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Introduction

Welcome to the *Manitoba Module: Ordering Laboratory Tests*. The Pharmaceutical Regulation in Manitoba provides pharmacists with the authority to order and receive the results of laboratory tests when following the guidelines and restrictions set out in the Regulation and the appropriate practice directions.

A phased-in approach of lab test ordering by pharmacists in Manitoba for patients who are not inpatients of a hospital ("outpatients") is currently underway.

Information on the phased-in rollout and self-declaration of module completion is posted on the College of Pharmacists of Manitoba website at the following link: https://cphm.ca/resource/ordering-lab-tests-info-sheet/

Pharmacists wanting to include test ordering for outpatients as part of their practice must complete the *Manitoba Module: Ordering Laboratory Tests*. Successful completion of the Manitoba Module does not automatically grant pharmacists the authority to order lab tests for outpatients in Manitoba. Following successful completion of the Manitoba Module, which includes successfully completing the post-test and receiving a Statement of Participation, pharmacists must sign into their Pharmacist Portal on the College website and declare they have completed the required training by inputting the module completion date. More information on this process can be found near the end of this module.

Learning Objectives

Upon successful completion of this module, the pharmacist will be able to:

- 1. Discuss principles of lab test ordering to guide appropriate ordering and interpretation.
- 2. Examine and apply the relevant sections of the *Pharmaceutical Act*, Regulations, and practice direction related to ordering laboratory tests for outpatients.
- 3. Implement the new practice framework for lab test ordering into his/her pharmacy practice.
- 4. Summarize the process of receiving, reviewing, and communicating test results and recommendations, including critical values.
- 5. Explain the legislative and procedural differences between community and hospital practice in relation to ordering lab tests.

Presentation

View the following presentation, *Medical Lab Tests & Pharmaceutical Care: Making the most of a valuable tool*, presented by Dr. Jamie Falk, as an introduction to the principles and importance of appropriate ordering and interpretation of lab tests. Following the presentation,

complete the rest of this self-study focusing on the applicable sections of the *Pharmaceutical Act*, Regulation, and practice direction related to laboratory tests as well as the process of ordering, receiving, reviewing, and communicating lab test results and recommendations, including the management of critical values.

Presentation Link https://youtu.be/NOAV4gc7hds

The Pharmaceutical Act and Regulations

The *Pharmaceutical Act* in Manitoba was passed and received Royal Assent on December 7th, 2006. The legislation was proclaimed by the government and came into effect on January 1, 2014. The *Pharmaceutical Act* can be viewed here.

It is imperative that pharmacists authorized to order tests are knowledgeable on the applicable sections of the Pharmaceutical Regulation to the *Pharmaceutical Act*. The full document can be viewed here and the sections pertaining to the ordering of lab tests are highlighted below:

REGULATIONS PART 13

ORDERING TESTS BY MEMBERS

Ordering tests — all members

100 Any member may order and receive the results of a screening or diagnostic test specified in Schedule 1 to this regulation in relation to a drug prescribed to a patient, when the purpose of doing so is to monitor the patient's drug therapy regime to ensure that it is safe and optimal.

Ordering tests — extended practice pharmacists

101 In addition to the tests permitted by section 100, a member who is an extended practice pharmacist may order and receive the results of a screening or diagnostic test that is within the scope of the member's specialty.

Ordering tests re drugs prescribed by members

102 Despite section 100, a member may order a screening or diagnostic test in relation to a drug that a member has prescribed only if the prescribing member is an extended practice pharmacist.

Ordering tests — hospital pharmacy

103 A member practising in a hospital pharmacy may, in accordance with hospital policy, order and receive the results of a screening or diagnostic test for a person who is an in-patient of the hospital. In that case, sections 105 and 106 do not apply.

Compliance with practice directions

104 A member who orders and receives the results of tests under this Part must comply with any applicable practice directions.

General requirements

105(1) Before ordering a screening or diagnostic test, a member must

- (a) give the patient sufficient information about the reason for ordering the test so that the patient can make an informed decision about whether to have the test; and
- (b) if the drug in relation to which the test was ordered was dispensed pursuant to a prescription, notify the practitioner who last prescribed the drug of the test to be ordered and the reason for doing so.

105(2) Upon receiving the results of screening or diagnostic test, the member must promptly forward the test results to the practitioner referred to in clause (1)(b), along with recommendations about patient care.

Record of tests ordered

106 A member who orders and receives the results of a screening or diagnostic test must make and retain a record of the following:

- (a) the patient's name and address;
- (b) the test ordered and the reason for ordering it;
- (c) the name of the member ordering the test;
- (d) the date the test was ordered;
- (e) the results of the test and the date they were received;
- (f) the practitioner to whom the results were forwarded and the date they were forwarded;
- (g) any recommendations made to the practitioner and the date they were forwarded.

Practice Direction Test Orders

The Pharmaceutical Act defines a "practice direction" as follows:

Practice direction means a written statement made by the council for the purpose of giving direction to members and owners about the conduct of their practices or pharmacy operations.

Practice Directions carry similar legal significance to Regulations, and thus it is required that members who will be ordering lab tests are knowledgeable on the Practice Direction Test

Orders. The practice direction was revised and approved by Council in October 2018 and can be found at the following link and below:

https://cphm.ca/resource-library/?_sf_s=test%20orders

Practice Direction Test Orders

1.0 Scope and Objective:

1.1 Expected Outcome

This document is a practice direction by Council concerning the ordering of laboratory tests through the authority of *The Pharmaceutical Regulations* to *The Pharmaceutical Act* and *The Pharmaceutical Act*.

1.2 Document Jurisdiction (Area of Practice)

Ordering of laboratory tests is open to all licensed pharmacists with the appropriate knowledge.

1.3 Regulatory Authority Reference

Section 104 of *The Pharmaceutical Regulations* to the *Pharmaceutical Act* empowers the Council to create a practice direction for test orders.

1.4 Definitions

Critical Value is "a patient test result, exceeding defined limits that is potentially life threatening or may cause significant harm to the patient, if not acted upon by a physician or other clinical personnel responsible for patient care. These patients may require urgent evaluation/action by the physician/delegate" (source of definition: Shared Health Manitoba).

2.0 Practice Direction

- 2.1 In a hospital pharmacy practice, licensed pharmacists are bound by hospital policy for tests ordered for inpatients, which may restrict or limit activities and/or follow-up actions. If no policy exists, licenced pharmacists in a hospital pharmacy practice cannot order laboratory tests for inpatients or outpatients of the facility.
 - 2.1.1 Hospital pharmacists who are ordering tests for inpatients need to complete a Regional Health Authority hospital-specific laboratory test education program.

2.2 Pharmacists shall only order laboratory tests for outpatients and in a community or clinical practice setting after successfully completing the education program "Manitoba Module: Ordering Lab Tests" and notifying the College of the completion.

2.3 Conditions

When ordering tests, a licensed pharmacist must:

- 2.3.1 only order laboratory tests in relation to a drug prescribed to a patient for the purposes of ensuring safe and optimal medication therapy (licensed pharmacists are limited to the tests listed in Schedule 1 to the regulations -see Appendices).
- 2.3.2 only order laboratory tests in relation to a drug that a pharmacist has prescribed only if the prescribing pharmacist is an extended practice pharmacist.
- 2.3.3 only order laboratory tests that are within the pharmacist's scope of practice.
- 2.3.4 only order tests if he/she has the knowledge of: the specific test, when the testing is appropriate, how the results should be interpreted in the context of other patient information, and what action should be taken based on the results.
- 2.3.5 make reasonable efforts to review currently available and relevant laboratory test results for the patient prior to ordering a laboratory test.
- 2.3.6 provide the practitioner, who prescribed the medication relevant to the test order, information about the patient condition and reason for ordering the laboratory test.
- 2.3.7 enter into dialogue with the patient about the test being ordered prior to the ordering of a laboratory test.
- 2.3.8 enter into dialogue with the patient and advise when the test is non-insured (i.e., not payable) by Manitoba Health.
- 2.3.9 be available and readily accessible or have alternate arrangements in place to respond to and act upon all critical laboratory values that are reported.
- 2.3.10 provide after hours and emergency contact information to the facility processing the test to insure their ability to contact the pharmacist, or the predetermined alternate, in the event of a critical laboratory test result.
- 2.4 Pharmacists ordering lab tests must ensure that a policy and procedure manual is created and maintained in the pharmacy that includes the process for ordering and tracking laboratory tests and for responding to critical values.
- 2.5 Pharmacists must counsel patients about the test and provide information that is understandable and sufficient to allow the patient to make an informed decision to

accept or decline the test. The counseling must include, but is not limited to, the clinical significance of the laboratory test, benefits and risks, the potential implications of the results, the proper procedure for having the laboratory test done (i.e., fasting, etc.), charge to the patient, and the process for communicating the laboratory test results to the practitioner and not directly to the patient.

- 2.6 If the pharmacist decides that a laboratory test is necessary, but the patient does not consent to having the test ordered by the pharmacist, the pharmacist must notify the practitioner who prescribed the medication relevant to the test order of his/her recommendations.
- 2.7 Pharmacists, with the exception of extended practice pharmacists, must use the Manitoba Pharmacist Laboratory Requisition form or other approved electronic ordering form when ordering laboratory tests for outpatients and in a community or clinical practice setting -see Appendices.
- 2.8 Pharmacists must have a procedure in place for tracking the receipt of test results that have been ordered.
- 2.9 Pharmacists must follow up with test results that are not received within the usual expected time frame.
- 2.10 Test results must be received at the pharmacy in such a manner that it maintains the patient's privacy.
- 2.11 Pharmacists must communicate the results of the test and any recommendations to the patient's practitioner within a reasonable period of time unless the result is a critical value. (See 2.12)
 - 2.11.1 Pharmacists may communicate the results of the test and any recommendations to the patient upon authorization of the practitioner.
- 2.12 All critical values must immediately be assessed by the pharmacist or their designate and the practitioner consulted without delay in accordance with a predetermined protocol in the pharmacy, and, failing that, contact the patient directly and provide the recommendation commensurate to the critical value.
- 2.13 Documentation
 - 2.13.1 The pharmacist must document and keep a record of all laboratory test results received and relevant patient information including:
 - 2.13.1.1 A copy of the completed laboratory requisition form
 - 2.13.1.2 The result of the test
 - 2.13.1.3 The name of the patient
 - 2.13.1.4 The address and contact information of the patient
 - 2.13.1.5 The name of the pharmacist ordering the test

The test ordered
The reason for ordering the test
Acknowledgement of information and voluntary consent
The practitioner to whom the results and the
recommendation from the test results was forwarded
Any recommendations made or actions taken as a
consequence of the results received and the date they
occurred
The date the pharmacist received authorization to provide
the results and/or recommendations to the patient under
Section 2.11.1 and any outcome from that discussion
The date the test was ordered or recommended
The date the results were received
The date the results were communicated by the
pharmacist to the practitioner responsible for the patient's
care
Amount being charged to the patient

2.14 Documentation is to be recorded in a readily retrievable manner either electronically or in written form.

3.0 Compliance Adjudication

3.1 All documentation must be readily accessible and open to regulatory review.

Schedule 1 to the Pharmaceutical Regulation (Section 100)

Tests that a pharmacist can order for outpatients are listed in Schedule 1 to the Pharmaceutical Regulation and are also listed in more detail on the Manitoba Pharmacist Laboratory Requisition Form. More information on the form can be found later in this module.

TESTS THAT A MEMBER MAY ORDER

Serum drug levels
Serum creatinine
Blood Urea Nitrogen
International
Normalized Ratio
Partial Thromboplastin
Time
Lipid panel
HbA1C (glycolated hemoglobin)
Blood glucose

Thyroid function **Complete Blood Count** Liver function Electrolytes Iron Indices Vitamin levels Total & Direct Bilirubin Albumin **Total Protein**

Process Map for Test Ordering by Community Pharmacists

The following process map was created as a resource to provide a visual of the workflow for pharmacist-ordered lab tests and can be found at the following link: https://cphm.ca/resource-library/? sf s=test%20orders

A process map for patient risk management for critical values is also included below.

INFORMATION AND PHYSICAL WORKFLOW

Patient arrives at the pharmacy



Pharmacist reviews the patient's current prescribed medication therapy (patient profile) to monitor for care and safety and identifies a potential need for a specific lab test



Pharmacist reviews the patient's available history of lab test results (EMR, eChart) to confirm the need for the specific lab test regarding prescribed medication and to avoid duplication



Pharmacist counsels the patient on the clinical significance of the lab test, benefits and risks, potential implications of the results, proper procedure for having the test done, charge to the patient, and process for communicating the results to the prescriber and not directly to the patient

OR



Patient does not consent

Patient makes informed decision to accept the lab test

Pharmacist completes necessary documentation

Pharmacist informs the prescriber of the test order including information about the patient condition and reason for ordering the lab test

Patient makes informed decision to refuse the lab test



Pharmacist refers the patient to the prescriber or primary care giver for follow-up and notifies prescriber of the need for the test, as long as the patient does not explicitly prohibit the sharing

Pharmacist orders the lab test and	issues the requisition to the patient							
	V							
Pharmacist charges the patient for te	est according to the Lab Fee Schedule							
	V							
Patient brings the requisition to lab of choice								
	V							
Requisition is entered in to the Lab Information S	System (LIS) and blood is drawn by lab technician							
Lab testing	performed							
\downarrow	V							
Critical value	All other results except for critical value							
0	R							
Pharmacist contacted by phone immediately								
J.								
*See PATIENT RISK MANAGEMENT PROCESS FOR								
CRITICAL VALUES	V							
CHITICALE VALUES								
Results verified in LIS and report issued to pharma	cist via fax or electronic transfer depending on site							
	,							
Report archived in LIS and forw	arded to lab billing department							
Pharmacist receives the report or follows up with lab tes	t services if the report is not received in a timely manner							
Pharmacist communicates results and recommendations	to the patient's prescriber and can request authorization							
from the prescriber to release results								
	NAGEMENT PROCESS FOR CRITICAL VALUES							
V	↓							
Authorization denied	Authorization provided							
0	R							
Pharmacist notifies the patient that results	Pharmacist provides results and recommendations							
have been sent to the prescriber and advises the	to the patient if the prescriber authorizes/consents							
patient to follow up with the prescriber	1							
*	↓							
Pharmacist completes the	necessary documentation							
Filalifiacist completes the								
The lab billing department sends an invoice to the pharmacy that ordered the test and the pharmacy pays the lab								
billing department directly								
Simily depart								

Note: If the patient does not go for the test or the results have not been received, the pharmacist can call the Dynacare customer service line at 1-800-565-5721 M-F 07:30 to 17:30 to determine if the test was done. If Dynacare does not have a record, the pharmacist should also call Shared Health

Manitoba (formerly Diagnostic Services Manitoba) at 204-787-1534 M-F 0800-1600 in the event that the patient had their blood drawn at a hospital laboratory.

* PATIENT RISK MANAGEMENT PROCESS FOR CRITICAL VALUES

Pharmacist receives call with a critical value

⇓

The pharmacist or their designate (as outlined in the pharmacy's policy) must Immediately assess the result and consult with the prescriber without delay

 \downarrow

Prescriber unavailable

If the pharmacist cannot consult with the prescriber, the pharmacist must contact the patient directly and provide the recommendation commensurate to the critical value

 \downarrow

Pharmacist communicates results and recommendations to the patient's prescriber

J

Pharmacist completes the necessary documentation

 \downarrow

The lab billing department sends an invoice to the pharmacy that ordered the test and the pharmacy pays the lab billing department directly

OR

Prescriber available

If the pharmacist is able to consult with the prescriber, the two health care professionals agree upon a plan of action and determine who is responsible for contacting and informing the patient of the recommendation

 \downarrow

Patient is contacted by the pharmacist and/or prescriber (as discussed) and informed of the critical value and recommendation



Pharmacist completes the necessary documentation



The lab billing department sends an invoice to the pharmacy that ordered the test and the pharmacy pays the lab billing department directly

Purposes of Ordering Lab Tests

There are three primary situations where a health care provider may wish to order a lab test:

- 1. To screen for diseases
- 2. To aid in diagnosing patients
- 3. To monitor drug therapy

Pharmacists in Manitoba, who are not extended practice pharmacists, may only order tests for the purposes of ensuring safe and optimal medication therapy. Any member may order and receive the results of a screening or diagnostic test specified in Schedule 1 to this regulation, but it must be in relation to a drug prescribed to a patient, when the purpose of doing so is to monitor the patient's drug therapy regime to ensure that it is safe and optimal.

For example, a patient taking an ACE Inhibitor may need their serum creatinine tested to ensure that a dose adjustment is not needed to accommodate for impaired renal function. Alternatively, a patient may need their serum creatinine tested to ensure a drug has not caused further deterioration of renal function. Ordering the test for these purposes would be acceptable. However, if a patient wanted their serum creatinine tested because they were worried as to if his/her kidney function was normal, but was not related to any medication therapy, then a pharmacist would not be able to order the serum creatinine test for this purpose. The patient would need to be referred to his/her practitioner in this case.

Evaluating the Need for a Test

Pharmacists must use professional judgment in order to determine whether ordering a lab test would be the best course of action. They should not order tests if they are unnecessary. This is due to a number of reasons including but not limited to: all procedures carry an element of risk, patient confusion, and an increased likelihood of false positives. All of this is detrimental to patient care.

Other factors that must be considered are test invasiveness, weighing the benefit versus risk, and cost. Pharmacists have an obligation to use health care and patient resources responsibly.

If the pharmacist decides that a laboratory test is necessary, but the patient does not consent to having the test ordered by the pharmacist, the pharmacist must notify the practitioner who prescribed the medication relevant to the test order of his/her recommendations.

Ordering Lab Tests

Pharmacists must only order lab tests if he/she has the knowledge of: the specific test, when the testing is appropriate, how the results should be interpreted in the context of other patient information, and what action should be taken based on the results.

The pharmacist must enter into dialogue with the patient about the test being ordered prior to the ordering of a laboratory test. It is important that a patient is informed of the reasoning behind recommending a lab test, so that they may make an informed decision of how to proceed. The patient must be advised of the possible benefits and risks in undergoing the procedure and the risks if they choose not to have the lab test completed. The patient must

also be advised when the test is non-insured (i.e. not payable) by Manitoba Health. Currently, lab tests ordered by pharmacists for outpatients are not covered by Manitoba Health. Essentially the decision to order a test is a joint decision by the pharmacist and the patient.

If the patient chooses to proceed with the test, the pharmacist must then counsel the patient on the following before providing the requisition forms:

- The clinical significance of the test results,
- The benefits and risks,
- Potential implications of the results,
- Proper procedures of the test (e.g. some tests require fasting),
- Charge to the patient, and
- The process of communicating results to the practitioner and not directly to the patient.

The patient's practitioner, who prescribed the medication relevant to the test order, must also be informed that the test is being ordered, information about the patient condition, and the reason for ordering the lab test. The patient must be informed in advance of the test being ordered that the pharmacist cannot provide the patient with the results of the test and that the results and recommendations will be forwarded to his/her prescriber. The pharmacist can only provide the patient with the results of the test and any recommendations if the authorization to do so has been received from the prescriber. It may be advisable to notify the patient when the results have been forwarded to the prescriber.

If the pharmacist decides that a laboratory test is necessary, but the patient does not consent to having the test ordered by the pharmacist, the pharmacist must notify the practitioner who prescribed the medication relevant to the test order of his/her recommendations.

Dynacare Lab Fee Schedule

Lab tests ordered by pharmacists for outpatients are not currently an insured benefit of Manitoba Health. Pharmacists ordering a lab test for an outpatient would charge the patient according to the Dynacare Lab Fee Schedule. After the patient brings the lab requisition to the lab of choice and the test is performed, the lab billing department will send an invoice to the pharmacy that ordered the test. The pharmacy pays the lab billing department directly.

Please contact the Dynacare customer service line at 1-800-565-5721 Monday through Friday between the hours of 07:30 to 17:30 for information on the Dynacare Lab Fee Schedule.

If a pharmacist needs to confirm if the patient went for the test or if the results of the test have not been received, the pharmacist can call the Dynacare customer service line at 1-800-565-5721 M-F 07:30 to 17:30 to determine if the test was done. If Dynacare does not have a record,

the pharmacist should also call Shared Health Manitoba (formerly Diagnostic Services Manitoba) at 204-787-1534 M-F 0800-1600 in the event that the patient had their blood drawn at a hospital laboratory.

Manitoba Pharmacist Laboratory Requisition Form

All pharmacists in Manitoba (with the exception of extended practice pharmacists) who are ordering lab tests for outpatients must only use the "Manitoba Pharmacist Laboratory Requisition Form". A pharmacist ordered lab test presented on any other form will be considered invalid.

Pharmacists can access and print the pharmacist requisition form on the Dynacare website or at the following link:

https://cphm.ca/resource-library/? sf s=requisition

A sample draft of the "Manitoba Pharmacist Laboratory Requisition Form" has been included below for your information.

SAMPLE

Dynacare.		MANITOBA PHARMACIST LABORATORY REQUISITION FORM							
PHARMACIST Information Pharmacist Name: Billing No.:				PATIENT Information Last Name:					
					As per MHSC card				
					Name: MHSC card				
				(9 digits):		MHSC/ R	MHSC/ Registration No. (6 digits):		
City:		Postal Cod	le:	Altern	ate Jurisdiction ID No	Jurisdiction ID No. (if applicable):			
Pharmacy Fax No.:	Phone	No.:		DOB:	YYYY / MM / DD	Gender:	r: Phone #:		
Pharmacist's After Hours Contact No. for Critical Results:									
Pharmacist Signature:		Pharmacis #:	t License	City:		Province: Postal Code:			
THERAPEUTIC DRUG MO	OTINO				REASON FOR	REQUE	ST:		
□ Caffeine		heophylli	ne		Note: A pharmacist,	with the exc	eption of ar		
□ Carbamazepine		obramyci						t in relation to a drug f doing so is to monitor the	
□ Cyclosporine		alproic A						it is safe and optimal.	
☐ Digoxin		ancomyc							
☐ Gentamicin									
		iner (list	ther (list below):						
□ Lithium									
□ Methotrexate					CHEMISTRY				
☐ Mycophenolate					□ Sodium		- 41	le fee Dhaashataa	
□ Phenobarbital					□ Potassium			 □ Alkaline Phosphatase □ ALT 	
□ Phenytoin					□ Chloride				
□ Sirolimus					□ Total CO₂				
□ Tacrolimus					□ Urea			☐ Bilirubin, Direct	
Date of Last Dose:	Time	of Last	Dose:		□ Creatinine		- 1	□ Bilirubin, Total	
					□ Magnesium	1		amma-Glutamyl	
					□ Calcium		1	ansferase	
HEMATOLOGY/COAGUL	ATION				□ Phosphate □ Albumin			bumin	
□ CBC					Glucose				
□ INR					☐ HbA1C		□ Vit	tamin B12	
PATIENT INSTRUCTIONS							+		
					☐ Ferritin			otal Cholesterol	
☐ Fasting for Blood Glucose: Have NOTHING to eat or					□ Serum Iron		□ Tr	riglycerides	
drink (except a small amount of water) for a hours BEFORE your blood is collected.			minimu	an of 8	□ TIBC		□ H	DL	
☐ Fasting for Lipids: Have	NOTHI	NG to eat			☐ Total Protei	in		DL	
(except a small amount of									
hours BEFORE your blood is collected. An 8 hour fast is				□ TSH					
also acceptable for individuals who are at risk of fasting complications such as diabetics and young children.									
For Lab Use Only:					☐ Uric Acid				
Collection Date: Number of tubes					Please select one of the following, if applicable:				
Number of tabes									
Time of Draw:	EDTA	Red Top	SST	Citrate	☐ Fasting ☐ Random				
					Random				
Hours spent Fasting:	Initials	Phleboto	my S	pec-Pro					
DynaMBPharmReq-v0-Jan2019		<u> </u>	_						

Filling out the Form:

The form must be completed in full, including the patient information, pharmacist information, reason for the lab tests, the tests that are being ordered, patient instructions and whether a fasting or random level is required.

PHARMACIST INFORMATION

The pharmacist must include their name, billing number (license number with "X" prefix), pharmacy name and address from where they are ordering the test, phone and fax number, an after-hours contact number, signature and license number. A phone number where the pharmacist or designate can be reached after the pharmacy is closed MUST be provided in case of a critical result.

PATIENT INFORMATION

The patient's first and last name (as listed on the patient's Manitoba Health card), PHIN and MHSC number (also known as the registration number), date of birth, gender, phone number, and address need to be completed. Where a patient does not have a PHIN and registration number, the Alternate Jurisdiction ID Number must be noted. This would apply to those patients who are from out of province or part of the Canadian Armed Forces or Department of National Defense. (The Royal Canadian Mounted Police are now registered with a PHIN).

THERAPEUTIC DRUG MONITORING

Clearly select the drug that you are intending to order. If the drug you want to order is not included in the list, select "other" and clearly indicate the drug name.

DATE OF LAST DOSE/TIME OF LAST DOSE

Include the date and time of the last dose pertaining to the drug level that you are ordering, if applicable.

REASON FOR REQUEST

Explain in a short and concise way the reasoning for ordering the lab test. Note that a pharmacist (with the exception of an extended practice pharmacist), can only order a lab test in relation to a drug prescribed to a patient when the purpose of doing so is to monitor the patient's drug therapy regime to ensure that it is safe and optimal.

CHEMISTRY/HEMATOLOGY

Clearly select the test that you are intending to order.

PATIENT INSTRUCTIONS

Select the appropriate recommendation for fasting for blood glucose and/or lipids.

Fasting for Blood Glucose requires the patient to have nothing to eat or drink (except a small amount of water) for a minimum of 8 hours before blood is collected.

Fasting for Lipids requires that the patient have nothing to eat or drink (except a small amount of water) for a minimum of 12 hours before blood is collected. An 8 hour fast is also acceptable for individuals who are at risk of fasting complications such as diabetics and young children. Therefore, 12 hour fasting is desirable, but 8 hours is also acceptable.

FASTING/RANDOM

Select the appropriate box in relation to the test you are ordering, if applicable.

FOR LAB USE ONLY

Do not complete.

Receiving and Interpreting Test Results

Although patients have the right to know the results of a test, it is important to note that in Manitoba, pharmacists are not allowed to provide the results, an interpretation of test results, nor the resulting recommendations to a patient without first consulting and receiving the authorization to do so from the patient's prescriber. Upon receiving the test results, the pharmacist must promptly forward them to the patient's prescriber of the medication, along with their recommendations for optimal patient care.

Please note, this does not apply to the results from patient-administered automated tests, which are not covered by this Module. (Examples of patient-administered automated tests include automated blood pressure monitors or over-the-counter home pregnancy test kits).

If a pharmacist needs to confirm if the patient went for the test or if the results of the test have not been received, the pharmacist can call the Dynacare customer service line at 1-800-565-5721 M-F 07:30 to 17:30 to determine if the test was done. If Dynacare does not have a record, the pharmacist should also call Shared Health Manitoba (formerly Diagnostic Services Manitoba) at 204-787-1534 M-F 0800-1600 in the event that the patient had their blood drawn at a hospital laboratory.

Recommendations that can be made by the pharmacist will vary. Examples include changing or discontinuing the drug prescribed, changing dosage, no change required, follow-up monitoring, among others.

When considering the type of recommendation to make to the practitioner, it is important for the pharmacist to consider the "big picture" when looking at test results. For example, although there are well-established guidelines for ranges of lab values, a result may come back for a patient that is above or below the ideal range. Professional judgment must be used to determine whether there is cause for concern, or whether the values are appropriate for the patient. Every patient is unique. The pharmacist should also always keep in mind the possibility of false positives or outliers.

Critical values are discussed in the next section.

Critical Values

A critical value is defined by Shared Health Manitoba, formerly Diagnostic Services Manitoba, as "a patient test result, exceeding defined limits that is potentially life threatening or may cause significant harm to the patient, if not acted upon by a physician or other clinical personnel responsible for patient care. These patients may require urgent evaluation/action by the physician/delegate".

All critical test results must immediately be assessed by the pharmacist or their designate and the practitioner consulted without delay in accordance with a predetermined protocol. If the practitioner cannot be reached or is unavailable, the pharmacist can contact the patient directly and provide an appropriate recommendation corresponding to the critical results.

A pharmacist ordering lab tests **must** provide after hours and emergency contact information to the facility processing the test to insure their ability to contact the pharmacist, or the predetermined alternate, in the event of a critical laboratory test result. The pharmacist ordering lab tests is taking responsibility for dealing with all critical values. He/she (or their designate) must be available and readily accessible by phone, to respond to and act upon all critical laboratory values that are reported, even if the pharmacy is closed. A delay in contacting the patient can lead to patient harm.

If the Dynacare or Shared Health Medical Laboratory Technician or Customer Care Representative cannot get in touch with the pharmacist or their designate regarding a critical value, the lab will contact the patient directly and may inform them to go to the nearest Emergency Department. The Lab will then notify the College of Pharmacists of Manitoba that the pharmacist could not be reached. Please review Dynacare's Critical Values Policies and Procedures here.

Pharmacists ordering lab tests must ensure that a policy and procedure manual is created and maintained in the pharmacy that includes the process for ordering and tracking laboratory tests and for responding to critical values.

Please review the workflow resource, Patient Risk Management for Critical Values, under the "Process Map for Test Ordering by Community Pharmacists" section of this Module.

Please review the following important Shared Health Manitoba documents found on the Policies and Procedures page: https://sharedhealthmb.ca/health-providers/diagnostic-services/reference-material/policies-and-procedures/

- Reporting Critical Values
- Clinical Biochemistry Critical Values
- Hematology Critical Values

Documentation

A member or owner must retain the test ordering and results records for at least five years. As stated in the Practice Direction on Test Orders, the pharmacist must document and keep a record of all laboratory test results received and relevant patient information including:

- A copy of the completed laboratory requisition form
- The result of the test
- The name of the patient
- The address and contact information of the patient
- The name of the pharmacist ordering the test
- The test ordered
- The reason for ordering the test
- Acknowledgement of information and voluntary consent
- The practitioner to whom the results and the recommendation from the test results was forwarded
- Any recommendations made or actions taken as a consequence of the result received and the date they occurred
- The date the pharmacist received authorization to provide the results and/or recommendations to the patient (see Section 2.11.1 of the Practice Direction) and any outcome from that discussion
- The date the test was ordered or recommended
- The date the results were received
- The date the results were communicated by the pharmacist to the practitioner responsible for the patient's care
- Amount being charged to the patient

This information may be retained in either an electronic format (pharmacy software may allow for direct data entry, or the software may allow the pharmacist to scan each of these records into the patient's own unique file), or in a manual/paper format. If a manual/paper method format is chosen, pharmacists should consider creating "patient-specific" files (not unlike what can be found in a medical offices) to retain these records in their own unique location, as opposed to storing them with the regular prescription files. In the event of a third party payer audit of prescriptions, the auditors should not be allowed to view these other types of records (violation of *Personal Health Information Act*), and storing them separately (or electronically) assures compliance.

Ordering Lab Tests in Hospital Practice

The requirements of pharmacists ordering lab tests in hospital practice for inpatients differ from pharmacists working in other pharmacy practice settings. The same requirements and limitations do not exist for hospital pharmacists ordering lab tests for inpatients. As stated in the Pharmaceutical Regulation, a member practising in a hospital pharmacy may, in accordance with hospital policy, order and receive the results of a screening or diagnostic test for a person who is an inpatient of the hospital. In these cases, section 105 from the Regulation on the general requirements and section 106 on the record of tests ordered do not apply.

"Inpatient" is defined in The Health Services Insurance Act as:

"in-patient" means a person admitted to and assigned to a bed in a hospital on the order of a medical practitioner, registered nurse (extended practice) or midwife or, subject to the conditions prescribed in the regulations, on the order of a licensed dentist.

An inpatient would not include, for example, a patient in a hospital emergency department.

In a hospital pharmacy practice, licensed pharmacists are bound by hospital policy for tests ordered for inpatients, which may restrict or limit activities and/or follow-up actions to the practice of the pharmacist(s) employed. If no policy exists, licenced pharmacists in a hospital pharmacy practice cannot order laboratory tests for inpatients or outpatients of the facility.

Hospital pharmacists who are ordering tests for inpatients need to complete a Regional Health Authority hospital-specific laboratory test education program.

Authorization to Order Lab Tests for Outpatients in Manitoba

All pharmacists who would like to order lab tests for outpatients and in a community or clinical practice setting must complete this education program, "Manitoba Module: Ordering Lab Tests". Successful completion of the Manitoba Module does not automatically grant pharmacists the authority to order lab tests for outpatients in Manitoba. Following successful completion of the Manitoba Module, which includes successfully completing the post-test and receiving a Statement of Participation, pharmacists must sign in to their profile on the

College website and self-declare they have completed the required lab test training along with the date of completion. Pharmacists who have made this declaration will be asked to submit a copy of their Statement of Participation when chosen for the Annual Professional Development Review. It is important that you retain a copy of the Statement of Participation for your records.

In order to complete this declaration, please follow these steps:

- 1. From the College website at www.cphm.ca, please click on "Registrant Login" at the top of the page and enter your information to login to your Pharmacist Portal.
- 2. In the Box labelled "My Menu", click on "View/Edit My Profile".
- 3. Scroll down near the very bottom of your profile (passed the "Tertiary Employer" section) to the field called "Lab Test Ordering Completion of the Manitoba Module". Enter the date you completed the Manitoba Module: Ordering Laboratory Tests as it appears on your Statement of Participation.
- 4. Click "Save".
- 5. Once you have saved the completion date, a screen asking for verification of your address and employers appears. Please confirm your information by scrolling down and answering the questions indicated in red.
- 6. Click "Save".
- 7. A summary screen with your member information will appear. Confirm that the date you have entered was saved by scrolling down to the "Lab Test Ordering Completion of the Manitoba Module" field.
- 8. You may logout.

Pre-Registering with Shared Health

Pharmacists who intend to order lab tests for outpatients and have completed the required training and College self-declaration for authorization should pre-register with Shared Health (formerly Diagnostic Services Manitoba) in order to reduce the probability of delay when a requisition is brought to a Shared Health laboratory.

In order to pre-register and become listed in Shared Health's Provider Dictionary, please fill out the form at the following https://cphm.ca/wp-content/uploads/Resource-Library/Expanded-Scope/Physician-Info-Fax-Confirmation-Sheet.pdf and submit it as stated on the form.

Additional Resources

Pharmacists who want to order lab tests must be knowledgeable in all pertinent aspects of lab test ordering. Section 18 of the Pharmaceutical Regulation states that a member may only engage in the aspects of pharmacy practice that he or she has the requisite knowledge, skill and judgment to provide or perform and that are appropriate to his or her area of practice. Pharmacists need to seek and complete additional training as needed to fulfill this requirement.

Pharmacists should also be familiar with policies and guidelines applicable to the ordering of laboratory tests that may be in place within their place of employment or organization.

Additional information for medical practitioners should also be reviewed on the Shared Health Manitoba (formerly Diagnostic Services Manitoba) website: https://sharedhealthmb.ca/health-providers/

Key Learning Points

- 1. Pharmacists ordering tests must follow the rules, regulations and applicable practice directions of the College of Pharmacists of Manitoba.
- 2. Pharmacists in Manitoba, who are not extended practice pharmacists, may only order tests for the purposes of ensuring safe and optimal medication therapy.
- 3. Pharmacists must fully inform and counsel the patient on any tests they would like to order, such that the patient can make an informed decision about the test and are aware of the procedures involved.
- 4. Pharmacists should order tests responsibly; they should only order a test if it is appropriate for the situation and beneficial to the patient. Ordering unnecessary tests may confuse the patient and increase the chance of false positives.
- 5. All pharmacists in Manitoba (with the exception of extended practice pharmacists) who are ordering lab tests for outpatients must use the "Manitoba Pharmacist Laboratory Requisition Form" or other approved electronic ordering form.
- 6. In Manitoba, pharmacists are not allowed to provide the results, the interpretation of test results, nor the resulting recommendations to a patient without first consulting and receiving the authorization to do so from the patient's prescriber. Upon receiving test results, pharmacists must promptly forward them to the patient's prescriber along with their recommendations for optimal patient care.
- 7. All critical results must immediately be assessed by the pharmacist or their designate and the practitioner consulted without delay in accordance with a predetermined protocol. A pharmacist ordering lab tests is taking responsibility for dealing with all critical values and must be accessible by phone to respond to and act upon all critical lab values that are reported, even if the pharmacy is closed. If the practitioner cannot be reached or is unavailable, the pharmacist can contact the patient directly and provide an appropriate recommendation corresponding to the critical results.
- 8. Following successful completion of the Manitoba Module: Ordering Lab Tests, a pharmacist wanting to order lab tests for outpatients must sign in to their profile on the College website and self-declare they have completed the "Manitoba Module: Ordering Laboratory Tests".

References

College of Pharmacists of Manitoba. July 3, 2013, Pharmaceutical Regulation document. Available: https://web2.gov.mb.ca/laws/regs/current/_pdf-regs.php?reg=185/2013 (accessed 2021 Apr 6).

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Oleschuk, C., & Falk, J. 2014. Medical Lab Tests & Pharmaceutical Care: Making the most of a valuable tool. Manitoba Pharmacy Conference 2014. Winnipeg, MB.

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