

- An Overview of Pharmacy Technician Training
- Pharmacy Technician Candidate Assessment Questions
- Community Pharmacy Support Persons Bylaw Excerpt
- Community Pharmacy Technician Job Description
- Pharmacy Technician Sample Knowledge Appraisal

The tools may be used "as is" or as a starting point for discussion or development of site-specific materials. An abstract of the TechWise Survey from November 2002 is in the appendix and a graphical representation of the survey results is available on the college website.

The Council sincerely hopes that every pharmacist in B.C. will find at least one "gold nugget" in this package that helps to make professional life a little less stressful. Through enhancing the role of pharmacy technicians, the profession can move forward with providing safe and effective pharmacy practice outcomes for the people of British Columbia.

Table of Contents

Pharmacy Technician Training Programs	Page 2
Pharmacy Technician Candidate Assessment Questions	Page 3
Community Pharmacy Support Persons Bylaw Excerpt	Page 5
Community Pharmacy Technician Job Description	Page 6
Pharmacy Technician Sample Knowledge Appraisal	Page 8

Appendix

TechWise Survey (November 2002) Abstract	Page 14
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Pharmacy Technician Training Programs

There are numerous post-secondary pharmacy technician training programs available throughout Canada. With the absence of national or provincial quality assurance standards for curriculum content and educational outcomes, the employers of pharmacy technicians are left with the task of evaluating both the qualifications of potential employees, as well as their ability to apply the training in everyday practice.

The TechWise research showed that training programs vary in many areas. There are part-time, full-time and correspondence programs currently offered in British Columbia. Programs vary in length from approximately six months to one year or more with no measurable correlation to educational outcomes. Some programs have practicum components while others have no practicums at all. Some of the programs may include aseptic training, hands-on dispensing labs, and compounding techniques with the amount of time devoted to these activities varying widely.

Job applicants may be at the top of their class, but if their training is not specific to the skills needed at your pharmacy then more on-the-job training will be required.

The purpose of this information is not to endorse or discredit any particular program. Instead, it is meant to educate and inform pharmacists who are looking for particular qualifications and skills in job candidates. The following tool has been developed to help an employer determine if an applicant's training is suitable to the practice environment.

Pharmacy Technician Training Assessment Questions

Suggested Use for this document

The following questions are designed to be an aid for evaluating the skills and training of applicants, either prior to or during a job interview. If more information is needed, each question may be expanded using the bullet points provided. Pharmacists are encouraged to use or adapt some or all of the questions as they wish.

Sample Assessment Questions

1. What were the entrance requirements for your training program?
 - What prerequisites did you complete?
 - What did your English, typing, and math assessments consist of?
 - What grade was required to qualify for the program?
2. Describe your training program.
 - What courses were offered by your program?
 - Tell me about what you did during the lab training.
 - What hands-on training did you have with aseptic techniques?
 - What areas did you enjoy most?
 - In what areas would you like more training?
3. Tell me about the computer program training that you had.
 - What software programs did you learn?
 - How would you rate your abilities with these programs?
 - Would you be comfortable demonstrating your data entry ability for me?
(Ask the individual specific questions about the software in use at your location and have them perform some computer functions for you).
4. Tell me what training you have in the following:
 - Pharmacare insurance plans? Explain.
 - Reference-based pricing? What is it? Explain.
 - Low Cost Alternative Program? What is it? Explain.
 - Special Authority? How does it work?
 - Private insurance plans? Which plans are you familiar with?
5. What information do you need on a patient record?
 - How would you find this information from the PharmaNet system?
 - What are the key pieces of patient information needed for a PHN search?

Pharmacy Technician Training Assessment Questions – cont'd

6. How do you handle controlled drug substances (including narcotics) recordkeeping differently than Schedule 1 drugs?
 - Describe the Duplicate/Triplicate Program.
 - What storage requirements are needed for controlled drug substances?

7. What specialized training have you received?
 - Do you have any certification in blood glucose monitoring, vitamin-herbal products, home health care, or computer programs?
 - Do you have any other training that would be relevant to this job?

8. What training have you received in the area of inventory management?
 - Describe what you learned about purchasing procedures.
 - Describe what you learned about record keeping procedures.
 - Tell me about a time that you created and placed a stock order.

9. What activities did you participate in during your practicum?
 - Describe the functions that you participated in.
 - What did your preceptor allow you to participate in?
 - Where did you complete your practicum?
 - Who was your preceptor?
 - May I contact your preceptor for a reference?

10. Do you have any objection to a criminal background check?

Community Pharmacy Support Persons

- (1) No pharmacist may permit support persons or a person who is not a registrant to direct, influence, control or participate in the management of the professional function of the community pharmacy. The pharmacist is solely responsible for the provision of community pharmacy services.

- (2) Functions involving patient-specific monitoring and evaluation of drug therapy must be performed by a pharmacist or by a student or qualifying candidate under the direct supervision of a pharmacist, and include, but are not limited to:
 - a) receipt of a verbal prescription from a practitioner,
 - b) determination of the authenticity of a prescription,
 - c) review of a prescription for completeness and appropriateness with respect to the drug, dosage, route and frequency,
 - d) review of the patient record for potential drug interactions, allergies, therapeutic duplications, and/or potential problems,
 - e) verification of the accuracy of a dispensed prescription,
 - f) verification of the accurate entry of drug and patient information into the PharmaNet patient record,
 - g) dialogue with a patient concerning the patient's drug history and/or patient record,
 - h) consultation with a practitioner with respect to a patient's drug therapy,
 - i) follow-up on a suspected adverse drug reaction,
 - j) dialogue with a patient regarding Schedule II and III drugs, and
 - k) provision of drug and poison information.

- (3) A pharmacist may delegate technical functions relating to the operation of the community pharmacy to support person(s) provided that the pharmacist exercises appropriate supervision of the support person(s) by implementing procedures, checks and controls to ensure the accurate and safe delivery of community pharmacy services.

Community Pharmacy Technician Job Descriptions

Sometimes pharmacists may need to remind themselves to delegate the technical aspects of filling prescriptions and let their pharmacy technicians do these tasks. A well-trained and properly utilized technician is a valuable asset to any pharmacy. When a technician is allowed to do what they have been trained to do, a pharmacist will be better able to focus on providing patients with professional aspects of pharmacy practice. Providing patient care becomes virtually impossible when the pharmacist is involved with all of the administrative and product-related tasks.

As part of the TechWise project, the Council analyzed a sampling of existing community pharmacy technician job descriptions. A brief summary of the main functional areas of the role of a pharmacy technician is described below.

Functions in relation to the **Patient**:

- Maintain the confidential and sensitive nature of the pharmacy/patient relationship at all times.
- Act as a liaison between patient and pharmacist, referring the patient to a pharmacist for any drug or poison information, health advice or medication-related counseling.

Functions in relation to the **Prescription**:

- Receive written prescription and written or verbal refill requests.
- Collect all required patient demographic and prescription information.
- Communicate insurance information to the patient and communicate with insurers.
- Input all patient and prescription data into computer.
- Communicate allergy, interaction and relevant billing information to a pharmacist.

Functions in relation to the **Product**:

- Perform all activities required in preparation of the prescription product for final check. This may include manufacture of sterile products, long-term care packaging, compliance packaging and compounding.

Community Pharmacy Technician Job Descriptions – cont'd

Functions within the **Dispensary**:

- Maintain supplies, equipment and cleanliness of the dispensary to ensure a safe and efficient working environment.

Functions relating to **Inventory Management**:

- Perform all tasks related to ordering, receiving and returning stock, expiry date checks, balance owing, and inventory corrections.

Functions relating to **Payment and Cash Handling**:

- Handle all activities related to collecting payment, processing returns, charge accounts and any cash register related functions.

Functions relating to **Clerical Activities**:

- Perform all required paperwork such as generating reports, prescription filing, and computer updates.

At all times, pharmacy technicians are expected to practice with the highest degree of professionalism. This includes respecting the confidential and sensitive nature of pharmacy practice as well as performing a double-check of their own and other pharmacy team members' work to ensure a consistent level of quality and accuracy. Pharmacy technicians must also identify and contribute to the resolution of unsafe work practices in a non-judgmental, non-punitive manner. Delegating appropriate technical functions and time-consuming aspects of pharmacy practice to pharmacy technicians is key. This, along with appropriate supervision, will help to achieve safe and effective pharmacy practice outcomes for patients.

Additional Reading

For additional reading relating to the expanded functions of pharmacy technicians, consult the "Proposed Pharmacy Technician Competency Profile" published by the Ontario College of Pharmacists. The document is available at www.ocpinfo.com.

Pharmacy Technician Knowledge Appraisal

Suggested Use for this Document

The following knowledge appraisal questions have been compiled to assist pharmacists with evaluating the knowledge of new or existing pharmacy technicians. For job applicants, the knowledge appraisal questions may be used as a screening tool. For existing employees, the knowledge appraisal may be used to identify areas for additional training and development. Pharmacists are encouraged to use or adapt some or all of the questions as they wish. A mark of 80% or greater may correlate to an acceptable level of knowledge for pharmacy practice.

Community Practice Questions

1. How many tablets do you have to dispense for the following prescription?

Rx: Co-Trimoxazole
ii bid x 2/52

2. The recommended dose of erythromycin to treat an ear infection is 50 mg/kg per day, given q6h.

- a) If a child weighs 20 kg, how much erythromycin should the child receive per day?
b) How much drug would the child receive per dose?

3. Convert the following:

0.01 g	= _____ mg	2.54 cm	= _____ inch
1 µg	= _____ g	190 lbs	= _____ kg
5% w/v	= _____ g/100 mL	1 cc	= _____ mL
0.125 mg	= _____ mcg	1 g	= _____ mg
4500 mL	= _____ L	2 kg	= _____ g
750 mg	= _____ g	22 lbs	= _____ kg

4. Choose the correct statement. A generic drug:

- a) contains a different active ingredient than the brand name drug.
b) must meet required bioequivalent standards before it can be sold.
c) is usually more expensive than the brand name drug.
d) has to follow the same approval process as the brand name drug.

5. Interpret the following:

mcg	= _____	o.s.	= _____
bid	= _____	stat	= _____
prn	= _____	mEq	= _____
q8h	= _____	qam	= _____
s.c.	= _____	qhs	= _____
a.u.	= _____	SOB	= _____

Pharmacy Technician Knowledge Appraisal – cont'd

6. Match the brand name with the correct generic name:

<u>Brand Name</u>	<u>Generic Name</u>
(1) _____ Ativan	A. quinapril
(2) _____ Prozac	B. warfarin
(3) _____ Gravol	C. cefuroxime
(4) _____ Xanax	D. dimenhydrinate
(5) _____ Benadryl	E. doxazosin
(6) _____ Coumadin	F. diphenhydramine
(7) _____ Cardura	G. lorazepam
(8) _____ Losec	H. furosemide
(9) _____ M-Eslon	I. etidronate
(10) _____ Didronel	J. zopiclone
(11) _____ Zantac	K. atorvastatin
(12) _____ Vasotec	L. fluvoxamine
(13) _____ Lasix	M. alprazolam
(14) _____ Ceftin	N. omeprazole
(15) _____ Imovane	O. ramipril
(16) _____ Altace	P. digoxin
(17) _____ Accupril	Q. enalapril
(18) _____ Lipitor	R. ranitidine
(19) _____ Luvox	S. morphine
(20) _____ Lanoxin	T. fluoxetine

7. A prescription calls for 25 g of 1% hydrocortisone in clotrimazole 1% cream.

- a) How much hydrocortisone powder would you need?
- b) How much clotrimazole 1% cream would you need?

8. Which drug is not used to treat arthritis

- a) Celebrex
- b) Celexa
- c) Vioxx
- d) Voltaren

9. Which drug is used to treat edema?

- a) Losec
- b) Luvox
- c) Lasix
- d) Lipitor

Pharmacy Technician Knowledge Appraisal – cont'd

10. Translate the following abbreviations:

prn	_____
qd	_____
ac	_____
hs	_____
po	_____
ou	_____
qid	_____
q2-3h	_____
pc	_____
tsp	_____
i gtt od qd	_____
gtt ii os	_____

11. If the prescription directions read: ii qid X 10d, what is the quantity to dispense?

12. What days supply would be entered into the computer for the following prescription?

Ventolin Inhaler ii qid (200 doses/inhaler)

13. A prescription reads: Naproxen 250 mg, 1 to 2 tablets twice daily as needed, Mitte 1 month + 3 repeats. What is the correct quantity to dispense for each fill?

14. Using the information from question 13, what is the total quantity authorized?

15. Translate the SIG and calculate the total quantity to dispense for the following:

Amoxicillin 250 mg caps: ii stat i tid X 10/7

Vasotec 5 mg tabs: iss od X 3/12

16. A Triplicate/Duplicate prescription is considered void after how many days?

17. Which of the following functions is a pharmacy technician is permitted to perform? Circle the correct answer(s).

- a) perform the final check of a prescription
- b) answer a customer's questions about a nonprescription product dosage
- c) take a prescription order from a customer over the phone
- d) make the decision to sell an nonprescription narcotic to a customer
- e) answer the question, "What is the brand name of gabapentin?"

Pharmacy Technician Knowledge Appraisal – cont'd

18. Categorize each of the following medications into one of the following four categories: (N) Narcotic (C) Control (P) Prescription (OTC) Non-prescription.
- a) Aricept 5 mg
 - b) Tylenol #3
 - c) Coactifed Syrup
 - d) Nicoderm 21 mg
 - e) One Touch Test Strips
 - f) Phenobarb 30 mg
 - g) Entrophen 650 mg
 - h) Triphasil 21
 - i) Rivotril 0.5 mg
 - j) Ritalin 10 mg
 - k) Effexor 37.5 mg
19. Dr. Smith phones in to provide a verbal prescription for Ms Jones. He begins to give you the instructions immediately after your greeting. What is the best course of action to take?
- a) Write the doctor's instructions and hand it to the pharmacist to sort out after.
 - b) Notify Dr. Smith that you must put him on hold while you get the pharmacist.
 - c) Notify Dr. Smith that you spoke with Ms Jones earlier and you know exactly what she is requesting.
 - d) Identify yourself as a technician, explain that you are not permitted to take a prescription by telephone, and ask Dr Smith for permission to put him on hold while you notify the pharmacist of the call.
 - e) Tell Dr Smith to call back on the designated telephone line for doctors so that the pharmacist will answer the call.
20. True or False? (circle one)
- | | | |
|---|---|--|
| T | F | PharmaNet requires a patient PHN to process a prescription. |
| T | F | A Duplicate prescription is void after 6 days. |
| T | F | A technician can recommend a vitamin supplement to a patient. |
| T | F | A tourist can buy 6 bottles of 200 AC&C to take to the USA. |
| T | F | Pharmacare allows a maximum of 30 days supply to seniors. |
| T | F | A one-year supply of 21-day birth control tablets is 273 tablets. |
| T | F | All prescriptions must be processed through PharmaNet. |
| T | F | A technician can accept a verbal prescription order from a doctor. |
| T | F | Repeat prescriptions do not require counseling from a pharmacist. |
| T | F | Drug allergies must be recorded in a new patient profile. |

Pharmacy Technician Knowledge Appraisal – cont'd

21. What is the correct metric conversion for the following?

2 fl oz	_____	mL
1 tsp	_____	mL
4 oz	_____	g
3 tbsp	_____	mL
ss tsp	_____	mL
½ oz	_____	g
1 pound	_____	g

22. What auxiliary label would be suitable for 30 Fosamax 10 mg tablets?

NOTE

The following six questions relate to specialized community or hospital practice settings.

23. A patient needs a 350 dose of amikacin. How many mL do you need to draw from a vial containing 500 mg/2 mL of amikacin?

24. Parenteral drug products should be:

- a) free of particulate matter
- b) sterile
- c) free of pyogens
- d) all of the above

25. Fill in the blanks. All manipulations inside a laminar flow hood should be performed at least _____ inches inside the hood to prevent _____.

26. Before working in a laminar flow hood:

- a) interior surfaces should be wiped with 70% alcohol
- b) the hood should be operated for at least 30 minutes
- c) hands should be washed in bacteriocidal soap
- d) all of the above

27. True or False. You are permitted to touch any part of a syringe while making sterile products providing that sterile gloves are worn.

28. The warning "must be diluted" on the container cap and label must be printed by the manufacturer on which of the following products:

- a) potassium chloride injection
- b) vincristine injection
- c) digoxin liquid
- d) amoxicillin suspension

Appendix

TechWise Survey

Abstract

In November 2002, a survey was distributed to all community pharmacies in British Columbia. The purpose of the survey was to gain insight into the duties, roles and attitudes of pharmacy technicians. A total of 309 responses were received from all types of pharmacies (chain, independent etc.) in 69 communities throughout the province. Of the 40% of respondents that reported having a college education, only 49% reported that they have completed a pharmacy technician training program. The survey results showed that...

- More than half of the technicians report that they do less than 40% of all the data entry and pharmacy related paperwork within a given day.
- Technicians are highly involved in prescription product preparation as well as stock ordering and receiving.
- Patients are more likely to encounter a technician at both the drop-off and pick-up areas of the dispensary.
- Insurance issues are mostly the responsibility of pharmacists while inventory management is mostly the responsibility of technicians.
- Most technicians feel that they are utilized effectively and are ready to take on more responsibilities.

The last question on the survey asked technicians to describe how they could contribute to the profession in the future. More than 72% of the survey respondents provided comments that mostly related to a continued support role with a desire to take on more of the data entry and computer functions. Many responses related to the desire to become more involved in patient interactions relating to device training and a need for education and development opportunities for technicians.

Opportunities

The survey results show that there is an opportunity for technicians to take on more responsibility in the areas of data entry, paperwork and insurance issues. With the increasing focus of pharmacists on the identification, prevention and resolution of drug-related problems, one would expect that patients would be more likely to encounter a pharmacist at either the drop-off or the pick-up areas of the dispensary counter. The survey results showed that technicians were often in both of these locations leaving a question as to when and where the pharmacist is consulting with the patient about their drug-related needs. More details of the survey results can be found on the College website at www.bcpharmacists.org.