• Continuing Education •

TECH talk CE

THE NATIONAL CONTINUING EDUCATION PROGRAM FOR PHARMACY TECHNICIANS

Take this course at eCortex.ca

JUNE/JULY 2024

Optimizing Pharmacy Workflow to Improve Efficiency and Patient Safety

by Sarah-Lynn Dunlop, MEd, BA, RPhT

Learning objectives

After successful completion of this continuing education program, pharmacy technicians will be able to:

- Recognize the importance of an efficient pharmacy workflow
- Implement steps to improve pharmacy workflow and efficiency
- Discuss the role of pharmacy technicians to optimize workflow and protect patient safety

Introduction

The goal of pharmacies is to provide safe and effective health care services to patients in a timely manner. The best way to accomplish this is with an efficient workflow. Workflow can be described as the process of dispensing medications—from the point of receiving a prescription or refill until the medication is released to the patient. With the changing scope of practice, Canadian pharmacies do more than dispense medications and need to balance dispensing with additional services. By implementing an efficient workflow and optimizing the role of the pharmacy technician, pharmacies can help ensure they are safely providing the right care at the right time.

An educational service for Canadian pharmacy technicians,
brought to you by Teva www.tevacanada.com

APPROVED FOR 1.5 CE Units

Approved by the Canadian Council on Continuing Education in Pharmacy. CCCEP #1329-2024-3791-I-T.

CE JUST FOR TECHNICIANS

Tech Talk CE is the only national continuing education program for Canadian pharmacy technicians.

As the role of the technician expands, use Tech Talk CE as a regular part of your learning portfolio.

Tech Talk CE is generously sponsored by Teva. Download back issues at eCortex.ca. The author has no competing interests to declare.

INSTRUCTIONS

1. After carefully reading this lesson, go to eCortex.ca to complete the questions.
2. Answer the test online at eCortex.ca. To pass, a grade of at least 70% is required.
3. Complete the required feedback for this lesson online at eCortex.ca.

CE FACULTY

CE Coordinator:
Rosalind Stefanac

Clinical Editor:
Lu-Ann Murdoch, BScPhm

Author:
Sarah-Lynn Dunlop, MEd, BA, RPhT

TAKE THIS COURSE AT
eCortex.ca

Improving workflow and efficiency is a team effort and, being the technical experts in drug distribution, pharmacy technicians are optimally positioned to analyze current workflow and collaborate with each member of the pharmacy team to implement strategies to improve efficiency.

Importance of an Efficient Pharmacy Workflow

An efficient pharmacy workflow can increase productivity and improve access to clinical services provided by pharmacists (see Table 1), benefiting both the pharmacy and patients.

An efficient workflow can decrease the amount of time it takes to fill a prescription, thereby decreasing patient wait times and increasing the number of prescriptions that can be safely filled in a day. Decreased wait times can help improve patient satisfaction and prevent patients from becoming frustrated and leaving the pharmacy without their prescription and/or changing pharmacies. These can also help decrease operating costs of community and hospital pharmacies, increase profitability of community pharmacies, and decrease stress on the pharmacy team.[3, 4] An efficient pharmacy workflow has been shown to improve patient safety by reducing the occurrence of adverse drug events and medication errors, and increasing pharmacist interventions and clinical services, which help improve medication adherence and shorten hospital stays.[4]

Workflow Challenges

Community pharmacies in Canada dispense more than 820 million prescriptions every year.[1] Implementing additional clinical services and being able to sustain the expected level of dispensing care is a challenge in a busy pharmacy environment, especially if it is understaffed and during high volume periods. It is important to have the correct staffing balance consisting of pharmacists, pharmacy technicians and assistants. This is especially the case during high volume periods as it can lead to pharmacists spending more time completing technical tasks during the dispensing process, such as performing technical checks and managing inventory issues, rather than devoting their time to clinical services.[5]

Steps to Improving Workflow & Efficiency

To improve workflow and efficiency, pharmacy team members must work together to:

- observe and analyze the current workflow
- establish new processes to improve workflow
- continually monitor and measure success.

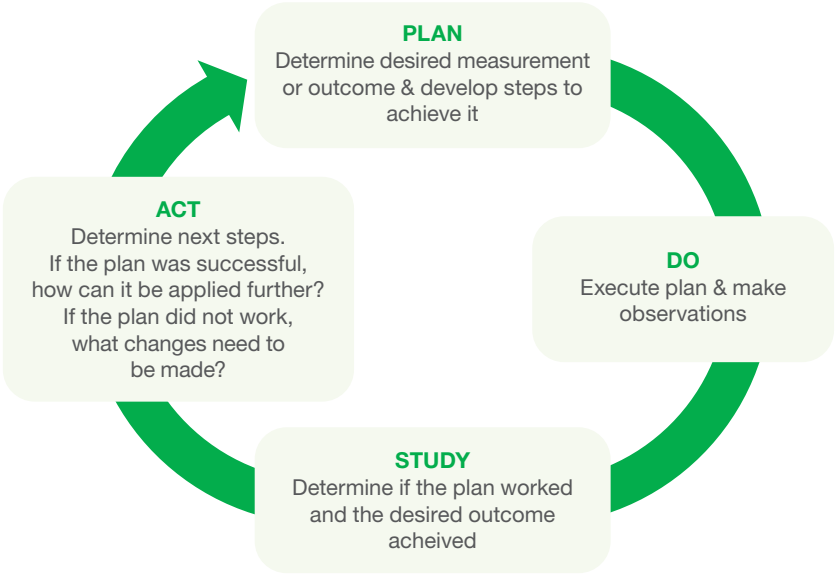
TABLE 1 - Review of Clinical Services Provided by Pharmacists[1,2]

Assessing & prescribing for minor ailments
Counseling patients on new and repeat prescriptions and over the counter medications and home healthcare needs
Prescribing & dispensing new antiviral therapies for influenza & COVID-19
Contraception provision
Adapting, renewing, and extending prescriptions
Performing medication reviews and care plans
Independent prescribing
Optimizing medication therapy
Chronic disease management
Supporting health promotion & disease screening
Vaccinations
Ordering and interpreting laboratory and Point-of-Care tests

BOX 1 - Questions to Consider When Observing and Analyzing Workflow

- How often do pharmacy team members need to leave their workstation to obtain tools required to complete a task?
- How much time does it take for pharmacy team members to leave their workstation to obtain tools required to complete a task?
- What required tools are missing at workstations and can they be moved to the workstation where the task is completed?
- How many steps are involved in completing tasks?
- How many individuals are involved in completing a task?
- Are any of the steps redundant?
- Are there established processes and safeguards in place for completing tasks?
- Are there times when any staff member(s) are waiting to complete a task?
- How long are patients waiting for a prescription?
- How long are patients waiting to engage with a pharmacist?
- Are all pharmacy team members working to their full potential and scope of practice?

FIGURE 1 - Plan-Do-Study-Act Model[NR]



Observe and Analyze Current Workflow

The pharmacy team should determine what part(s) of workflow is working well and the areas that require improvement.[4] This can include mapping out the workflow, measuring productivity, and identifying bottlenecks, all of which can help identify inefficiencies and situations or processes that could compromise patient safety. See Box 1 for questions to

TABLE 2 - Strategies for Improving Workflow Through Physical Layout [3,4,6,7,8]

Strategy	Purpose
Establish processes and a clearly defined workflow direction	Creates clear stages with established checkpoints to help ensure each stage is completed
Examples: • Linear workflow moving left to right from prescription drop-off to processing to filling to the technical check • Separate prescription drop-off and entry stations, when possible, to help minimize distractions and interruptions • Implement contingency plans for situations that will delay the processing of prescriptions, such as adjudication issues in community pharmacy • Ensure pharmacy team members are trained to double check the prescription that was entered before filling the prescription to help avoid time needed to change and re-bill the prescription and reduce the error rate	
Ensure workstations are set up with all tools necessary to complete tasks	Streamlines movement & helps prevent the unnecessary wasting of time
Examples: • Computer at the prescription drop-off station to allow the pharmacy team member to quickly determine: - if a patient is new or established - create or maintain a complete & accurate patient profile - determine if a medication is new - identify changes to a medication - identify potential situations that may cause a delay and/or require pharmacist intervention (e.g., unexpected dose change, allergies, duplicate drug, drug coverage, eligibility for pharmacy services) • Prescription entry stations should be equipped with calculators and easy access to resources, such as pseudo-DINs, easy to access resources related to drug information in both community and hospital pharmacies (e.g., eCPS, Lexicomp, formularies), and inventory. • Filling station (select, prepare, and package) should be equipped with all necessary tools, such as: - counting trays and spatulas - alcohol and wipes to clean counting trays and spatulas - bins for pharmaceutical waste - vials with both child resistant and easy open lids or snap caps - ointment pots - liquid medication bottles and lids (including child resistant lids, seal safe bottle closures, oral syringes and/or medicine cups), - auxiliary labels - calculators - computer • Manual oral liquid unit dose re-packaging station in hospital pharmacy should have oral unit dose containers, oral syringes, a computer, labels and a printer to create labels, as well as a sink nearby for handwashing. • Checking stations, both for the technical check and the clinical check should be equipped with a computer, with easy access to drug information resources, and calculators.	
Use organizational tools	Prioritize workflow, provide quick visual to pharmacy team, and help reduce errors
Examples: • Colour-coded baskets can be used to indicate prescriptions that: - need to be delivered - have an issue that needs to be resolved - include medications that need to be stored in the fridge, reconstituted upon release, or compounded	
Create and use stamps or pre-printed forms	Reduce the amount of time writing out the same information.
Examples: • "Balance" stamp when there is insufficient medication to fill a prescription and a balance is owed to the patient • "Deductible" stamp when patients are working on an insurance deductible • Pre-printed "Stop Note" on which pharmacy staff can quicky select why a prescription has not been fully completed, such as requiring reconstitution upon dispensing, or to communicate additional information, such as the pharmacist wanting to speak to the patient at pick up. • Standardize Patient Intake Form (discussed below)	

consider when evaluating workflow. It may be beneficial to ask each team member these questions since their opinions can be diverse or to have pharmacy professionals from another pharmacy observe workflow and provide feedback.

Mapping workflow should include observing the various tasks that must be performed and determining if all resources required to complete a task are readily available.[4] Having all tools needed to complete a task at workstations decreases the amount of time pharmacy team members spend looking for and retrieving supplies, which helps increase productivity.

Each individual pharmacy should determine what success in terms of productivity looks like for them. This may include determining how many prescriptions are dispensed in a day and how much time the pharmacist has to focus on clinical services versus technical functions. Documenting and analyzing medication incidents and/or near misses to look for patterns can also be beneficial.[4,6]

While observing workflow, the pharmacy team should be looking for bottlenecks – points where the workload demands exceed the capacity of the team to effectively manage the workload. [7,8] Upon identifying bottlenecks, the team should look for patterns and consider the source. For example, are these short-term or unexpected (for example, being unexpectedly short-staffed due to staff illness) or chronic, long-term bottlenecks that are occurring on a regular basis? Are bottlenecks occurring at the same time and in the same stages of workflow?

Establish New Processes to Improve Workflow

After observing the current workflow and identifying inefficiencies or areas for improvement, the pharmacy team should work together to establish priorities and set clearly defined, measurable goals, new processes, roles and responsibilities, and implement strategies to improve workflow.[4, 8] Suggestions of how to improve workflow are discussed further below.

Monitor and Measure Success

Once goals have been set and new strategies implemented to help achieve these goals, the new workflow must be moni-

tored, and productivity measured. For example, if the goal was to increase the number of prescriptions that can comfortably be dispensed in a day without the need for excess patient waiting or staff overtime, data must be gathered and analyzed to determine if the new processes designed to help improve workflow have been successful or if additional strategies need to be implemented. Such observations and analyses should be performed on an on-going basis to ensure continual workflow efficiency and patient safety and can be done using the Plan-Do-Study-Act model. See Figure 1.

Hospital Pharmacy & Workflow

Workflow in hospital pharmacies is uniquely influenced by the rhythm of the individual hospital.[4] This includes when health care teams perform rounds (meetings to share important patient updates and to discuss care plans), patient admissions and discharges, drug delivery and medication administration times, and schedules throughout the hospital.[4] When designing workflow in hospital pharmacies, it is helpful to gather insights from the various areas within the hospital that pharmacy services.[4] For example, loading an automated dispensing unit (ADU) during medication administration time will negatively impact both the nurse retrieving medication and the pharmacy technician loading the ADU, leading to an inefficient workflow.

Ways to Improve Pharmacy Workflow

The set-up of workflow will be unique to each pharmacy, depending on its size, space, design, workload, and services provided. The pharmacy team can work on areas to improve including the physical layout, use of technology and automation, and appropriate use of well-trained personnel.

Physical Layout

A well-designed and organized physical layout is essential to optimal workflow and can help reduce redundancies, confusion, and errors.[3,4,8] Physical layout and workflow should optimize time, space, and personnel, allowing the pharmacy team to complete tasks without (or with minimal) interruptions.[4] Physical workflow should have an established process and clearly defined direction to help ensure no steps are missed and workstations should be set up with all the tools staff need to accurately complete their tasks.[3,4,6,8] See Table 2.

TABLE 3 - Technology and Automation[10]

Strategy	Purpose
Paperless Workflow	• The use of scanning technology allows pharmacies to scan prescriptions and all accompanying documentation to a patient's profile. • Can eliminate time spent filing paper copies and reduces the amount of time it takes to retrieve documentation when needed. • For example, in the event of a drug recall, it is much faster to determine which patients received the drug and Lot number in question by reviewing their electronic profiles than it is looking through filed paper copies.
	• In hospital, the use of Computerized Physician Order Entry (CPOE) can help improve workflow and efficiency, allowing physicians to enter all orders directly into the software system. • Reduces the time it takes for orders to be processed and administered to patients by eliminating the need for pharmacy technicians to collect paper orders on rounds, filter through orders for pharmacy orders, and enter the orders. • Pharmacists can remotely perform clinical checks after physician order entry, either from the pharmacy department or stations on the units.
Barcode Scanning	• Bar-coding scanning technology can be used throughout the dispensing process, including when selecting products used in compounding to help ensure correct product selection and protect patient safety. • When implementing barcode scanning technology, it is important to identify and prevent known workarounds and ensure staff are educated about the importance of safeguards and the risks of circumventing these safeguards. • For example, when more than one package of a medication is required to fill a prescription, it is important to scan each individual package rather than scanning the same package multiple times.
Inventory	• Management of inventory and ordering is an example of a low-level task that can be performed through technology and automation, allowing pharmacists and pharmacy technicians to focus on additional tasks throughout the day. • Requires intervention of pharmacy team members to ensure the virtual order is correct and to manage drug shortages. • Automated filling technology or robots used to count, package, and label frequently used medications can also help increase workflow and efficiency.
IVR and Online Booking Systems	• The use of Interactive voice response (IVR) and online booking systems enable patients to phone in refill requests on prescriptions and book appointments for clinical services without requiring pharmacy team members to answer the call, which helps decrease interruptions and distractions during critical dispensing functions.

Technology and Automation

Use of technology and automation to complete lower-level tasks, such as counting medication, allows pharmacists and pharmacy technicians to focus on the highest-level duties according to their education, training, and scope of practice.[7] This can help increase the number of prescriptions filled and decrease patient wait times, as well as increase patient access to additional services, the amount of time pharmacists can devote to clinical services, and enhanced patient interactions. When pharmacy technicians have more time to work to their full scope of practice, including administering vaccines and point-of-care tests and completing Best Possible Medication Histories (BPMH), this can allow pharmacists additional time to handle additional clinical duties or administrative tasks. Examples include a paperless workflow, barcode scanning, virtual inventory, and online booking systems. See Table 3.

Standardized Patient Intake Forms

Usually, a patient's first point of contact with the pharmacy team is at prescription drop-off. At the prescription drop-off station, pharmacy team members must gather and docu-

ment all information required to create a new patient profile or to accurately maintain an established patient profile and to ensure the pharmacist can complete a thorough and accurate clinical check. To help ensure all information is gathered and documented and help relieve bottlenecks at the drop-off station, community pharmacies can create a checklist of all essential questions to ask all new and established patients or implement a Standardized Patient In-Take Form.[6,10] See Box 2. Similarly, in hospital pharmacy, standardized Best Possible Medication History (BPMH) forms can be used to ensure all pertinent information is accurately gathered. ISMP (Institute of Safe Medication Practices) has created a guide pharmacy technicians can use and can be accessed at https://www.ismp-canada.org/download/MedRec/SHN_medcard_09_EN.pdf

BOX 2 - Examples of Information to Gather on a Standardized Patient In-Take Form

- Patient Name (Last Name, First Name, Used Name)
- Date of Birth
- Weight (for pediatric patients)
- Sex assigned at birth
- Demographic Information (Address, Phone Number, etc.)
- Insurance
- Allergies
- Medical Conditions
- Changes to overall health
- New or Established Patient
- Medications filled at other pharmacies
- Over-the-Counter (OTC) Use, including natural health products
- Smoking, Alcohol Use, Cannabis Use, Illicit Drug Use
- Pregnancy or Breast-Feeding
- Indication for use of medication prescribed

BOX 3 - Possible Strategies for Improving Workflow and Efficiency in Scenario A

- Implement the use of a Standardized Patient Intake Form at prescription drop-off station
- Hire a second pharmacy technician to complete technical checks OR place a well-trained pharmacy assistant at prescription drop-off to monitor for potential issues & allow the only pharmacy technician to completed technical checks
- Train pharmacy assistants at filling station to check prescriptions prior to filling and sending for technical and clinical checks
- Station the pharmacist in an office close to the dispensary to complete clinical checks, ideally before the prescription is filled, where they can also provide patient counselling while being removed from the technical drug distribution process

The Pharmacy Team

A pharmacy team consisting of motivated pharmacists, pharmacy technicians, and pharmacy assistants who all understand the importance of an efficient workflow, as well as the roles, responsibilities, and scopes of practice of all team members is essential to optimal workflow and improved patient safety.

It is important to have established roles for each station and to ensure that each employee understands what they are responsible for during each shift, such as who is responsible for answering the phone or waiting on patients and customers.[8] This will help keep everyone on task and prevent congestion throughout the dispensing process. While everyone should have a clearly defined role for a shift, employees should also be cross-trained within their scope of practice to ensure workflow does not come to a stop if an individual is absent or busy with a patient.[8]

Pharmacy technicians who work to their full scope of practice are essential to providing pharmacists with time to engage in clinical services. In many jurisdictions, pharmacy technicians are performing all technical functions in the drug distribution process, such as performing a technical check on filled prescriptions, administering injections after a pharmacist has assessed the patient, receiving verbal orders for regular prescriptions, educating patients on the use of drug administration and medical devices, transferring prescriptions, and developing master compounding formulas.[11] When pharmacy technicians perform these tasks, pharmacists are able to spend more time engaging with patients, assessing patients' unique needs and goals, providing services and care that promote optimal outcomes, and continually monitoring patients to ensure therapy continues to be optimal.[12]

Scenarios

Review the following scenarios. Reflect on some of the suggestions for improving workflow discussed and identify some possible strategies for improving workflow and efficiency.

Scenario A:

Community Pharmacy A has been operating with one pharmacist, one pharmacy technician, and two pharmacy assistants per shift. The pharmacy technician works at the drop-off station, gathering patient information, monitoring for potential issues, such as allergies, dosing changes, etc., that may require pharmacist intervention, and prioritizing prescription workflow.

Prescriptions are processed by one pharmacy assistant and filled by an automated filling robot and the second pharmacy assistant, who is also responsible for answering the phone, and finally passed to the pharmacist who performs both the technical and clinical check.

The team notices that they typically experience congestion at the checking stage of the dispensing process, with the pharmacist catching technical errors and sending the prescription back to be fixed, then trying to catch up on clinical checks and patient counselling, leaving patients frustrated with the amount of time they wait and resulting in some patients leaving altogether.

Scenario B:

Rural Hospital Pharmacy B uses a modified unit dose dispensing system, where nurses remove all medications from the automated dispensing unit. The pharmacy department regularly has 5 pharmacy technicians and 2 pharmacists working at a time. There is a pharmacy technician who gathers all orders throughout the hospital and enters them, a pharmacy technician responsible for performing a technical check on all entered orders and a pharmacist who performs a therapeutic check on all orders. Another pharmacy technician loads all automated dispensing units (ADUs) in the hospital and 2 additional pharmacy technicians are

BOX 4 - Possible Strategies for Improving Workflow and Efficiency in Scenario B

- Use CPOE (Computerized Physician Order Entry). Orders can be processed in a timelier fashion when the physicians enter orders as they write them rather than waiting on a technician to finish entering orders and then collecting additional orders to enter (especially when hospital orders can change quickly and frequently). This can eliminate the need for a pharmacy technician to enter the orders and a second technician to perform a technical check.
- Designate a technician to ensure all medications are packaged in unit dose packaging to meet the demands of the patients.
- Consider having both pharmacists working on hospital units to perform therapeutic checks and provide patient care.

responsible for all compounding (non-sterile and sterile). The pharmacy technician who performs technical checks on entered orders, is also responsible for performing independent double checks on the medications to be loaded in the ADUs. Unit dose packaging of medications is performed by the technician who has time to do so. The second pharmacist works on the floors of the hospital, collaborating with other health care professionals and providing direct patient care. The pharmacy team notes that it can be challenging to load the ADUs as they frequently do not have enough medications packaged.

Conclusion

An efficient workflow is required to offer consistent, sustainable pharmacy services to patients while ensuring accuracy and protecting patient safety. The pharmacy team must work together to observe and analyze workflow processes, looking for inefficiencies and developing strategies to address areas for improvement. This includes setting up a physical layout that promotes optimal workflow, the use of automation and technology, and ensuring pharmacy technicians work to their full scope of practice and potential to allow pharmacists to provide enhanced clinical services.

REFERENCES

1. Neighbourhood Pharmacy Association of Canada. Impact report 23: Enabling the community health hub of tomorrow. https://neighbourhoodpharmacies.ca/sites/default/files/2024-02/2023%20Neighbourhood%20Pharmacies%20Impact%20Report%20F_0.pdf (accessed March 9, 2024).

2. National Association of Pharmacy Regulatory Authorities (NAPRA). Scope of practice for pharmacists in Canadian jurisdictions. (August 2023). https://www.napra.ca/wp-content/uploads/2021/12/NAPRA-Scope-of-Practice-Pharmacists-EN-2023-08.pdf (accessed March 11, 2024).

3. TelePharm. 3 tips to improve your retail pharmacy workflow. (n.d.) https://blog.telepharm.com/3-tips-to-improve-your-retail-pharmacy-workflow (accessed February 28, 2024).

4. Fox, D. Streamlining hospital pharmacy workflow: Enhancing efficiency for optimal patient care. (July 11, 2023). https://www.completerx.com/blog/improve-hospital-pharmacy-workflow/#:~:text=Having%20an%20efficient%20workflow%20that,and%20increases%20overall%20staff%20satisfaction. (accessed March 11, 2024).

5. Ontario College of Pharmacists [OCP]. (2019, May 7). Optimizing Patient Care Series: Managing workflow in my busy community pharmacy [Video]. Ontario College of Pharmacists. https://www.ocpinfo.com/video/optimizing-patient-care-series-managing-workflow-in-my-busy-community-pharmacy/?hilite=optimizing+patient+care (accessed March 10, 2024).

6. Beaton, C. Five causes of medication errors that significantly increased during COVID-19. (November 2, 2022). https://www.canadianhealthcarenetwork.ca/five-causes-medication-errors-significantly-increased-during-covid-19 (accessed March 1, 2024).

7. RAO. Major tips to improve pharmacy workflow. (November 3, 2023). https://raoinformationtechnology.com/blog/major-tips-to-improve-pharmacy-workflow/ (accessed February 28, 2024).

8. RPh on the Go. 3 tips to improve your retail pharmacy workflow. (October 13, 2022). https://www.rphonthego.com/blog/3-tips-to-improve-your-retail-pharmacy-workflow/ (accessed February 28, 2024).

9. Agency for Healthcare Research and Quality. Plan-Do-Study-Act Worksheet, Directions, and Examples. (February 2015). https://www.ahrq.gov/health-literacy/improve/precautions/tool2b.html (accessed April 3, 2024).

10. Institute of Safe Medication Practices (ISMP). Near events for community pharmacy. (March 30, 2021). https://ismpcanada.ca/wp-content/uploads/ISMPCSB2021-i3-Community-Pharm-Assessments.pdf (accessed March 12, 2024).

11. National Association of Pharmacy Regulatory Authorities (NAPRA). Pharmacy technicians' scope of practice in Canadian jurisdictions. (December 2021). https://www.napra.ca/wp-content/uploads/2022/09/NAPRA-PT-Scope-of-Practice-in-Canada-chart-2021-12-EN.pdf (accessed March 11, 2024).

12. National Association of Pharmacy Regulatory Authorities (NAPRA). Model standards of practice for pharmacists and pharmacy technicians in Canada: Domains and standards quick reference guide. (February 2022). https://www.napra.ca/wp-content/uploads/2022/11/NAPRA-MSOP-QRG-Feb-2022-EN-final.pdf (accessed March 11, 2024).

QUESTIONS

Find and answer the questions for this CE lesson—as well as additional interactive questions—online at eCortex.ca. Search using all or part of the course title.

1. An efficient workflow benefits patients by:
a) Decreasing the risk of hospital stays
b) Decreasing patient frustration
c) Increasing the likelihood of the patient leaving the pharmacy without their prescription
d) A & B only
e) A, B, and C

2. The best person to evaluate pharmacy workflow and efficiency is:
a) Designated Manage (DM) or Director of Pharmacy
b) Pharmacists
c) Pharmacy Technicians
d) Pharmacy Assistants
e) A & B only
f) All of the above

3. Collecting data regarding the number of prescriptions filled in a day is the best way for pharmacies to measure productivity.
a) True b) False

4. Pharmacy A collected data on their workflow efficiency and implemented the use of an automated filling station to help increase productivity, which was measured by the number of prescriptions filled in a day. After working with the new technology for several weeks, the pharmacy team noted that their prescription count per day increased, however, there were still a number of prescriptions each day that they were not able to complete. Which of the following should the pharmacy do?
a) Return the automated filling station
b) Purchase another automated filling station
c) Observe and evaluate other processes in workflow
d) A & C

5. Use of a standardized patient in-take form at prescription drop-off can help improve workflow efficiency and patient safety by:
a) Ensuring all information required to create or maintain a complete and accurate patient profile is gathered
b) Ensuring the pharmacist has enough information to complete a thorough clinical check
c) Increasing the amount of time the phar-

macy team member spends with patients at prescription drop-off
d) A & B
e) A, B & C

6. An efficient workflow has the following benefits on the pharmacy:
a) Decreases stress on the pharmacy team
b) Improves profitability of the pharmacy
c) Increases the number steps pharmacy team members take in a day
d) A & B
e) A & C

7. A hospital pharmacy is organized with all pharmacists stationed on units throughout the hospital and all technicians in the pharmacy department. Within the department, there are designated areas for work and storage. All computers are in one area and printers together in the corner. There is a wall of shelving holding all medication dispensing containers and then designated stations for pre-packaging medications. Pre-packaging of oral solids is done with technology and pre-packaging of oral liquids is done manually. This workflow allows for optimal efficiency when pre-packaging oral liquids?
a) True b) False

8. Technology and automation can help improve workflow efficiency and patient safety by:
a) Decreasing interruptions during critical functions
b) Decreasing pharmacist interventions
c) Decreasing time spent on higher-level functions

9. At Pharmacy B, a busy community pharmacy, a pharmacy technician is situated at the prescription drop-off station which is also used as the prescription entry station. This workflow can lead to which of the following:
a) Decreased errors
b) Frequent interruptions at prescription entry
c) Staff at the filling and checking stations waiting to complete tasks
d) A & C
e) B & C

10. Pharmacy C is a small pharmacy that operates with three pharmacy assistants and one pharmacist per shift, requiring the pharmacist to perform all technical checks along with their clinical responsibilities. The pharmacist must return prescriptions that have been processed or filled incorrectly and finds it difficult to teach the assistants about the errors. These errors have been causing a lot of stress on the pharmacy team, especially during high-volume periods. Which of the following strategies would be beneficial?
a) Consider investing in an automated filling station
b) Invest in a pharmacy technician
c) Invest in further training of pharmacy team members
d) Any of the above strategies would be beneficial

11. Pharmacy D is a busy community pharmacy with frequent staff turnover. Lately, antibiotic suspensions that require reconstitution have been mixed prior to the patient or caregiver arriving to pick-up the medication. This has led to mixed medication sitting on the shelf for a couple of days in a few instances resulting in the medication being wasted and the patient having to wait while a new label is printed, and new medication is reconstituted. Which of the following strategies could the pharmacy implement to help address this workflow inefficiency?
a) Use of pre-printed stop notes to indicate reconstitution is required upon pick-up
b) Use of colour-coded baskets to indicate a medication that requires reconstitution
c) Investment in appropriate education of staff
d) A & B only
e) A, B, and C

12. At Pharmacy E, a pharmacy assistant, Brynn, is the only staff member dedicated to processing and filling compliance packs, which are then checked by a pharmacy technician. Brynn's child has unexpectedly fallen ill, and Brynn has been off work for the last 4 days and there is no additional staff to fill in, resulting in the delay of compliance packs being dispensed. Which of the following workflow inefficiencies has led to this delay?
a) Lack of cross-training
b) Insufficient staffing compliment
c) Pharmacy assistant not having adequate support from a partner to stay home with the ill child instead
d) A & B only
e) A, B, and C

TECH talk CE Presented by pharmacy PRACTICE + BUSINESS eCortex.ca Sponsored by teva

Optimizing Pharmacy Workflow to Improve Efficiency and Patient Safety

1.5 CE Units • JUNE/JULY 2024
To find this lesson, enter the CCCEP number 1329-2024-3791-I-T online at eCortex.ca

***REFERENCE ONLY**

1. a b c d e	**4.** a b c d	**7.** a b	**10.** a b c d
2. a b c d e f	**5.** a b c d e	**8.** a b c	**11.** a b c d e
3. a b	**6.** a b c d e	**9.** a b c d e	**12.** a b c d e

Accredited by the Canadian Council on Continuing Education in Pharmacy

Questions?
Email **ecortex@canadianhealthcarenetwork.ca** or call **1-877-687-7321**