



Hospital Pharmacy in Canada Survey 2020/21

The 22nd survey of hospital pharmacy practice in Canada is conducted by the Hospital Pharmacy in Canada Survey Board, an affiliate board of the Canadian Society of Hospital Pharmacists.

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To view previous survey reports, go to [HPC Survey Website](#).

CSHP thanks the following sponsors for making the 2020/21 survey possible.



As with all industry partnerships, the editorial direction, content, survey design, analysis and interpretation remain the sole purview of the CSHP HPC Survey Board. Sponsorship funding supports the technical production of the report, including the survey programming, French translation, publication, copy editing, and other requirements.



Hospital Pharmacy in Canada Survey 2020/21

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CSHP Hospital Pharmacy in Canada Survey Questions

On March 31, 2021, did you have [acute care beds](#) at your facility (excluding bassinets for newborns)?

*If your facility has less than 50 acute care beds,
you will be directed to the Small Hospitals Survey.*

*If you have 50 or more acute care beds,
you will be directed to the full survey.*

- No, we do not have any acute care beds
- We have 1 to 49 acute care beds
- We have 50 or more acute beds

Section A – Hospital Information

Please review the following explanations and definitions of terms used in this section:

Acute care

Provision, to a patient who has been formally admitted to a bed in a facility, of the necessary treatment for a disease or severe episode of illness for a short period. Patients are discharged from acute care as soon as they are healthy and their condition is stable. **Note:** Palliative care beds and alternate level of care (ALC) beds may be classified as acute or non-acute, according to how they are designated within a given facility.

Non-acute care

Inpatient care that is not of an acute nature, encompassing the following types of care: long-term care (LTC), rehabilitation, chronic care and complex continuing care. **Note:** Palliative care beds and alternate level of care (ALC) beds may be classified as acute or non-acute, according to how they are designated within a given facility.

Alternate level of care (ALC)

Care provided to a patient who is occupying a bed in a facility but does not require the intensity of resources/services usually provided in that care setting (whether acute care, chronic or complex continuing care, mental health care or rehabilitation). In this situation, the patient must be designated “ALC” by the most appropriate care team member (physician, long-term care [LTC] assessor, patient care manager, discharge planner or other care team member). For a patient with “ALC” designation in an acute care setting, discharge/transfer destinations may include but are not limited to:



- home (with/without services);
 - designated/specialized mental health treatment facility;
 - chronic or complex continuing care (facility/bed within or outside reporting facility); and
 - long-term care (LTC) home.
- * The discharge or transfer destination need not be known at the time of ALC designation.

Long-term care (LTC)

Care to address the needs of patients who require nursing and personal care on a continuing basis. These patients usually have disabilities or chronic care needs, with a range of medical and/or social services being offered. The services are generally provided in residential facilities (e.g., nursing homes or assisted living facilities).

Rehabilitation

Care to address the needs of patients who have been disabled by disease or injury. In the rehabilitation setting, patients receive combined and coordinated care through the provision of medical, social, educational and vocational measures for training or re-training, in an effort to restore the patients to their highest possible level of functional ability.

Palliative care

Care to address the needs of patients with life-limiting conditions. In the palliative care setting, the focus is on improving quality of life for the patient and their family/loved ones. Improving quality of life begins with identifying, assessing and alleviating pain and other physical, psychosocial and spiritual issues.

Mental health care

Care to address the needs of patients with mental illness. In the mental health care setting, the focus is on observing and providing care and treatment for patients who are experiencing; mental health disorders.

A1. Are you providing data for more than one facility?

No

Yes

Please specify all of the facilities for which you are responding:



A2. How many of the following types of beds did your facility have in service on March 31, 2021 (excluding bassinets for newborns)?

Note: non-acute care beds include:

[Long-term care \(LTC\)](#)

[Rehabilitation](#)

[Palliative care](#)

[Alternate level of care \(ALC\)](#)

[Mental health](#)

[Complex continuing care](#)

Exclude non-acute care beds for which pharmacy services are outsourced to a retail pharmacy.

acute care beds : _____

non-acute care beds : _____

Total : _____

A3. What was your facility's number of inpatient days (sometimes reported as hospital days) in the 2020/21 fiscal year?

acute care (excluding newborns) : _____

non-acute care (excluding newborns) : _____

Total : _____

A4. What was the average length of acute care inpatient stay in the 2020/21 fiscal year?

Please enter the number of days:

A5. How many patient visits did your facility have in the 2020/21 fiscal year for the following types of outpatient care?

Emergency Department : _____

All ambulatory clinics combined : _____

Total : _____





A6. Does your organization own and operate any retail pharmacies?

- No
- Yes

How many retail pharmacies does your organization own and operate?

A7. Please add any comments related to Hospital Information here:



Section B – Clinical Pharmacy Practice

Please review the following explanations and definitions of terms used in this section:

Patient care program

Healthcare delivery that is formally structured to service a group of patients with similar healthcare needs (e.g., child health program, mental health program, critical care program). A formal patient care program will usually have a physician and/or nurse as the leader or director.

0.2 Full-Time Equivalent (FTE)

Assignment of a pharmacist to a program for a minimum of one day per week or for shorter periods that combine to the equivalent of one day per week, on average. For example, 0.2 FTE is equivalent to one pharmacist working one full day per week or two half-days per week.

Practice model

The method by which pharmacy department resources are used to provide patient care services and the outcomes that are intended to be achieved as a result of that model of resource utilization. A pharmacy department's practice model specifies the roles played by pharmacists, regulated pharmacy technicians, non-regulated pharmacy assistants and students, as well as the application of information technologies and automation technologies.

Clinical Programs

In the following questions, please indicate (a) whether your facility has or does not have a formal [patient care program](#) for each of the disciplines below. For each formal patient care program in your facility, please indicate (b) whether a pharmacist is assigned to that program for inpatient services (c) whether a pharmacist is assigned to that program for outpatient services

Note: The list of patient care programs has been revised for this edition of the survey, taking into account the "other programs" identified by respondents to the 2016/17 survey. Please review the entire list before responding.

Indicate "yes" only if your department has 0.2 FTE pharmacist or more assigned to the formal patient care program. The specific number of FTEs per program should be reported in Section E, Benchmarking.

If your facility does not have a formal patient care program for any of the medical disciplines below, select "no" in the column about whether such a program exists, even if your facility sometimes delivers care to that type of patient as part of another patient care program. For example, if your facility sometimes admits



transplant patients to a medicine or surgery unit with an assigned pharmacist, but your facility does not have a formal patient care program for organ transplants, select “no” for transplantation.

Ensure that all FTEs related to decentralized clinical pharmacy services are reported under the relevant patient care program.

B1a. Does a formal program exist for the following Patient Care Programs?



	No	Yes
General medicine	<input type="radio"/>	<input type="radio"/>
Family practice	<input type="radio"/>	<input type="radio"/>
Oncology	<input type="radio"/>	<input type="radio"/>
Bone marrow transplantation	<input type="radio"/>	<input type="radio"/>
Cardiology	<input type="radio"/>	<input type="radio"/>
Respirology	<input type="radio"/>	<input type="radio"/>
Geriatrics	<input type="radio"/>	<input type="radio"/>
Infectious diseases	<input type="radio"/>	<input type="radio"/>
HIV/AIDS	<input type="radio"/>	<input type="radio"/>
Diabetes/endocrinology	<input type="radio"/>	<input type="radio"/>
Nephrology/renal care/dialysis care	<input type="radio"/>	<input type="radio"/>
Neurology	<input type="radio"/>	<input type="radio"/>
Gastroenterology	<input type="radio"/>	<input type="radio"/>
Pain service	<input type="radio"/>	<input type="radio"/>
Palliative care	<input type="radio"/>	<input type="radio"/>
Mental health	<input type="radio"/>	<input type="radio"/>





Hematology/anticoagulation	<input type="radio"/>	<input type="radio"/>
Obstetrics and/or gynecology and/or women's health care	<input type="radio"/>	<input type="radio"/>
Emergency	<input type="radio"/>	<input type="radio"/>
Critical care (medical, surgical or cardiac)	<input type="radio"/>	<input type="radio"/>
Clinical pharmacology and toxicology service	<input type="radio"/>	<input type="radio"/>
Pediatric and/or neonatal intensive care	<input type="radio"/>	<input type="radio"/>
Pediatric and/or newborn care	<input type="radio"/>	<input type="radio"/>
Operating room	<input type="radio"/>	<input type="radio"/>
Surgery, pre-admission	<input type="radio"/>	<input type="radio"/>
General surgery	<input type="radio"/>	<input type="radio"/>
Cardiac/vascular surgery	<input type="radio"/>	<input type="radio"/>
Neurosurgery	<input type="radio"/>	<input type="radio"/>
Orthopedic surgery	<input type="radio"/>	<input type="radio"/>
Solid organ transplantation	<input type="radio"/>	<input type="radio"/>
Other surgeries	<input type="radio"/>	<input type="radio"/>
Genetics/rare disease care	<input type="radio"/>	<input type="radio"/>
Chronic or complex continuing care	<input type="radio"/>	<input type="radio"/>





Home care	<input type="radio"/>	<input type="radio"/>
Rehabilitation	<input type="radio"/>	<input type="radio"/>
Clinical research	<input type="radio"/>	<input type="radio"/>
Long-term care	<input type="radio"/>	<input type="radio"/>
Other patient care areas	<input type="radio"/>	<input type="radio"/>

B1b. Please indicate:

	Adult or pediatric?		Inpatient pharmacist assigned?			Outpatient pharmacist assigned?		
	Adult	Pediatric	No	Yes	N/A	No	Yes	N/A





General medicine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Family practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Oncology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Bone marrow transplantation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Cardiology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Respirology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Geriatrics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Infectious diseases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
HIV/AIDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Diabetes/endocrinology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Nephrology/renal care/dialysis care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Neurology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Gastroenterology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Pain service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Palliative care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					





Mental health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Hematology/anticoagulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Obstetrics and/or gynecology and/or women's health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Emergency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Critical care (medical, surgical or cardiac)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Clinical pharmacology and toxicology service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Pediatric and/or neonatal intensive care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Pediatric and/or newborn care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Operating room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Surgery, pre-admission	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
General surgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Cardiac/vascular surgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Neurosurgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Orthopedic surgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Solid organ transplantation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					





Other surgeries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Genetics/rare disease care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Chronic or complex continuing care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Home care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Rehabilitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Clinical research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Long-term care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					
Other patient care areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>					





B2. In providing clinical pharmacy services, pharmacists perform various clinical activities.

For each clinical pharmacy activity, indicate the extent to which it has been implemented and performed within your organization, as of March 31, 2021.



	Exists in all areas/ situations (100%)	Exists in most areas/ situations (50%–99%)	Exists only in some areas/ situations (1%– 49%)	Does not exist (0%)
--	--	--	--	------------------------

Pharmacists are involved in identifying, developing, reviewing or approving new medication order sets.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pharmacists are involved in monitoring and reporting potential and actual adverse drug events (ADEs) or in mandatory reporting (in compliance with Vanessa's Law).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pharmacists facilitate medication-related continuity of care when patients experience transitions of care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your facility has processes to ensure medication-related continuity of care for discharged patients.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





The pharmacy department at your facility has identified drug therapy management as a service that should be provided consistently by pharmacists.

Pharmacists are involved in developing patient care plans.

Pharmacists review medication orders before the first dose is administered.

All patients' medication profiles are reviewed for appropriateness at least once daily by a pharmacist.

Pharmacists monitor patients' responses to medication therapy.





When a patient's genetic characteristics are known, pharmacists have a role in adjusting the dosage or changing the therapy for select medications (e.g., through results of genetic tests for variants of the CYP2C9 and VKORC1 genes for patients receiving warfarin therapy).

Medication reconciliation is performed by pharmacy staff at your facility at any transition of care.

Pharmacists provide discharge education to patients in your facility.

Pharmacists participate on your facility's rapid response teams.

Pharmacists participate on your facility's cardiopulmonary resuscitation teams (e.g., Code Blue teams).





Drug therapy management services by pharmacists are prioritized for inpatients according to the complexity of patients' medication therapy.



Drug therapy management services by pharmacists are prioritized for outpatients according to the complexity of patients' medication therapy.



Pharmacists independently adjust the dosages of medications on the basis of the patient's response or pharmacokinetic characteristics.



Inpatient pharmacists are authorized by policy or protocol (e.g., through medical directives) to write medication orders as part of their scope of practice.





Outpatient pharmacists are authorized by policy or protocol (e.g., through medical directives) to write medication orders and/or prescriptions as part of their scope of practice.

Pharmacists routinely document recommendations and assess progress and achievement of therapeutic goals in patients' medical records.

Inpatient pharmacists can work to their full scope of practice as defined by legislation in your province or territory.

Pharmacists participate in a formal antimicrobial stewardship program

Pharmacists participate in a formal controlled substance stewardship program (e.g., opioid stewardship)





Key Performance Indicators

Key performance indicators (KPIs) are quantifiable measures of quality that reflect the critical success factors of an organization. Clinical pharmacy KPIs (cpKPIs) are evidence-based clinical pharmacy processes of care that are associated with a meaningful impact on patient outcomes (such as improved morbidity rates or reduced hospital readmissions).

In 2013, the National cpKPI Collaborative established a set of eight national cpKPIs using an evidence-based, modified Delphi approach. Hospitals across Canada have started measuring and reporting cpKPI data at the local level; however, variations exist in terms of which of the eight cpKPIs are measured, how frequently they are measured and the local platforms used for documentation (paper-based or electronic).



B3a(1). Indicate the current situation within your facility (for inpatient and outpatient programs):

Data for these cpKPI's were collected in the 2020/21 fiscal year:



	No	Yes
Medication reconciliation on admission: Proportion of patients who received documented medication reconciliation on admission (as well as resolution of identified discrepancies) performed by a pharmacist	<input type="radio"/>	<input type="radio"/>
Pharmaceutical care plan: Proportion of patients for whom pharmacists have developed and initiated a pharmaceutical care plan	<input type="radio"/>	<input type="radio"/>
Resolved drug therapy problems: Number of drug therapy problems resolved by a pharmacist per admission	<input type="radio"/>	<input type="radio"/>
Interprofessional patient care rounds: Proportion of patients for whom a pharmacist participated in interprofessional patient care rounds to improve medication management	<input type="radio"/>	<input type="radio"/>
Patient education during hospital stay: Proportion of patients who received education from a pharmacist about their disease(s) and medication(s) during their hospital stay	<input type="radio"/>	<input type="radio"/>
Patient education at discharge: Proportion of patients who received medication education from a pharmacist at discharge	<input type="radio"/>	<input type="radio"/>
Medication reconciliation at discharge: Proportion of patients who received documented medication reconciliation at discharge (as well as resolution of identified discrepancies), performed by a pharmacist	<input type="radio"/>	<input type="radio"/>





Comprehensive direct patient care bundle: Proportion of patients who received comprehensive direct patient care from a pharmacist working in collaboration with the healthcare team



B3a(2). Indicate the current situation within your facility (for inpatient and outpatient programs):

If data were collected for this cpKPI, indicate the extent of implementation for your entire organization.





1%–25% 26%–50% 51%–75% 76%–100%

Medication reconciliation on admission: Proportion of patients who received documented medication reconciliation on admission (as well as resolution of identified discrepancies) performed by a pharmacist



Pharmaceutical care plan: Proportion of patients for whom pharmacists have developed and initiated a pharmaceutical care plan

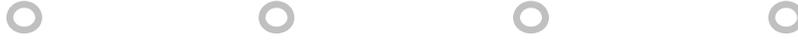


Resolved drug therapy problems: Number of drug therapy problems resolved by a pharmacist per admission





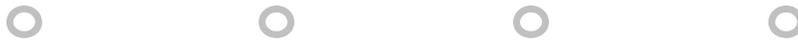
Interprofessional
patient care
rounds:
Proportion of
patients for
whom a
pharmacist
participated in
interprofessional
patient care
rounds to
improve
medication
management



Patient
education during
hospital stay:
Proportion of
patients who
received
education from a
pharmacist
about their
disease(s) and
medication(s)
during their
hospital stay



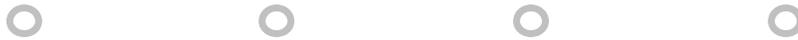
Patient
education at
discharge:
Proportion of
patients who
received
medication
education from a
pharmacist at
discharge





Medication reconciliation at discharge: Proportion of patients who received documented medication reconciliation at discharge (as well as resolution of identified discrepancies), performed by a pharmacist

Comprehensive direct patient care bundle: Proportion of patients who received comprehensive direct patient care from a pharmacist working in collaboration with the healthcare team



B3a(3). There are plans to collect data for this cpKPI in the 2021/22 fiscal year or sometime thereafter.





	No	Yes
Medication reconciliation on admission: Proportion of patients who received documented medication reconciliation on admission (as well as resolution of identified discrepancies) performed by a pharmacist	<input type="radio"/>	<input type="radio"/>
Pharmaceutical care plan: Proportion of patients for whom pharmacists have developed and initiated a pharmaceutical care plan	<input type="radio"/>	<input type="radio"/>
Resolved drug therapy problems: Number of drug therapy problems resolved by a pharmacist per admission	<input type="radio"/>	<input type="radio"/>
Interprofessional patient care rounds: Proportion of patients for whom a pharmacist participated in interprofessional patient care rounds to improve medication management	<input type="radio"/>	<input type="radio"/>
Patient education during hospital stay: Proportion of patients who received education from a pharmacist about their disease(s) and medication(s) during their hospital stay	<input type="radio"/>	<input type="radio"/>
Patient education at discharge: Proportion of patients who received medication education from a pharmacist at discharge	<input type="radio"/>	<input type="radio"/>
Medication reconciliation at discharge: Proportion of patients who received documented medication reconciliation at discharge (as well as resolution of identified discrepancies), performed by a pharmacist	<input type="radio"/>	<input type="radio"/>





Comprehensive direct patient care bundle: Proportion of patients who received comprehensive direct patient care from a pharmacist working in collaboration with the healthcare team



B3b. Are you collecting other clinical pharmacy performance indicators in your department?

No

Yes

Please specify:

Clinical Practice Model

In Canada, the scope of practice of pharmacists is evolving. To help in better capturing this trend, indicate the percentage of pharmacists (either full-time or part-time) working in each practice model category (distributive and clinical activities may include some teaching responsibilities).

B4. Please enter the percentage of pharmacists working in each practice model:

Only distributive activities : _____

Mostly distributive activities with limited clinical activities : _____

Similar amounts of distributive and decentralized clinical activities : _____

Mostly clinical activities with limited distributive activities : _____

Only clinical activities : _____

Total : _____



Please indicate:

	No	Yes
B5. Has a structured approach been used to define and prioritize the specific activities upon which pharmacists are expected to focus their efforts (e.g., pharmacy practice expectations)?	<input type="radio"/>	<input type="radio"/>
B6. Does your province or territory have legislation requiring the evaluation of pharmacists?	<input type="radio"/>	<input type="radio"/>
B7. Do you evaluate the provision of direct patient care pharmacy services?	<input type="radio"/>	<input type="radio"/>

B8. Which of the following methods are used to evaluate the provision of direct patient care pharmacy services in your facility?

Select all that apply:

- Retrospective chart review
- Direct observation
- Peer-review evaluation
- Self-evaluation by pharmacist
- Knowledge and competence testing
- Other



Please specify:

B9. What aspects of clinical practice are evaluated in your setting?

Select all that apply:

- Development of an individualized pharmaceutical care plan, including its monitoring
- Medication counselling and evaluation of adherence
- Answers to drug information questions
- Conformity of documentation with clinical practice

B10. Have mechanisms been established to measure patients' medication-related outcomes in your facility (e.g., achievement of effective anticoagulation, avoidance of bleeding episodes, satisfaction with drug therapy management during the hospital stay)?

- No
- Yes



B11. Are those outcomes used to evaluate the performance of pharmacists?

- No
 - Yes
-

B12. What proportion of pharmacists were evaluated using patients' medication-related outcomes in the 2020/21 fiscal year?

- All pharmacists (100%)
- Most pharmacists (50%–99%)
- Some pharmacists (1%–49%)
- None (0%)

B13. Please add any comments related to Section B (Clinical Pharmacy Practice) here:



Section C – Drug Distribution Systems

Please review the following explanations and definitions of terms used in this section:

Acute care

Provision, to a patient who has been formally admitted to a bed in a facility, of the necessary treatment for a disease or severe episode of illness for a short period. Patients are discharged from acute care as soon as they are healthy and their condition is stable. Note: Palliative care beds and alternate level of care (ALC) beds may be classified as acute or non-acute, according to how they are designated within a given facility.

Non-acute care

Inpatient care that is not of an acute nature, encompassing the following types of care: long-term care (LTC), rehabilitation, chronic care and complex continuing care. Note: Palliative care beds and alternate level of care (ALC) beds may be classified as acute or non-acute, according to how they are designated within a given facility.

Unit-dose system

A drug distribution system in which medications are packaged and dispensed to the patient care unit in a single-dose, ready-to-administer form. Usually, no more than a 24-hour supply of patient-specific medication is delivered to the patient care unit at any one time. A unit-dose system may be centralized or decentralized.

Centralized unit-dose system

A unit-dose system in which most medications for a specified time frame (e.g., 24 hours) are dispensed to the patient care unit from the central pharmacy.

Decentralized unit-dose system

A unit-dose system in which most medications are distributed from a satellite pharmacy or from an automated dispensing cabinet (ADC) located on the patient care unit.

Automated dispensing cabinet (ADC)

A computer-driven mechanical system (e.g., Pyxis, Omnicell Technologies) located in a patient care area, which stores medications, controls their release to authorized personnel and captures all transaction information.

Traditional drug distribution system

A drug distribution system in which most medications are labelled and dispensed in multi-dose, patient-specific vials or similar medication containers, after a pharmacist has reviewed and approved the medication and dosage ordered for each specific patient.

Total wardstock system

A drug distribution system in which most medications are stocked on the patient care unit in bulk



containers, from which medications can be removed and administered to patients without a pharmacist having to first review and approve the medication order for each specific patient.

Controlled/carded dose system

A drug distribution system in which most medications are packaged in blister cards containing up to a one-month supply of medication. A pharmacist usually reviews and approves the medication order before a patient-specific label is applied to the card and the card is delivered to the patient.

Robotic automation

An automated system (e.g., Robot-Rx, PillPick, BoxPicker) in which a robotic arm selects the correct drug from racks holding pre-packaged unit-dose medications in the form of tablets, capsules, syringes, pre-packaged liquids, vials, ampoules or patches. Barcoding systems are used to verify items that have been selected from the shelving racks by the robotic arm.

Pharmacy information system (PIS)

A computer system (e.g., BDM, Cerner, Meditech, EPIC) that is used by the pharmacy to maintain an accurate record of drug dispensing activity, patient medication profiles and other relevant patient information. Reports generated from a PIS are used to track drug costs by patient or patient care unit, drug utilization patterns, and other pertinent data.

Computerized provider order entry (CPOE)

Process whereby a healthcare provider enters medication orders or other instructions electronically, rather than on paper charts.

National Association of Pharmacy Regulatory Authorities (NAPRA) and Ordre des pharmaciens du Québec (OPQ) standards

[Model Standards for Pharmacy Compounding of Non-hazardous Sterile Preparations and Model Standards for Pharmacy Compounding of Hazardous Sterile Preparations](#), which have been endorsed by NAPRA, or [the standards of the OPQ](#) (Norme 2014.01, for sterile compounding of non-hazardous products; Norme 2014.02, for sterile compounding of hazardous products).

Segregated ISO Class 7 clean room

A clean room is an environment with a controlled level of contamination that is described in terms of the concentration of non-viable particles per cubic meter at a specified particle size. A Class 7 clean room has a maximum number of particles ($\geq 0.5 \mu\text{m}$ in size) of 352,000/m³.

Segregated ISO Class 8 ante-room

An ante-room is a buffer room between a normal room and a clean room. Like a clean room, an ante-room has a controlled level of contamination that is described in terms of the concentration of non-viable particles per cubic meter at a specified particle size. A Class 8 ante-room has a maximum number of particles ($\geq 0.5 \mu\text{m}$ in size) of 3,520,000/m³.

Inventory turnover ratio

A measure of a facility's efficiency of inventory management, calculated as follows: total annual drug



expenses / average inventory value. If only a single inventory count is done in a year, efforts should be made to ensure that the inventory count is as representative as possible of the average inventory value.

Hospital Information System (HIS)

A hospital information system (HIS) refers to an electronic system designed to manage healthcare data generated during a patient's hospital encounter. It is a comprehensive information system used to collect, store, process, retrieve, and communicate patient care and administrative information for all hospital-affiliated activities and to satisfy the functional requirements of all authorized users in the healthcare setting.

Inpatient Drug Distribution Systems

Questions in the section for inpatient drug distribution systems deal with oral and other medications that are not prepared and distributed through a parenteral admixture program.

Indicate the types of drug distribution systems that were used in your facility to service inpatient units with overnight beds during the 2020/21 fiscal year. Exclude systems used for patient care units that generally do not have overnight beds (e.g., operating rooms, Emergency Department).

Note: For each type of bed (acute care beds and non-acute care beds, if applicable), the percentages serviced by all of the systems listed in the table above should sum to 100%. If not, review the numbers you have entered and make any necessary corrections.

C1a. Please enter the percentage of beds that receive the majority of scheduled doses via this drug distribution system for:



acute care %

Unit-dose system: centralized	
Unit-dose system: decentralized from pharmacy satellites	
Unit-dose system: decentralized from automated dispensing cabinets	
Traditional drug distribution system	
Total wardstock system	
Controlled/carded dose system	
Total	





	non-acute care %
Unit-dose system: centralized	
Unit-dose system: decentralized from pharmacy satellites	
Unit-dose system: decentralized from automated dispensing cabinets	
Traditional drug distribution system	
Total wardstock system	
Controlled/carded dose system	
Total	



C1b. Is robotic automation used to pick and fill patient-specific unit-dose bins or similar storage units for later delivery to the patient care unit?

- No
- Yes

C1c. Do you have any automated dispensing cabinets (ADCs) in your facility?

- No
- Yes

C1d. Indicate in column [A] the approximate percentage of patient care units in your facility where medications are accessed from an automated dispensing cabinet (e.g., if you have four medical/surgical units, and two of them are using automated dispensing cabinets, you would indicate that 26%–50% of medical/surgical units are accessing medications from an automated dispensing cabinet). Select “not applicable” if you do not have that particular type of patient care unit. Select 0% if you have no automated dispensing cabinets on that particular patient care unit.

Indicate in column [B] whether patient-specific medication profiles are used to control access to medications in the automated dispensing cabinets located in each particular patient care unit.

	[A] % of patient care units with medication access from automated dispensing cabinets							[B] Are patient-specific medication profiles used to control access to medications in the automated dispensing cabinets in this area of your facility?	
	not applicable	0%	1%–25%	26%–50%	51%–75%	76%–99%	100%	No	Yes



General adult medical/surgical unit	<input type="radio"/>								
Adult critical care unit	<input type="radio"/>								
Operating room	<input type="radio"/>								
Recovery room	<input type="radio"/>								
Labour and delivery unit	<input type="radio"/>								
Ante-partum/post-partum units	<input type="radio"/>								
Mental health unit	<input type="radio"/>								
Emergency Department	<input type="radio"/>								
General pediatric medical/surgical unit	<input type="radio"/>								
Pediatric critical care unit	<input type="radio"/>								

C2a. Percentage of medication order entry performed by:





	100%	50%–99%	1%-49%	0%
<p>Prescribing physicians entering their own orders into a CPOE system <i>Select 0% if prescribing physicians do not enter orders.</i></p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>Prescribing pharmacists entering their own orders into a CPOE system or PIS <i>Select 0% if prescribing pharmacists do not enter orders.</i></p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>Pharmacists entering prescribers' orders into a PIS <i>Select 0% if pharmacists do not enter orders.</i></p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>Regulated pharmacy technicians entering prescribers' orders into a PIS <i>Select 0% if regulated pharmacy technicians do not enter orders.</i></p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





Non-regulated
pharmacy
assistants
entering
prescribers'
orders into a PIS
*Select 0% if non-
regulated
pharmacy
assistants do not
enter orders.*



Others (e.g.,
nurse
practitioners,
medical
assistants,
midwives,
dentists,
dietitians) *Select
0% if others do
not enter orders.*



Please identify others performing medication order entry:

C2b. "Verification" refers to confirming that the entry in the pharmacy information system (PIS) matches the intended medication order and that no errors in transcription and/or data entry have occurred.

Verification of medication order entry is performed by:





	A pharmacist only	A regulated pharmacy technician only	A non-regulated pharmacy assistant only	A pharmacist <u>or</u> a regulated pharmacy technician <u>or</u> a non-regulated pharmacy assistant	Verification of order entry is not required
Prescribing physicians entering their own orders into a CPOE system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prescribing pharmacists entering their own orders into a CPOE system or PIS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pharmacists entering prescribers' orders into a PIS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regulated pharmacy technicians entering prescribers' orders into a PIS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-regulated pharmacy assistants entering prescribers' orders into a PIS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





Specify
Others:

C3a. In the 2020/21 fiscal year, what was the total number of hours per week that your pharmacy was open, (i.e., with at least one pharmacist physically present and providing pharmacy services, including review, processing and dispensing of medication orders)?

Note: If you are reporting for a region or multi-site health organization, report the hours of operation for the site with the most hours. Round the number of hours to the nearest whole number.

Please enter hours per week:

C3b. Is your pharmacy open 168 hours/week (i.e., 24 hours/day x 7 days/week)?

- No
- Yes

C3c. During the hours that the pharmacy is closed (i.e., no pharmacist is scheduled to be on site), does a staff or contract pharmacist, either on call or working off site (i.e., remote order review), review at least 95% of all routine medication orders for appropriateness, excluding orders where a licensed independent practitioner controls the ordering, preparation and administration of the medication (e.g., in the operating room, labour and delivery department, radiology department,



catheterization lab or urgent situations when any delay would harm the patient) in any of the following situations?

	No	Yes	Not applicable
Before medications are accessed from a night cupboard or similar after-hours medication supply mechanism (e.g., DocuMed system)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Before medications are accessed from ADCs on the patient care units	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Before medications are accessed from wardstock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Before medication order appears on the medication administration record (MAR)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

C4. In your facility, what is the primary method of creating medication administration records (MARs)?

- Manual preparation on the patient care units
- Generation of a hard copy by the pharmacy information system (PIS), with documentation of administered medication doses done manually
- Creation of an electronically derived MAR through a common database aligned with a pharmacy information system (PIS), with documentation of administered medication doses done electronically



5. In the 2020/21 fiscal year, did your parenteral admixture service include service to 90% or more of the inpatients in your facility?

No, we serviced less than 90% of inpatients Please enter the approximate percent:

Yes, we serviced 90% or more of inpatients

Not applicable (we do not have a parenteral admixture service)

C6a. What percentage of the intravenous and epidural doses administered in your facility are mixed on the patient care units?

C6b. What percentage of your parenteral admixtures are used for the following patient groups?

Inpatients : _____

Outpatients and ambulatory patients (e.g., in oncology units, the Emergency Department, outpatient/ambulatory clinics [for total parenteral nutrition or antibiotics], home care) : _____

Total : _____

C7a. In your facility, who provides sterile compounding services for non-hazardous medications?

Primarily provided by an external contractor (e.g., Baxter-CIVA, Calea, Fresenius Kabi)

Primarily provided by the pharmacy department or organization (including centralized production centers)

Completely provided by the pharmacy department or organization

Completely provided by an external contractor

Not provided (admixtures are prepared in patient care areas by non-pharmacy personnel)

Not required for our patient population



C7b. For any sterile compounding services for non-hazardous medications that are provided by the pharmacy department or organization, indicate the physical spaces used that meet the physical space requirements outlined in the [NAPRA standards or the OPQ standards \(Norme 2014.01\)](#).

Select all that apply:

- Segregated ISO class 7 clean room
- Segregated ISO class 8 ante-room
- An environment that maintains positive pressure
- Biological safety cabinets or laminar airflow workstations (also called primary environmental controls [C-PECs] or hoods) for all sterile compounding
- An environment with full HEPA filtration and at least 20 air exchanges per hour

C7c(1). For sterile compounding of non-hazardous medications in your facility, indicate whether there is a quality assurance program in place, applicable to both personnel and the product preparation process and identifying any actions taken.

- No
- Yes

C7c(2). Identify which of the processes outlined in the [NAPRA standards or the OPQ standards \(Norme 2014.01\)](#) are used for quality assurance.



Select all that apply:

- Verification of equipment, including the C-PECs (e.g., laminar flow hoods)
- Verification of controlled areas (clean room and ante-room)
- Verification of aseptic compounding processes
- Verification of final preparations

C7. Please indicate:

	No	Yes
(d) For sterile compounding of non-hazardous medications in your facility, is documentation retained for all staff training and certification?	<input type="radio"/>	<input type="radio"/>
(e) For sterile compounding of non-hazardous medications in your facility, is documentation retained for all activities related to this type of compounding, as outlined in the NAPRA standards or the OPQ standards (Norme 2014.01)?	<input type="radio"/>	<input type="radio"/>

C7f(1). For sterile compounding of non-hazardous medications in your facility, is an environmental verification program that meets the [NAPRA standards or the OPQ standards \(Norme 2014.01\)](#) in place, including the detection of microbial and chemical contamination (e.g., surface sampling)?

- No
- Yes



C7f(2). Indicate who completes the verification:

- Personnel in the organization
- External contractors
- Others

Please identify who completes the verification:

C7. For sterile compounding of non-hazardous medications...

	No	Yes
(g) in your facility, has a sterile compounding supervisor been designated to monitor and oversee activities related to sterile compounding?	<input type="radio"/>	<input type="radio"/>
(h) does your facility adhere to the NAPRA standards or the Quebec standards (Norme 2014.01) for beyond-use dating (BUD)?	<input type="radio"/>	<input type="radio"/>
(i) does your facility complete product sterility testing to extend beyond-use dating (BUD)?	<input type="radio"/>	<input type="radio"/>



C8. In your facility, who provides sterile compounding services for hazardous medications (e.g., carcinogens, teratogens)?

- Primarily provided by an external contractor (e.g., Baxter-CIVA, Calea, Fresenius Kabi)
- Primarily provided by the pharmacy department
- Completely provided by the pharmacy department or organization
- Completely provided by an external contractor
- Not provided (admixtures are prepared in patient care areas by non-pharmacy personnel)
- Not required for our patient population

C8b. For any sterile compounding services for hazardous medications that are provided by the pharmacy department or organization, indicate the physical spaces used that meet the physical space requirements outlined in the [NAPRA standards or the OPQ standards \(Norme 2014.01\)](#).

- Segregated ISO class 7 clean room
- Segregated ISO class 8 ante-room
- An environment that maintains negative pressure
- Biological safety cabinets or laminar airflow workstations (also called primary environmental controls [C-PECs] or hoods) for all sterile compounding
- An environment with full HEPA filtration and at least 30 air exchanges per hour
- A drug storage area that maintains negative pressure



C8c(1). For sterile compounding of hazardous medications in your facility, indicate whether there is a quality assurance program in place, applicable to both personnel and the product preparation process and identifying any actions taken.

- No
- Yes

C8c(2). Identify which of the processes outlined in the [NAPRA standards or the Quebec standards \(Norme 2014.01\)](#) are used for quality assurance,

Select all that apply.

- Verification of equipment, including the C-PECs (e.g., laminar flow hoods)
- Verification of controlled areas (clean room and ante-room)
- Verification of aseptic compounding processes
- Verification of final preparations

C8. For sterile compounding of hazardous medications at your facility, is documentation retained...

	No	Yes
(d) for all staff training and certification?	<input type="radio"/>	<input type="radio"/>
(e) for all activities related to this type of compounding, as outlined in the NAPRA standards or the OPQ standards (Norme 2014.01)	<input type="radio"/>	<input type="radio"/>



C8f(1). For sterile compounding of hazardous medications in your facility, is an environmental verification program that meets the [NAPRA standards or the OPQ standards \(Norme 2014.01\)](#) in place, including the detection of microbial and chemical contamination (e.g., surface sampling)?

- No
- Yes

C8f(2). Indicate who completes the verification:

- Personnel in the organization
- External contractors
- Others

Please specify:



C8. For sterile compounding of hazardous medications...

	No	Yes
(g) in your facility, has a sterile compounding supervisor been designated to monitor and oversee activities related to sterile compounding?	<input type="radio"/>	<input type="radio"/>
(h) does your facility adhere to the NAPRA standards or the OPQ standards (Norme 2014.01) for beyond-use dating (BUD)?	<input type="radio"/>	<input type="radio"/>
(i) does your facility complete product sterility testing to extend beyond-use dating (BUD)?	<input type="radio"/>	<input type="radio"/>

C9. How frequently are refrigerator and/or freezer temperatures checked by personnel (either electronically or manually)?

- Daily (or more frequently)
- Weekly
- Monthly
- Less often than monthly or not at all

C10a. Do written policies and procedures exist to ensure the health and safety of employees who prepare, transport, administer and dispose of hazardous drugs?

- Yes
- No
- Not applicable



C10b. Indicate the topics addressed and defined by policies and procedures that are in place within your facility.

Select all that apply.

- Definition of cytotoxic/hazardous drugs
- Handling of cytotoxic/hazardous drugs (receiving, storage and transport)
- Personal protective equipment (e.g., protective gloves and gowns)
- Safe practices for administering cytotoxic/hazardous drugs
- Equipment maintenance
- Decontamination and cleaning
- Waste handling
- Response to spills
- Environmental sampling

C11. Is there a medical surveillance program in place for employees who handle cytotoxic/hazardous drugs?

- No
- Yes
- Not applicable



C12. Are hazardous drugs prepared using a closed-system device (e.g., PhaSeal™, Chemolock™)?

- No
- Yes, for some drugs
- Yes, for all drugs
- Not applicable

C13. Indicate why a closed-system device was not implemented for preparing hazardous drugs.

Select all that apply.

- Cost
- Low volume
- Other

Please specify:



C14. Indicate why a closed-system device was implemented for preparing hazardous drugs.

Select all that apply.

- Employee safety
- Patient safety
- Audit or regulatory recommendation
- Other

Please specify:

C15. Indicate whether any of the following types of automation were used to prepare parenteral admixtures in the 2020/21 fiscal year.

Select all that apply.

- No automation was used to prepare parenteral admixtures
- Automated syringe-filling device
- Automated compounding device
- Stand-alone robotic device (e.g., robotic intravenous automation)
- Other



Please specify:

C16. Can your facility provide traceability information for any of your medication products to the level of the patient?

- No
- Yes

C17a. For which medications can you trace to the level of the patient?

Select all that apply.

- Oral solids
- Non-hazardous parenteral medications
- Hazardous parenteral medications
- Vaccines
- Topical agents
- Other



Please specify:

C17b. How do you manage traceability?

Select all that apply:

- Through barcoding technology linked to your Hospital Information System (HIS)
- Through stand-alone software administered by the pharmacy
- Other

Please specify:

Drug Purchasing and Inventory Management System

C18. What was your facility's [inventory turnover ratio](#) in the 2020/21 fiscal year?

Refer to definition for calculating ratio:



C19. Please add any comments related to Section C (Drug Distribution Systems) here:





Section D – Pharmacy Human Resources

Please review the explanations and definitions of terms used in this section:

Budgeted hours

All staffing hours that are funded in the budget. If relief hours (e.g., for vacation or illness) are included in the budget, they should be counted as budgeted hours.

Full-Time Equivalent (FTE)

A standardized counting unit, whereby the annual number of budgeted hours for a full-time employee (e.g., 2,015 hours) is equivalent to 1 FTE. For example, if the total number of budgeted hours for all pharmacists in a given fiscal year is 20,150, and the number of hours budgeted for a full-time pharmacist is 2,015, the number of FTEs would be 10. Budgeted casual and relief hours should be included in the calculation of FTEs.

Staff Pharmacist

A pharmacist who holds a licence to practice pharmacy and who participates in the delivery of drug distribution and/or clinical services (excluding pharmacists in management positions and any pharmacists who have been designated as Advanced Practice Pharmacists).

Advanced Practice Pharmacist

A pharmacist who has advanced training beyond entry-to-practice requirements (e.g., PharmD, Clinical Master's [Quebec], Accredited Canadian Pharmacy Residency [ACPR] and/or certification [such as certification in pharmacotherapy from the Board of Pharmacy Specialties or from the Association des pharmaciens des établissements de santé du Québec]) and who spends most of their time addressing more complex clinical questions or working through more complex patient care challenges than typically handled by staff pharmacists. This designation may not be formally recognized in labour agreements.

Pharmacist Manager

A pharmacist who is responsible for managing one or more sites or functional areas and who is responsible for hiring, performance reviews, discipline and dismissal of designated staff members who report directly.

Pharmacy Manager (neither a pharmacist nor a pharmacy technician nor a non-regulated pharmacy assistant)

A manager who is not a pharmacist or a regulated pharmacy technician or a non-regulated pharmacy assistant, but who has the same scope of responsibilities as a pharmacist manager (i.e., is responsible for managing one or more sites or functional areas and is responsible for hiring, performance reviews, discipline and dismissal of designated staff members who report directly).

Pharmacy Technician Manager

A regulated pharmacy technician who is responsible for managing one or more sites or functional areas and who is usually responsible for hiring, performance reviews, discipline and dismissal of designated staff



members who report directly.

Non-regulated Pharmacy Assistant Manager

A non-regulated pharmacy assistant who is responsible for managing one or more sites or functional areas and who is usually responsible for hiring, performance reviews, discipline and dismissal of designated staff members who report directly.

Regulated Pharmacy Technician

An individual who has been licensed by the relevant provincial college of pharmacists/pharmacy and who is qualified to perform, without direct supervision of a pharmacist, specialized functions, such as compounding medications, preparing parenteral admixtures, entering medication orders into the pharmacy information system and checking the work of other pharmacy technicians or non-regulated pharmacy assistants. The individual may also perform basic functions, such as re-packaging medications, delivering medications, maintaining inventory records and performing clerical activities. Individuals with this designation have passed the qualifying examination of the Pharmacy Examining Board of Canada (PEBC) after (1) graduating from an accredited pharmacy technician training program or (2) passing the PEBC evaluation examination and becoming qualified for licensure. For the purposes of this survey, the term “Regulated Pharmacy Technician” means those who are “registered” or “licensed” by a provincial regulatory body (college). Note: This designation is applicable only in provinces where regulation of pharmacy technicians has been implemented; Level 1 (Staff) and Level 2 (Senior) categories of the designation may be used.

Non-regulated Pharmacy Assistant

An individual who works under the direct supervision of a pharmacist or a regulated pharmacy technician to assist with various functions, such as compounding medications, preparing parenteral admixtures, entering medication orders into the pharmacy information system and checking the work of other non-regulated pharmacy assistants, or to perform basic functions, such as re-packaging medications, delivering medications, maintaining inventory records and performing clerical activities. Such an individual may also be referred to as a technical assistant.

Support Personnel (Clerical / Porter / Aide)

Individuals who perform clerical duties, deliver medications and supplies, and perform similar duties that do not involve direct participation in the selection, re-packaging, labelling and inventory management of pharmaceuticals.

Residents

Individual who is enrolled in a formal hospital pharmacy residency program.

Practice Leader / Coordinator

A pharmacist who possesses a high level of content expertise in a particular clinical practice area and who supervises, trains and acts as a clinical resource for other pharmacists and/or technicians who work in the particular clinical area (e.g., Practice Leader – Pediatrics, Coordinator – Clinical Pharmacy Services).

Note: If staffing for pharmacists or other pharmacy staff members is funded by individual programs,



answer staffing and salary questions for all pharmacists, regulated pharmacy technicians and non-regulated pharmacy assistants who work in your hospital.

To ensure that your entire staff is captured by the categories used in this section, please use the following table to help you in assigning specific staff members to these categories:



Staff Title	Staff Category
Director or Executive Director	Pharmacist Manager
Practice Leader/Coordinator	Advanced Practice Pharmacist
Pharmacist Supervisor/Coordinator with the authority to hire and fire staff	Pharmacist Manager
Pharmacist Supervisor/Coordinator without the authority to hire and fire staff	Staff Pharmacist
Specialized Pharmacist (e.g., drug utilization review or information technology)	Staff Pharmacist
Pharmacy Technician Supervisor/Coordinator with the authority to hire and fire staff	Pharmacy Technician Manager
Non-regulated Pharmacy Assistant Supervisor/Coordinator with the authority to hire and fire staff	Non-regulated Pharmacy Assistant Manager
Pharmacy Technician Supervisor/Coordinator without the authority to hire and fire staff	Pharmacy Technician
Non-regulated Pharmacy Assistant Supervisor/Coordinator without the authority to hire and fire staff	Non-regulated Pharmacy Assistant

Other staff titles that do not appear on the list of staff titles used in this section

Include FTEs for these staff members in the category that is most similar to the position that they hold.

D1a. What was the total annual number of [budgeted hours](#) per [full-time equivalent \(FTE\)](#) for each of the following position types in your facility in the 2020/21 fiscal year?

For each position type, select (from the choices indicated) the number that is closest to your actual budgeted hours or “n/a” (not applicable).

Budgeted hours/year





	1820	1885	1950	1957.5	2015	2080	n/a
Staff Pharmacist	<input type="radio"/>						
Advanced Practice Pharmacist	<input type="radio"/>						
Pharmacist Manager	<input type="radio"/>						
Pharmacy Manager (neither a pharmacist nor a pharmacy technician nor a non-regulated pharmacy assistant)	<input type="radio"/>						
Pharmacy Technician Manager	<input type="radio"/>						
Non-regulated Pharmacy Assistant Manager	<input type="radio"/>						
Regulated Pharmacy Technician	<input type="radio"/>						
Non-regulated Pharmacy Assistant	<input type="radio"/>						
Support personnel (clerk, porter, aide)	<input type="radio"/>						
Residents	<input type="radio"/>						





D1b-d. For each position type listed in the table below, what was the total number of budgeted full-time equivalent (FTE) positions in the 2020/21 fiscal year?

For these responses, please note the following:

- Include budgeted positions for [pharmacists, regulated pharmacy technicians, non-regulated pharmacy assistants](#) and other staff working in inpatient, outpatient and retail pharmacy settings.
- Include the [FTEs](#) for all budgeted full-time and part-time positions that are vacant.
- Include budgeted casual and relief hours by converting them to [FTEs](#).
- Where budgeted positions exist for [students](#), count the [FTEs](#) for their positions in the category of staff most appropriate for the roles that the students are performing in your department (i.e., [pharmacist, regulated pharmacy technician, non-regulated pharmacy assistant, or support personnel](#)).
- The [FTEs](#) entered in column (b), i.e., [FTEs](#) that provide services to [inpatients](#) of your facility, will be used to calculate your budgeted hours per inpatient day, and should include front-line staff, managers and all staff who indirectly support inpatient services (e.g., drug information staff, educators).
- For the [FTEs](#) entered in column (c), i.e., [FTEs](#) that provide services to [outpatients and external organizations excluding retail pharmacy operations owned and operated by your facility](#), include all staff who provide services to outpatients or to external agencies (e.g., delivering special programs on behalf of the provincial government). In the case of services to external agencies, the agencies would generally provide funding for these specific [FTEs](#), through a contract or other formal agreement with your facility.
- In column (d), report all [FTEs](#) that provide services to outpatients and external organizations [in any retail pharmacy that is owned and operated by your facility](#).

If a staff member or manager works in [both inpatient and outpatient](#) areas, please apportion their [FTE](#) according to the percentage of time worked in each area.

Note: If you are reporting for a site, and there are regional pharmacy managers or staff who provide services to multiple sites within the region, it is recommended that those [FTEs](#) be apportioned to the individual sites for the purposes of completing this section. The Regional Director may be in the best position to make decisions about how to apportion these [FTEs](#) for the sites within your region.

Enter the total number of budgeted [FTEs](#) that provide services...



	(b) to inpatients of your facility	(c) to outpatients and external organizations <u>excluding</u> retail pharmacy operations	(d) in a retail pharmacy owned and operated by your facility
Staff Pharmacist			
Advanced Practice Pharmacist			
Pharmacist Manager			
Pharmacy Manager (neither a pharmacist nor a pharmacy technician nor a non- regulated pharmacy assistant)			
Pharmacy Technician Manager			
Non-regulated Pharmacy Assistant Manager			





Regulated Pharmacy Technician			
Non-regulated Pharmacy Assistant			
Support personnel (clerk, porter, aide)			
Residents			





D1e. How many FTEs were vacant on March 31, 2021?

	FTE positions vacant March 31 (excluding leaves of absence)	FTE positions vacant March 31 (INCLUDING leaves of absence)
Staff Pharmacist		
Advanced Practice Pharmacist		
Pharmacist Manager		
Pharmacy Technician Manager		
Regulated Pharmacy Technician		
Non-regulated Pharmacy Assistant		



D2. Estimate the percentage of time spent by all pharmacists, excluding managers, in each of the following types of activities (estimate the proportion of paid hours per activity in relation to total paid hours for pharmacists).

Activity:

Drug distribution (including investigational drugs) : _____

Clinical activities : _____

Teaching : _____

Pharmacy research : _____

Other non-direct patient care activities (e.g., Drug use evaluation, audits, drug information) : _____

Total : _____

Note: The "total % of time spent" is the sum of the values entered above and should be 100%. If the values do not sum to 100%, please review and correct the entries above in this table

Salary information

D3. What was the annual salary for the Director or Executive Director of Pharmacy (department head) in the fiscal year 2020/21 (including any premiums and bonuses, if applicable)?

Salaries should not include the cost of benefits.

Select below, in thousands of dollars (e.g. 120 = \$120,000).

If less than \$90,000 select "90". If over \$250,000 select "250".

Select:	90 100 120 130 140 150 160 170 180 190 200 210 220 230 240 250
---------	---





D4. Please record the actual salary range per FTE for each of the following positions for the fiscal year 2020/21.

Include any temporary or permanent market adjustments or premiums and bonuses in the salary amounts reported here.

Record the lowest actual starting salary (if new staff received a salary higher than the bottom of the range) and the highest actual salary (top of the range).

	Annual starting salary (\$)	Annual salary, top of scale (\$)	Check if NOT applicable





Staff Pharmacist			<input type="checkbox"/>
Advanced Practice Pharmacist			<input type="checkbox"/>
Practice Leader / Coordinator			<input type="checkbox"/>
Pharmacy Supervisor / Coordinator			<input type="checkbox"/>
Pharmacist Manager			<input type="checkbox"/>
Pharmacy Manager (neither a pharmacist nor a pharmacy technician nor a non-regulated pharmacy assistant)			<input type="checkbox"/>
Pharmacy Technician Manager			<input type="checkbox"/>





Non-regulated Pharmacy Assistant Manager			<input type="checkbox"/>
Regulated Pharmacy Technician (Level 1 or Staff)			<input type="checkbox"/>
Regulated Pharmacy Technician (Level 2 or Senior)			<input type="checkbox"/>
Non-regulated Pharmacy Assistant (Level 1 or Staff)			<input type="checkbox"/>
Non-regulated Pharmacy Assistant (Level 2 or Senior)			<input type="checkbox"/>

D5. If you had a pharmacy residency program in the last fiscal year, what was the annual salary or compensation paid to residents?

Enter the amount in dollars:





D6. Please add any comments related to Section D (Human Resources) here:



Section E – Benchmarking

In the interest of comparative analysis of human and material resources for hospital pharmacy services, in this section of the survey we are asking you for data on specific patient care programs that are serviced by your department. This breakdown data can then be used to calculate indicators and ratios to provide pharmacy managers with information on the staffing requirements and drug costs associated with pharmacy services for specific patient care programs. Please provide whatever data you can for the fiscal year, 2020/21. If you are not able to populate the entire table below, partial data (eg. drug costs, paid hours, admissions, patient days) will still be useful.

Drug costs should include all drugs issued, regardless of the source of funding.

INCLUDE: inpatient (and outpatient in that section) oncology drugs, anesthetic gases, parenteral nutrition solutions and lipids, and any inpatient drug costs that are recovered from outside agencies.

EXCLUDE: IV solutions (e.g., Normal saline, D5W), continuous bladder irrigation solutions, dialysis solutions, contrast media, and bulk gases (e.g., O₂, N₂)

Please provide your drug costs as whole numbers - no decimals should be entered. If you cannot provide the drug cost by patient care programs, at least provide us with the total drug costs for both inpatient and outpatient services.

Please provide actual or reasonable estimates of annual **paid** hours (not budgeted) for pharmacy staff in both drug distribution and clinical activities. If you can only provide drug distribution OR clinical activities staffing information for these programs, it will still be useful. For example, if clinical staff are allocated to these programs, but drug distribution staff are centralized and cannot be easily allocated to the programs, please provide the paid hours for clinical activities for that specific patient care program. If you are only able to provide totals for the various variables, that data would also be appreciated.

If you are providing data for a pediatric stand-alone hospital, please use the same patient care programs used for adult hospitals (with the exception of Adult Critical Care and Pediatric columns).

For each patient care program, please provide annual numbers or estimates.

Please review the following explanations and definitions of terms used in this section:

MANAGEMENT includes: Pharmacist Manager, Pharmacy Manager (neither a pharmacist nor a pharmacy technician nor a non-regulated pharmacy assistant), Pharmacy Technician Manager, Non-regulated Pharmacy Assistant Manager

OTHER PHARMACY STAFF HOURS includes: support personnel (clerical, porter, aide)

LONG TERM CARE includes: complex continuing care, long term care



MEDICINE includes: alternate level of care, cardiology, clinical pharmacology and toxicology, diabetes and endocrinology, gastroenterology, general medicine, genetics, geriatrics, hematology/anticoagulation, HIV/AIDS, infectious diseases, mental health, nephrology/renal/dialysis care, neurology, pain service, palliative, respiratory

OBSTETRICS/GYNECOLOGY includes: women's health

ONCOLOGY includes: all malignancies, including hematological

PEDIATRICS includes: pediatric or newborn care within an adult facility

SURGERY includes: cardiac, general surgery, neurosurgery, orthopedic, solid organ transplant, vascular, other surgeries

OTHER (inpatient services/programs) all other inpatient services not specified in the list

OTHER (outpatient services/programs) all other outpatient clinics, including anticoagulant, cardiac, home care, surgical pre-admission clinic, outpatient IV services, etc.

E1a. Inpatient Services/Programs

Do not enter commas or decimals. Please round up or down as required.



	Number of inpatient beds	Number of inpatient patient days	Number of inpatient admissions
Adult Critical Care (ICU, CCU, Etc.)			
Pediatric Critical Care (Eg. NICU, PICU)			
Medicine			
Surgery			
Pediatric			
Oncology			
Bone Marrow Trans-Plant			
Obstetrics / Gynecology			





Long Term Care			
Rehab			
Other			
Enter total, if breakdown not available			

E1b. Inpatient Services/Programs

Do not enter commas or decimals. Please round up or down as required.





	Pharmacist paid hours for central drug distribution activities excluding pharmacy residents	Pharmacist paid hours for decentralized services including clinical services	Management paid hours
Adult Critical Care (ICU, CCU, Etc.)			
Pediatric Critical Care (Eg. NICU, PICU)			
Medicine			
Surgery			
Pediatric			
Oncology			
Bone Marrow Trans-Plant			
Obstetrics / Gynecology			





Long Term Care			
Rehab			
Other			
Enter total, if breakdown not available			

E1c. Inpatient Services/Programs

Do not enter commas or decimals. Please round up or down as required.





	Regulated pharmacy technician and/or non-regulated pharmacy assistant paid hours for drug distribution activities	Regulated pharmacy technician and/or non-regulated pharmacy assistant paid hours for clinical services	Other pharmacy staff paid hours
Adult Critical Care (ICU, CCU, Etc.)			
Pediatric Critical Care (Eg. NICU, PICU)			
Medicine			
Surgery			
Pediatric			
Oncology			
Bone Marrow Trans-Plant			
Obstetrics / Gynecology			





Long Term Care			
Rehab			
Other			
Enter total, if breakdown not available			

E1d. Inpatient Services/Programs

Do not enter commas or decimals. Please round up or down as required.





Inpatient drug costs

Adult Critical Care (ICU, CCU, Etc.)	
Pediatric Critical Care (Eg. NICU, PICU)	
Medicine	
Surgery	
Pediatric	
Oncology	
Bone Marrow Trans-Plant	
Obstetrics / Gynecology	
Long Term Care	





Rehab	
Other	
Enter total, if breakdown not available	

E2a. Outpatient Services/Programs

Do not enter commas or decimals. Please round up or down as required.

	Number of outpatient visits
Emergency	
Oncology	
Dialysis	
All other outpatient clinics	
Enter total, if breakdown not available	





E2b. Outpatient Services/Programs

Do not enter commas or decimals. Please round up or down as required.

	Pharmacist paid hours for central drug distribution activities excluding pharmacy residents	Pharmacist paid hours for decentralized services including clinical services
Emergency		
Oncology		
Dialysis		
All other outpatient clinics		
Enter total, if breakdown not available		





E2c. Outpatient Services/Programs

Do not enter commas or decimals. Please round up or down as required.

	Regulated pharmacy technician and/or non-regulated pharmacy assistant paid hours for drug distribution activities	Regulated pharmacy technician and/or non-regulated pharmacy assistant paid hours for clinical services
Emergency		
Oncology		
Dialysis		
All other outpatient clinics		
Enter total, if breakdown not available		



E2d. Outpatient Services/Programs

Do not enter commas or decimals. Please round up or down as required.

	Other pharmacy staff paid hours	Management paid hours	Outpatient drug costs
Emergency			
Oncology			
Dialysis			
All other outpatient clinics			
Enter total, if breakdown not available			

E3. Please add any comments related to Section E (Benchmarking) here:





Section F – Pharmacy Technician Practice

Please review the explanations and definitions of terms used in this section:

Regulated Pharmacy Technician

An individual who has been licensed by the relevant provincial college of pharmacists/pharmacy and who is qualified to perform, without direct supervision of a pharmacist, specialized functions, such as compounding medications, preparing parenteral admixtures, entering medication orders into the pharmacy information system and checking the work of other pharmacy technicians or non-regulated pharmacy assistants. The individual may also perform basic functions, such as re-packaging medications, delivering medications, maintaining inventory records and performing clerical activities. Individuals with this designation have passed the qualifying examination of the Pharmacy Examining Board of Canada (PEBC) after (1) graduating from an accredited pharmacy technician training program or (2) passing the PEBC evaluation examination and becoming qualified for licensure. For the purposes of this survey, the term “Regulated Pharmacy Technician” means those who are “registered” or “licensed” by a provincial regulatory body (college). Note: This designation is applicable only in provinces where regulation of pharmacy technicians has been implemented; Level 1 (Staff) and Level 2 (Senior) categories of the designation may be used.

Non-regulated Pharmacy Assistant

An individual who works under the direct supervision of a pharmacist or a regulated pharmacy technician to assist with various functions, such as compounding medications, preparing parenteral admixtures, entering medication orders into the pharmacy information system and checking the work of other non-regulated pharmacy assistants, or to perform basic functions, such as re-packaging medications, delivering medications, maintaining inventory records and performing clerical activities. Such an individual may also be referred to as a technical assistant.

Best Possible Medication History (BPMH)

A complete medication history created using (1) a systematic process of interviewing the patient and/or the patient’s family and (2) a review of at least one other reliable source of information to obtain and verify all of the patient’s medication use (prescribed and non-prescribed). Complete documentation includes drug name, dosage, route and frequency (<https://www.ismp-canada.org/medrec>). Once generated, the BPMH is an important reference tool for reconciling medications at care transitions.

Medication reconciliation

A formal process of (1) obtaining a complete and accurate list of each patient’s current home medications, including name, dosage, route and frequency; (2) using that list when writing admission, transfer and/or discharge orders; and (3) comparing the list against the patient’s admission, transfer and/or discharge orders, identifying any discrepancies, bringing them to the attention of the prescriber and, if appropriate, making changes to the orders. Any resulting changes in orders are documented.



Monitoring

Ongoing review of all pertinent patient data (e.g., diagnoses, laboratory values, medications) and evaluation of the patient's response to therapy. The routine drug profile review that pharmacists perform at the time of order entry or order review does not, on its own, fulfill the criteria for monitoring.

Medication counselling

A process involving direct interaction between the patient and an appropriate caregiver, during which the patient's medications are reviewed and the patient is provided with education concerning the safe and appropriate use of all medications.

Automated dispensing cabinet (ADC)

A computer-driven mechanical system (e.g., Pyxis, Omnicell Technologies) located in a patient care area, which stores medications, controls their release to authorized personnel and captures all transaction information.

Computerized provider order entry (CPOE)

Process whereby a healthcare provider enters medication orders or other instructions electronically, rather than on paper charts.

F1. What tasks do your regulated pharmacy technicians or non-regulated pharmacy assistants perform to support pharmacists in carrying out their clinical activities?



Regulated pharmacy
technicians

Non-regulated
pharmacy assistants

N/A

Serve as the initial pharmacy liaison for solving drug distribution problems on patient care units	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Collect and collate information concerning each patient's pre-admission drug therapy, to support medication reconciliation at admission (e.g., BPMH)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Create initial inpatient drug therapy documentation and discharge drug therapy plan to support medication reconciliation at discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Collect laboratory test results to support drug therapy evaluation and monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assemble pamphlets and documentation to be given to the patient by the pharmacist during medication counselling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Calculate changes to parenteral nutrition therapy using established protocols and laboratory values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





Collect and collate information used in the preparation of drug formulary submissions and in the investigation of non-compliance with formulary rules and other problems, to support the drugs and therapeutics committee

Assist in collecting data for presentation to the medication safety committee (e.g., conduct audits to identify and collect information on orders containing banned abbreviations)

Collect data for drug utilization review, to support the drug use evaluation program

Manage investigational drug inventory and provide technical assistance with clinical trial protocols

Other

For OTHER regulated pharmacy technicians, please specify:





For OTHER: Non-regulated pharmacy assistants, please specify:

F2a. Please indicate whether a regulated pharmacy technician or non-regulated pharmacy assistant perform any of the following activities.





	No	Performed by regulated pharmacy technicians	Performed by non-regulated pharmacy assistants
Perform medication order entry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill traditional prescriptions: new orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill traditional prescriptions: refills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Package unit-dose items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill unit-dose trays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill interim doses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compound patient-specific intravenous admixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compound batch intravenous admixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compound total parenteral nutrition solutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compound chemotherapy medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perform extemporaneous compounding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill cardiac arrest trays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Replenish automated dispensing cabinets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





F2b. Please indicate whether a regulated pharmacy technician or non-regulated pharmacy assistant check any of the following activities.





	Not applicable	No	Checked by regulated pharmacy technicians	Checked by non-regulated pharmacy assistants
Perform medication order entry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill traditional prescriptions: new orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill traditional prescriptions: refills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Package unit-dose items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill unit-dose trays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill interim doses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compound patient-specific intravenous admixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compound batch intravenous admixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compound total parenteral nutrition solutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compound chemotherapy medications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perform extemporaneous compounding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fill cardiac arrest trays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





Replenish
automated
dispensing
cabinets

F3. What percentage of your staff who perform technical functions are regulated pharmacy technicians?

0 10 20 30 40 50 60 70 80 90 100

Select: 

F4. For every 1 pharmacist, what would be the ideal ratio of regulated pharmacy technicians in your facility?

Pharmacist to Regulated Pharmacy Technician?

- 6:1
- 5:1
- 4:1
- 3:1
- 2:1
- 1:1
- 1:2
- 1:3
- 1:4
- 1:5
- 1:6



F5. For every 1 regulated pharmacy technician, what would be the ideal ratio of non-regulated pharmacy assistants in your facility?

Regulated Pharmacy Technician to Non-regulated Pharmacy Assistant?

- 6:1
- 5:1
- 4:1
- 3:1
- 2:1
- 1:0
- 1:1
- 1:2
- 1:3
- 1:4
- 1:5
- 1:6

F6. What has been the impact, if any, of the technologies listed below on the workload of regulated pharmacy technicians and/or non-regulated pharmacy assistants?

	Regulated pharmacy technicians workload:				Non-regulated pharmacy assistants workload:			
	Increased	Reduced	No change	N/A	Increased	Decreased	No change	N/A





CPOE	<input type="radio"/>							
Automated sterile compounding machines	<input type="radio"/>							
Automated packaging machines	<input type="radio"/>							
Barcode medication identification systems	<input type="radio"/>							
Inventory management systems	<input type="radio"/>							

F7. In your facility, please indicate who routinely performs the functions listed below?





	Pharmacist	Regulated Pharmacy Technician	Non-regulated Pharmacy Assistant	Non-pharmacy personnel	N/A
Developing master formulas or compounding protocols	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sterile compounding of pharmaceuticals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-sterile compounding of pharmaceuticals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Determining beyond-use date (BUD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Receiving verbal orders (except for controlled substances)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Performing the final product check for new prescriptions, including prescriptions for controlled and hazardous substances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Performing the final product check for refill prescriptions, including refill prescriptions for controlled and hazardous substances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transferring prescriptions (except for controlled substances)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





Providing instructions on how to operate medical devices

Supervising the pharmacy operations of a regional distribution centre

Supervising the pharmacy dispensary in your facility

Creating, updating and validating the drug database library in your facility

Performing final verification of compounded non-sterile pharmaceuticals, including narcotics and controlled substances

Performing final verification of compounded sterile pharmaceuticals, including narcotics and controlled substances

Performing quality audits on the automated system





Performing
quality audits on
sterile
compounding
personnel

F8. Would your organization support performance of any of the following functions by a regulated pharmacy technician with appropriate education and training?

	No	Yes
Administering medications by injection or inhalation	<input type="radio"/>	<input type="radio"/>
Witnessing ingestion of opioid replacement therapy (e.g., methadone, buprenorphine/naloxone)	<input type="radio"/>	<input type="radio"/>
Receiving verbal prescriptions for narcotics and controlled substances	<input type="radio"/>	<input type="radio"/>
Independently destroying unserviceable narcotics and controlled substances	<input type="radio"/>	<input type="radio"/>

F9. Are regulated pharmacy technicians and/or non-regulated pharmacy assistants involved in any of the following activities related to drug diversion prevention?

	No	Yes
Obtaining reports of discrepancies related to controlled substances	<input type="radio"/>	<input type="radio"/>
Performing audits of storage and retrieval procedures for controlled substances	<input type="radio"/>	<input type="radio"/>
Staff education about procedures for handling controlled substances	<input type="radio"/>	<input type="radio"/>
Disposal of controlled substances and related documentation	<input type="radio"/>	<input type="radio"/>
Serve as a member of your facility's drug diversion prevention committee?	<input type="radio"/>	<input type="radio"/>





F10. What impact, if any, has pharmacy technician regulation had on your organization?

Select all that apply.

- Creation of new positions
- Elimination of existing positions
- Expansion of services
- Enhancement of patient care
- Decrease in pharmacists' workload
- Decrease in medication turnaround times
- Decrease in medication errors
- Decrease in staff turnover
- Other
- Not applicable

For OTHER please specify:



F11. Please add any comments related to Section F (Pharmacy Technician Practice) here:





Section G – Technology Information

Please review the explanations and definitions of terms used in this section:

TALLman lettering

The use of uppercase letters (capitalization) to enhance the unique letters of a medication's generic drug name (e.g., DOXOrubicin, HYDROmorphone, OXYcodone, inFLIXimab, NIFEdipine, DULoxetine) to reduce errors caused by potential confusion between drug products with look-alike drug names.

Pharmacy information system (PIS)

A computer system (e.g., BDM, Cerner, Meditech, EPIC) that is used by the pharmacy to maintain an accurate record of drug dispensing activity, patient medication profiles and other relevant patient information. Reports generated from a PIS are used to track drug costs by patient or patient care unit, drug utilization patterns, and other pertinent data.

Computerized provider order entry (CPOE)

Process whereby a healthcare provider enters medication orders or other instructions electronically, rather than on paper charts.

Electronic Health Record (EHR)

A longitudinal electronic record of patient health information generated as a result of one or more encounters in any care delivery setting. Included in this record are patient demographic characteristics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data and radiology reports. The EHR automates and streamlines the clinician's workflow. The EHR system has the ability to generate a complete record of a clinical patient encounter, as well as supporting other care-related activities, directly or indirectly, through the interface, including evidence-based decision support, quality management and outcomes reporting.

Clinical decision support system

Feature of a computer program that provides automatic reminders, advice or interpretation as data are entered for a specific patient and/or a specific medication order. A clinical decision support system uses patient-specific data and evidence-based practice guidelines to generate alerts and/or suggested courses of action.

Smart pump

Infusion pump with a programmable drug library, including clinical alerts related to drug dose and rate, as well as the ability to store and download usage data for quality assurance, education and safety purposes.

Repeater pump or automatic syringe filler

A peristaltic pump that is used for accurately transferring aliquots of fluid from one container to another (e.g., from a bag to a syringe).



Automated dispensing cabinet (ADC)

A computer-driven mechanical system (e.g., Pyxis, Omnicell Technologies) located in a patient care area, which stores medications, controls their release to authorized personnel and captures all transaction information.

Healthcare Information and Management Systems Society (HIMSS) classification

[The HIMSS Analytics Electronic Health Record Adoption Model \(EMRAM\)](#) incorporates methodology and algorithms to automatically score hospitals around the world relative to their electronic health record (EHR) capabilities. This eight-stage model (in which stages are designated from 0 to 7) measures the adoption and utilization of various EHR functions.

Stage 7 Complete EHR; external electronic health information exchange (HIE); data analytics, governance, disaster Recovery, privacy and security

Stage 6 Technology-enabled medication, blood products and human milk administration; risk reporting; full clinical decision support

Stage 5 Physician documentation using structured templates; intrusion/device protection

Stage 4 CPOE with clinical decision support; nursing and allied health documentation; basic business continuity

Stage 3 Nursing and allied health documentation; electronic medication administration record (eMAR); role-based security

Stage 2 Clinical data repository; internal interoperability; basic security

Stage 1 Ancillaries: laboratory, pharmacy and radiology/cardiology information systems; picture archiving and communication system; Digital non-DICOM image management

Stage 0 Ancillaries not installed

G1. Does your facility have an operational [electronic health record \(EHR\)](#)?

No

Yes

G2. How many budgeted FTEs did you have in the 2020/21 fiscal year for staff members dedicated to working on the pharmacy information system (PIS) and any other pharmacy technology?

Pharmacists _____

Regulated Pharmacy Technicians _____

Non-regulated Pharmacy Assistants _____

Non-pharmacy personnel _____





G3. During the dispensing process, how do pharmacy personnel obtain access to laboratory test results?

Select one of the following.

- Through paper-based medical records only
- Through view-only access available at pharmacy terminals (interface or separate log-in)
- Through a laboratory system that is fully interfaced with the medication order entry system, to automatically alert practitioners about the need for potential changes in drug therapy

G4a. Does your facility use [TALLman lettering](#) to reduce errors caused by potential confusion between drug products with look-alike drug names?

- No
- Yes

G4b. Where is [TALLman lettering](#) used?

Select all that apply.

- In the Pharmacy Information System (PIS) (e.g., drop-down menus for drug selection)
- On pharmacy-generated labels
- On pharmacy-generated unit-dose packaging
- On pharmacy-generated medication administration records (MARs)
- On shelf labels in the pharmacy
- In the medication rooms of patient care units (e.g., shelf labels)
- On medication carts



- On automated dispensing cabinets
- On clinical order sets or preprinted orders
- Within the computerized provider order entry (CPOE) environment (if applicable)

G5a. Does your facility have an operational CPOE system (excluding outpatient oncology services)?

- No, and there is no approved plan to implement such a system
- No, but there is an approved plan to implement such a system
- Yes

G5b. Describe in general terms the functionality of the CPOE system.

Select one of the following.

- The CPOE system is interfaced unidirectionally with the PIS (information flows only from the CPOE system to the PIS, or information flows only from the PIS to the CPOE system).
- The CPOE system is interfaced bidirectionally with the PIS (information flows back and forth between the PIS and the CPOE system) or functions as a single, integrated hospital information system requiring no interfaces.
- The CPOE is not interfaced with the PIS (medication orders are transcribed into the pharmacy computer system).



G6. The CPOE system has the following features:

Select all that apply.

- Integrated with an EHR
- Integrated with a clinical decision support system that guides the user through established protocols and clinical pathways
- Interfaced with the laboratory system to alert practitioners to the need for potential changes in drug therapy
- Alerts prescribers to unsafe orders (e.g., allergies, maximum doses, interactions) during order entry
- Guides the use of formulary drugs
- Guides the use of weight-based or surface area-based dosing for selected drugs (e.g., certain hazardous/cytotoxic oncology drugs) and/or patient populations (e.g., pediatric patients)
- Guides dosage determination of medications for special populations (e.g., patients with renal impairment, pediatric patients)
- Other

For OTHER, please specify:



G7a. Does your facility use smart pumps?

No

Yes

If YES,

	No	Yes
b) Does your facility use a wireless network to upload or download data to smart pumps?	<input type="radio"/>	<input type="radio"/>
c) Does your facility review and update the drug-specific pump programming (i.e., the pump library) at least annually?	<input type="radio"/>	<input type="radio"/>
d) Is the smart pump integrated with your facility's EHR?	<input type="radio"/>	<input type="radio"/>

G8. Please indicate the status of barcoding in your facility for each of the potential applications listed below.





Application	No, we are not using barcoding for this application and do not have an approved plan to do so	No, we are not using barcoding for this application, but we have an approved and funded plan to do so	Yes, we are using barcoding for this application in ≤ 50% of our facility	Yes, we are using barcoding for this application in 51%–100% of our facility
Verify drug selection before dispensing from the pharmacy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verify drug selection before administration to a patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify the patient during medication administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify the staff member during medication administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conduct inventory management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verify filling of unit-dose bins	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verify stocking of automated dispensing cabinets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verify stocking of automated re-packaging machines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





Verify base solutions and ingredients during preparation and verification of compounded sterile preparations

Transfer patient- and/or drug-specific information to smart pump



G9. Does your facility use standardized nomenclature to describe medications in various information systems? (e.g., use a standard descriptor for dosage forms such as sustained-release [SR, CD, XR, XL, etc.]) consistently throughout the facility's system.

No

Yes





G10. Indicate which of the following technologies are currently used in your facility.

Select all that apply:

- Gravimetry-based intravenous (IV) workflow: Software and equipment used for compounding of sterile preparations
- Fluid transfer pump: Sterile compounding device (for both hazardous or non-hazardous products) for fluid transfer and filling, such as drug reconstitution, IV fill and transfer, elastomeric infuser fills, total parenteral nutrition, filling of sterile syringes
- Camera-based remote verification: Use of camera to manage workflow of compounding sterile preparation and permitting remote verification and documentation of activities by authorized personnel outside of the sterile room or from a remote facility
- Medication order management: Scanning of medication orders and secure transmission to a pharmacist at a remote location for review
- Carousel: Automated storage and dispensing system for pharmacy inventory, which may feature vertical storage capacity, barcode scanning, and ambient or refrigerated storage
- Telecare: Consultations or services for patients in other healthcare facilities or at home
- Radio frequency identification (RFID): Use of RFID tags on devices, kits or trays used to administer or store medications
- Artificial intelligence: Electronic, robotic or virtual systems that employ human-created algorithms, machine-learning or deep learning



G11. What is the [The HIMSS Analytics Electronic Health Record Adoption Model \(EMRAM\)](#) classification of your facility?

- Stage 0
- Stage 1
- Stage 2
- Stage 3
- Stage 4
- Stage 5
- Stage 6
- Stage 7
- Unknown

G12. Please add any comments related to Section G (Technology Information) here:





SECTION H –The Impact of the COVID 19 Pandemic on Hospital Pharmacy Services

The purpose of the questions in this special section is to determine the impact of the COVID 19 pandemic on your pharmacy department operations and clinical services. We hope the results will help us to better prepare for future pandemics.

Pharmacy Operations

H1a. Did you have pharmacy staff working from home/remotely as a result of the pandemic?

- No
 Yes

H1b. Which pharmacy services were provided by staff working remotely?

Select all that apply.

- Order entry
- Order validation
- Clinical rounds
- Medication reconciliation
- Drug Use Evaluation
- Procurement
- Pharmacy informatics
- Management
- Other

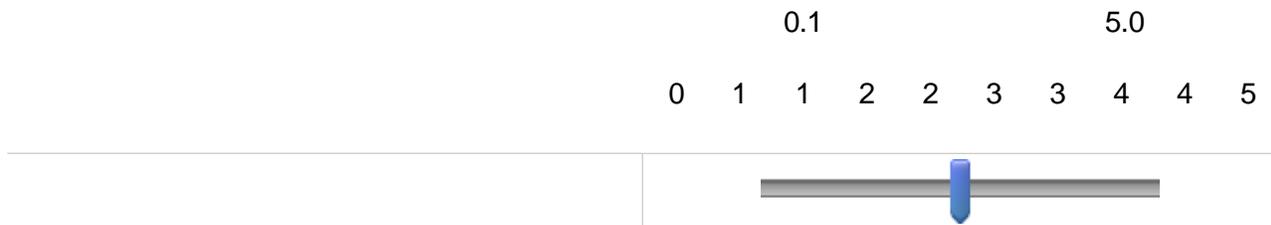


For OTHER, please specify:

H2a. Did you increase pharmacy staffing to manage drug shortages during the pandemic?

- No
 Yes

H2b. Please indicate the number of FTE's that were added.



H3a. During the pandemic did you have to suggest alternative agents due to drug shortages?

- No
 Yes

H3b. How often did you have to suggest alternative agents due to drug shortages?

- Daily
 2 to 3 times a week
 Weekly
 Monthly

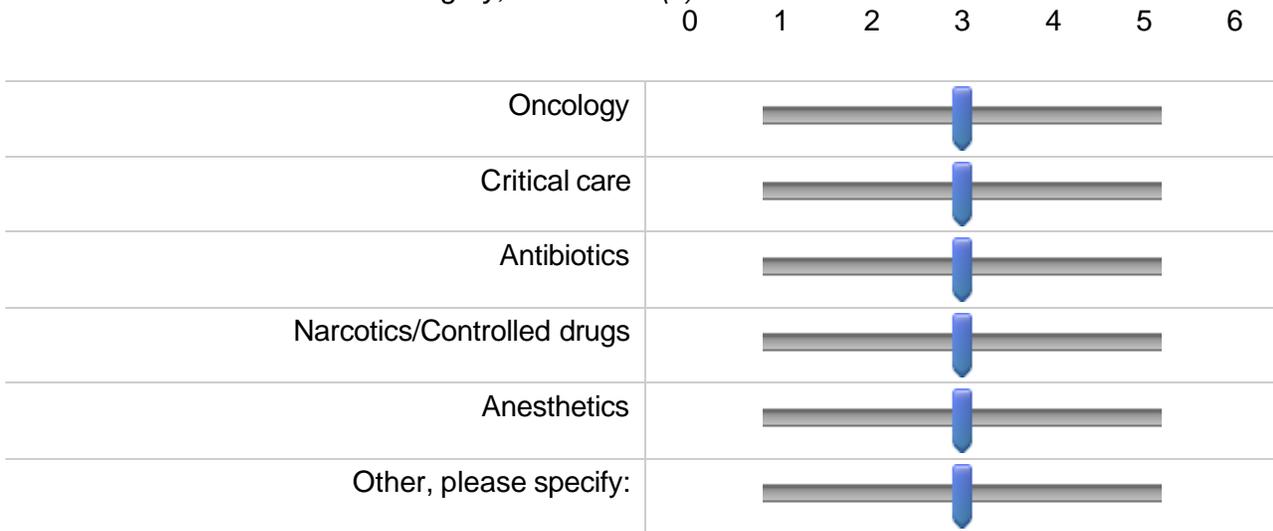


H4a. During the pandemic, did you increase your drug inventory?

- No
- Yes

H4b. Please indicate which drug categories were increased and by how many months of usage.

If there was no increase for a category, select zero (0).



H5a. During the pandemic, did you require additional storage space for your drug inventory?

- No
- Yes

H5b. Indicate how much additional space you required (in square meters; m2)

- 1 - 500 m2
- 501 – 1000 m2
- 1001 – 2000 m2
- More than 2000 m2





H6a1. Was your pharmacy department involved with a COVID 19 vaccination program?

- No
- Yes

H6a2. Please indicate which aspects of COVID 19 vaccination you were involved with.

Select all that apply.

- Storage of the COVID 19 vaccine
- Distribution of the COVID 19 vaccine
- Preparation of the COVID 19 vaccine: reconstitution
- Preparation of the COVID 19 vaccine: preparing individual doses (syringes)
- Administration of the COVID 19 vaccine (pharmacy staff as immunizers)
- Transporting vaccine to off-site vaccination clinics
- Other

For OTHER, please specify:

H6b. At the peak of activity, please indicate how many FTE's per week were required to support your involvement with vaccination activities?





H6c1. At the peak of activity, were additional pharmacy FTE's per week hired to support your pharmacy department's involvement with COVID 19 vaccinations?

- No
- Yes

H6c2. How many additional FTE's were approved to support your pharmacy department's involvement with COVID 19 vaccinations?

- 0.5
- 1
- 1.5
- 2
- 2.5
- 3
- 3.5
- 4
- 4.5
- 5
- 5.5
- 6
- 6.5
- 7
- 7.5



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- 24.5
- 25

Clinical Pharmacy Services

H7a. Did you admit COVID patients to your ICU?

- Not applicable (NO ICU beds in our facility)
- No
- Yes





H7b. How did you provide pharmacist coverage to the ICU during the pandemic?

- Managed with our pre-pandemic pharmacy staffing allocation for the ICU
- Reassigned pharmacists from other patient care areas to increase the number of pharmacist FTE's providing ICU coverage
- Hired additional pharmacists to provide ICU clinical coverage

H8. Did you provide additional training for pharmacists providing ICU coverage?

- No additional training was provided
- Additional training was provided for the pharmacists providing ICU coverage
- Training was provided to pharmacists from other patient care areas in order to provide ICU coverage
- Training was provided to all pharmacists providing clinical services in order to provide ICU coverage

Pharmacy Education

H9a. Did your pharmacy department provide “remote” clinical rotations during the pandemic?

- No
- Yes



H9b. Which type of clinical rotations did you provide remotely during the pandemic?

Select all that apply.

- Drug information rotations
- Research related rotations
- Specialty rotations
- Pharmacy student rotations
- Pharmacy technician rotations
- Pharmacy residency rotations
- Other

For OTHER, please specify:

H10a. Were your regulated pharmacy technicians or non-regulated pharmacy assistants trained to administer COVID 19 vaccinations?

- No
- Yes



H10b. Please indicate the reason they were not trained to administer COVID 19 vaccinations?

Select all that apply.

- They were not designated as potential vaccinators in our provincial jurisdiction
- They were needed to maintain current pharmacy services
- Staff were not interested in being trained to administer vaccine
- No injection training or certification program was available

H10c. At the peak of activity how many FTE's per week were allocated to administer COVID 19 vaccinations?



Pharmacy Administration/Human Resources

H11. Was your pharmacy department involved with regional planning to support the COVID 19 vaccination strategy?

- No
- Yes



H12. Please indicate if you lost pharmacy staff during the pandemic for any of the following reasons.

Select all that apply.

- COVID-related sick leaves (infection or isolation)
- Decision to take early retirement due to the pandemic
- Staff resignation due to the pandemic
- No pharmacy staff was lost

H13. What percentage of your pharmacy staff tested positive for COVID 19 during the pandemic?

0 10 20 30 40 50 60 70 80 90 100



H14a. Did you have to procure capital equipment due to the demands of the pandemic?

- No
- Yes



14b. Please indicate what equipment was procured due to the demands of the pandemic?

Select all that apply.

- Freezer(s)
- Automated Dispensing Cabinet(s) (ADC's)
- Fridge(s)
- Computer(s)
- Printer(s)
- Other

For OTHER, please specify:

H15a. Did your facility increase the number of acute care beds due to the pandemic?

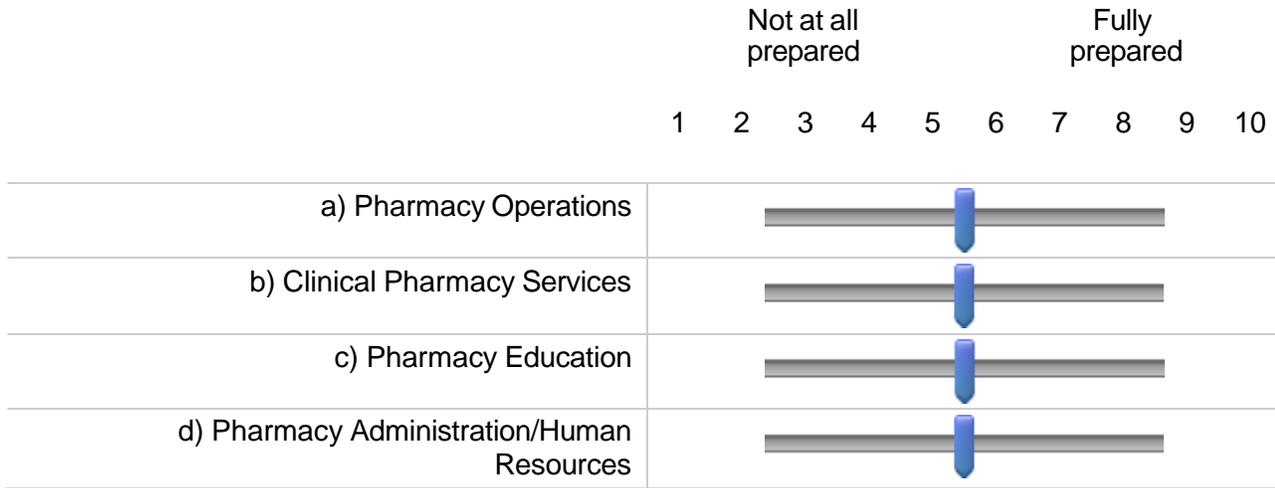
- No
- Yes

H15b. Please indicate how many additional acute care beds were added:

H15c. How many new pharmacy FTE's were added to support the additional acute care beds?



H16. Using a scale of 1 to 10, 1 being not at all prepared and 10 being fully prepared, please rate your level of preparedness for another pandemic in the following pharmacy domains,



H17. What did you find most challenging in managing pharmacy services during the pandemic?

H18. What went well in managing pharmacy services during the pandemic?



H19. If you had to do it over again, what would you do differently?





Section I – Small Hospital Survey (1- 49 acute care beds)

Please review the following for explanations and definitions of terms used in this survey:

Acute Care

Provision, to a patient who has been formally admitted to a bed in a facility, of the necessary treatment for a disease or severe episode of illness for a short period. Patients are discharged from acute care as soon as they are healthy and their condition is stable. Note: Palliative care beds and alternate level of care (ALC) beds may be classified as acute or non-acute, according to how they are designated within a given facility.

Non-acute care

Inpatient care that is not of an acute nature, encompassing the following types of care: long-term care (LTC), rehabilitation, chronic care and complex continuing care. Note: Palliative care beds and alternate level of care (ALC) beds may be classified as acute or non-acute, according to how they are designated within a given facility.

Alternate level of care (ALC)

Care provided to a patient who is occupying a bed in a facility but does not require the intensity of resources/services usually provided in that care setting (whether acute care, chronic or complex continuing care, mental health care or rehabilitation). In this situation, the patient must be designated “ALC” by the most appropriate care team member (physician, long-term care [LTC] assessor, patient care manager, discharge planner or other care team member). For a patient with “ALC” designation in an acute care setting, discharge/transfer destinations may include but are not limited to:

home (with/without services);

designated/specialized mental health treatment facility;

chronic or complex continuing care (facility/bed within or outside reporting facility);

and long-term care (LTC) home.

The discharge or transfer destination need not be known at the time of ALC designation.

Complex continuing care

The delivery of medically complex, specialized services (e.g., ventilation therapy) to patients of any age, over extended periods of time.

Long-term care (LTC)

Care to address the needs of patients who require nursing and personal care on a continuing basis. These patients usually have disabilities or chronic care needs, with a range of medical and/or social services being offered. The services are generally provided in residential facilities (e.g., nursing homes or assisted living facilities).



Rehabilitation

Care to address the needs of patients who have been disabled by disease or injury. In the rehabilitation setting, patients receive combined and coordinated care through the provision of medical, social, educational and vocational measures for training or re-training, in an effort to restore the patients to their highest possible level of functional ability.

Palliative care

Care to address the needs of patients with life-limiting conditions. In the palliative care setting, the focus is on improving quality of life for the patient and their family/loved ones. Improving quality of life begins with identifying, assessing and alleviating pain and other physical, psychosocial and spiritual issues.

Mental health care

Care to address the needs of patients with mental illness. In the mental health care setting, the focus is on observing and providing care and treatment for patients who are experiencing mental health disorders.

Unit-dose system

A drug distribution system in which medications are packaged and dispensed to the patient care unit in a single-dose, ready-to-administer form. Usually, no more than a 24-hour supply of patient-specific medication is delivered to the patient care unit at any one time. A unit-dose system may be centralized or decentralized.

Centralized unit-dose system

A unit-dose system in which most medications for a specified time frame (e.g., 24 hours) are dispensed to the patient care unit from the central pharmacy.

Decentralized unit-dose system

A unit-dose system in which most medications are distributed from a satellite pharmacy or from an automated dispensing cabinet (ADC) located on the patient care unit. Automated dispensing cabinet (ADC) A computer-driven mechanical system (e.g., Pyxis, Omnicell Technologies) located in a patient care area, which stores medications, controls their release to authorized personnel and captures all transaction information. Traditional drug distribution system A drug distribution system in which most medications are labelled and dispensed in multi-dose, patient-specific vials or similar medication containers, after a pharmacist has reviewed and approved the medication and dosage ordered for each specific patient.

Total wardstock system

A drug distribution system in which most medications are stocked on the patient care unit in bulk containers, from which medications can be removed and administered to patients without a pharmacist having to first review and approve the medication order for each specific patient.

Controlled/carded dose system

A drug distribution system in which most medications are packaged in blister cards containing up to a one-month supply of medication. A pharmacist usually reviews and approves the medication order before a patient-specific label is applied to the card and the card is delivered to the patient.



Budgeted hours

All staffing hours that are funded in the budget. If relief hours (e.g., for vacation or illness) are included in the budget, they should be counted as budgeted hours.

Full-Time Equivalent (FTE)

A standardized counting unit, whereby the annual number of budgeted hours for a full-time employee (e.g., 2,015 hours) is equivalent to 1 FTE. For example, if the total number of budgeted hours for all pharmacists in a given fiscal year is 20,150, and the number of hours budgeted for a full-time pharmacist is 2,015, the number of FTEs would be 10. Budgeted casual and relief hours should be included in the calculation of FTEs.

0.2 Full-Time Equivalent (FTE)

Assignment of a pharmacist to a program for a minimum of one day per week or for shorter periods that combine to the equivalent of one day per week, on average. For example, 0.2 FTE is equivalent to one pharmacist working one full day per week or two half-days per week.

Staff Pharmacist

A pharmacist who holds a licence to practice pharmacy and who participates in the delivery of drug distribution and/or clinical services (excluding pharmacists in management positions and any pharmacists who have been designated as Advanced Practice Pharmacists).

Pharmacist Manager

A pharmacist who is responsible for managing one or more sites or functional areas and who is responsible for hiring, performance reviews, discipline and dismissal of designated staff members who report directly.

Pharmacy Technician Manager

A regulated pharmacy technician who is responsible for managing one or more sites or functional areas and who is usually responsible for hiring, performance reviews, discipline and dismissal of designated staff members who report directly.

Non-regulated Pharmacy Assistant Manager

A non-regulated pharmacy assistant who is responsible for managing one or more sites or functional areas and who is usually responsible for hiring, performance reviews, discipline and dismissal of designated staff members who report directly.

Regulated Pharmacy Technician

An individual who has been licensed by the relevant provincial college of pharmacists/pharmacy and who is qualified to perform, without direct supervision of a pharmacist, specialized functions, such as compounding medications, preparing parenteral admixtures, entering medication orders into the pharmacy information system and checking the work of other pharmacy technicians or non-regulated pharmacy assistants. The individual may also perform basic functions, such as re-packaging medications, delivering medications, maintaining inventory records and performing clerical activities. Individuals with this



designation have passed the qualifying examination of the Pharmacy Examining Board of Canada (PEBC) after (1) graduating from an accredited pharmacy technician training program or (2) passing the PEBC evaluation examination and becoming qualified for licensure. For the purposes of this survey, the term “Regulated Pharmacy Technician” means those who are “registered” or “licensed” by a provincial regulatory body (college). Note: This designation is applicable only in provinces where regulation of pharmacy technicians has been implemented; Level 1 (Staff) and Level 2 (Senior) categories of the designation may be used.

Non-regulated Pharmacy Assistant

An individual who works under the direct supervision of a pharmacist or a regulated pharmacy technician to assist with various functions, such as compounding medications, preparing parenteral admixtures, entering medication orders into the pharmacy information system and checking the work of other non-regulated pharmacy assistants, or to perform basic functions, such as re-packaging medications, delivering medications, maintaining inventory records and performing clerical activities. Such an individual may also be referred to as a technical assistant.

Computerized provider order entry (CPOE)

Process whereby a healthcare provider enters medication orders or other instructions electronically, rather than on paper charts.

Smart pump

Infusion pump with a programmable drug library, including clinical alerts related to drug dose and rate, as well as the ability to store and download usage data for quality assurance, education and safety purposes.

I1-2. How many of the following beds did your facility have in service on March 31, 2021 (excluding bassinets for newborns)?

Non-acute care includes the following:

[Long-term care \(LTC\)](#)

[Rehabilitation](#)

[Palliative care](#)

[Alternate level of care \(ALC\)](#)

[Mental health](#)

[Complex continuing care](#)

Enter zero (0) if there are no non-acute care beds.

acute care _____

non-acute care _____





I3. What was your facility's number of inpatient days (sometimes reported as hospital days) in the 2020/21 fiscal year?

a) acute care: _____

b) non-acute care: _____

I4. How are pharmacy services provided for acute care and non-acute care beds within your facility?

If you use a combination of service providers, select all that apply.

- Services are provided by an on-site hospital pharmacy
- Services are provided by an off-site hospital pharmacy provider
- Services are provided by an off-site community pharmacy provider
- Services are provided by a remote telepharmacy service

I5. Indicate the type of drug distribution system that was used in your facility to service inpatient units with overnight beds during the 2020/21 fiscal year.

If you use multiple systems, indicate which system is used to service the majority of your beds.

Exclude systems used for patient care units that generally do not have overnight beds (e.g., operating rooms, Emergency Department).

- Unit-dose system: centralized
- Unit-dose system: decentralized, with automated dispensing cabinets
- Traditional drug distribution system
- Total wardstock system
- Controlled/carded dose system



I6. Do you provide:

	No	Yes
non-hazardous sterile compounding services in your facility?	<input type="radio"/>	<input type="radio"/>
hazardous sterile compounding services in your facility?	<input type="radio"/>	<input type="radio"/>

I7. Clinical pharmacy key performance indicators (cpKPIs) are evidence-based clinical pharmacy processes of care that are associated with a meaningful impact on patient outcomes (such as improved morbidity rates or reduced hospital readmissions).

Does your pharmacy program collect data on cpKPIs?

- No
- Yes

I8a. What was the total annual number of budgeted hours per full-time equivalent (FTE) for each of the following position types in your facility in the 2020/21 fiscal year?

For each position type, select the number that is closest to your actual budgeted hours or “n/a” (not applicable).



	Budgeted hours / year						
	1820	1885	1950	1957.5	2015	2080	n/a
Staff Pharmacist	<input type="radio"/>						
Pharmacist Manager	<input type="radio"/>						
Pharmacy Technician Manager	<input type="radio"/>						
Non-regulated Pharmacy Assistant Manager	<input type="radio"/>						
Regulated Pharmacy Technician	<input type="radio"/>						
Non-regulated Pharmacy Assistant	<input type="radio"/>						

18b. For each position type listed below, what was the total number of budgeted full-time equivalent (FTE) positions in the 2020/21 fiscal year?

For these responses, please note the following:

- Include the FTEs for all budgeted full-time and part-time positions that are vacant.
- Include budgeted casual and relief hours by converting them to FTEs.
- Where budgeted positions exist for students, count the FTEs for their positions in the category of staff most appropriate for the roles that the students are performing in your department (i.e., pharmacist, regulated pharmacy technician, or non-regulated pharmacy assistant).

Enter zero (0) if there is no staffing in a particular category (e.g., if you have no positions of a particular type servicing your facility or if services are provided on a fee-for-service basis).

Note: If there are centralized or regional managers or staff who provide services to multiple sites, it is recommended that those FTEs be apportioned to the individual sites for the purposes of completing this section. The Regional Director may be in the best position to make decisions about how to apportion



these FTEs for the sites within your region.

- Staff Pharmacist _____
- Pharmacist Manager _____
- Pharmacy Technician Manager _____
- Non-regulated Pharmacy Assistant Manager _____
- Regulated Pharmacy Technician _____
- Non-regulated Pharmacy Assistant _____

19. Report the average number of hours per week that the following pharmacy staff members are on site providing clinical or distributive services.

- Pharmacists _____
- Regulated Pharmacy Technicians and/or Non-regulated Pharmacy Assistants _____

110. Does your facility employ any of the following technologies?

	No	Yes
Smart pumps	<input type="radio"/>	<input type="radio"/>
Bar coding during drug preparation	<input type="radio"/>	<input type="radio"/>
Bar coding during drug dispensing	<input type="radio"/>	<input type="radio"/>
Bar coding during medication administration to patients	<input type="radio"/>	<input type="radio"/>
Operational CPOE system	<input type="radio"/>	<input type="radio"/>



I11 Does your facility have...

Please indicate "yes" only if your department has 0.2 FTE or more pharmacists assigned to such formal patient care programs.

	No	Yes
any formal inpatient patient care programs to which a pharmacist is assigned?	<input type="radio"/>	<input type="radio"/>
any formal outpatient patient care programs to which a pharmacist is assigned?	<input type="radio"/>	<input type="radio"/>

I12. Please add any comments related to Section I – Small Hospital Survey here:





Section J – Statement of Completion and Respondent Information

Thank you for participating in the 22nd Hospital Pharmacy in Canada Survey!

Please supply the following information about you and your facility

- to indicate that you have reviewed the data provided in this survey for reasonableness and completeness
- to ensure recognition of your facility's participation in the 22nd Hospital Pharmacy in Canada Report to be published in 2022
- to authorize the use of the data provided in this survey for the preparation and publication of reports (data from individual hospitals will not be identified).

** required*

- Name * _____
- Position * _____
- Telephone number * (direct line) _____
- email address * _____
- Hospital * _____
- Street address _____
- City _____
- Province _____
- Postal code _____
- Pharmacy website (if applicable) _____



Please specify the name(s) of the hospital / facility (hospitals / facilities) for which you are reporting in this survey.*

Additional comments related to the 2020/21 Hospital Pharmacy in Canada Survey:

Submitted on (dd/mm/yyyy):
