New Brunswick College of Pharmacists
Ordre des pharmaciens du Nouveau-Brunswick

GUIDANCE: LABORATORY TESTING

Introduction

The scope of pharmacy practice has evolved to include more direct patient care responsibilities. As part of this evolution, pharmacists' authority to order and interpret laboratory tests has become an essential tool when making informed clinical decisions. The *New Brunswick Pharmacy Act, 2014* and Regulations outline the authority for pharmacists to order and interpret laboratory tests.

This guidance document is intended to support pharmacists who have been authorized by the College to order and interpret laboratory tests, and whose name and contact information is on a list provided to Horizon Health Network by the College.

Purpose

The document provides information on the expectations of pharmacists ordering and interpreting laboratory tests, by describing the:

- requirements for pharmacists; and
- expectation for pharmacist self-assessment of ongoing learning needs.

Definitions

Critical Value: A patient test result, outside of the normal range, that is potentially life threatening or may cause significant harm to the patient, if not acted upon by clinical personnel responsible for patient care. These patients may require urgent evaluation/action.

Medical laboratory (lab) tests: Tests performed by a licensed Medical Laboratory Technologist from a specimen collected from a patient for the purposes of monitoring and optimizing response to medications.

Medication Management: A health-care service provided by pharmacists and other professionals to optimize therapeutic outcomes for patients. It involves identifying, resolving, and preventing drug-related problems, either independently or in collaboration with a patient's care team, within a pharmacist's scope of practice.

Exclusions

- Point-of-Care Testing (POCT). For information on POCT, please refer to the Administering and Interpreting Point of Care Tests Policy published by the College.
- Medical Laboratory Tests not related to medication management.

Education and Training: Pharmacists are expected to self-assess and ensure they have the necessary competence (knowledge, skills and judgment) before performing any clinical activity. Knowledge that may be required to competently order and interpret lab tests includes, but is not limited to:

- Determining when laboratory tests are appropriate to monitor medication therapy and interpreting data considering patient-specific factors;
- understanding the limitations of tests, including specificity, sensitivity, and precision,

alongside how medications or substances may influence test results; and
- evaluating laboratory values against expected normal or reference ranges and understanding different units of measure to guide therapeutic decisions.

Requirements:

1. **Professional relationship:** Pharmacists must have a professional relationship with a patient before ordering or interpreting laboratory tests. A professional relationship formed with the patient to optimize the patient's health or drug therapy exists when:

    a. The pharmacist has directly assessed the patient's health needs and drug therapy through documented interaction(s); and
    b. the pharmacist has developed sufficient knowledge of the patient's therapy needs by reviewing health information and gathering patient-specific data.

2. **Collaboration**: Pharmacists are to collaborate with other health-care professionals providing care for the patient when appropriate. The collaboration should include an established relationship with other health-care providers that:

    a. Addresses policies and procedures at the laboratory being used (see Horizon Skyline Intranet link under the *Additional Resources* section below);
    b. includes mutually agreed upon channels of communication and information sharing that maintain and protect patient confidentiality;
    c. includes a process to avoid duplication of testing; and
    d. recognizes and establishes mutual goals of therapy that are acceptable to the patient.

3. **Patient assessment**: Pharmacists must complete a thorough patient assessment and determine that the laboratory test is both appropriate and for the benefit of medication management of the patient. The pharmacist must only order labs for the following purposes:

    a. To support the pharmacist in providing and monitoring patient response to drug therapy management;
    b. assessment of the appropriateness of a medication dosage; and
    c. monitoring adverse effects potentially caused by the medication.

4. **Ordering medical laboratory tests**

    a. The pharmacist shall recognize and accept responsibility for the impact that conducting and ordering labs has on the overall cost and sustainability of the health-care system. This includes confirming, prior to ordering tests, that they have not already been ordered within a reasonable time frame; that the results cannot be obtained from another source; and that the test is needed for the management of drug therapy;
    b. pharmacists must follow established processes and procedures for ordering lab tests in accordance with applicable regulations by selecting and completing the appropriate requisition form for the hospital or area where the patient will go for specimen collection;

c. Pharmacists must only order tests to support medication management related to the activities that are within the scope of practice of the pharmacist;
d. Pharmacists must obtain informed consent before ordering tests and communicate directly with the patient about any related follow-up plan or communication with other health professionals;
e. When a pharmacist orders a test,
    i. Their full name, the title "pharmacist" or another recognized professional designation identifying them as a pharmacist, and their licence number must be visible on the requisition document.
    ii. They are responsible for following up on the results and taking necessary actions until they have confirmed that another appropriate health-care provider has assumed responsibility for the results.
f. Pharmacists shall have a tracking process to ensure they receive patient results from tests they have ordered.
g. All community pharmacists must opt out of receiving faxed results and shall be responsible for accessing and reviewing these results through the patient's electronic health record.

5. **Interpretation:** Upon receipt of the test results ordered by a pharmacist, the pharmacist must interpret the result when amending or establishing the patient's care plan and communicate the result and associated plan with the patient in a timely manner.

    a. A pharmacist who orders a laboratory test must ensure timely receipt of laboratory results by either themselves or a designated alternate pharmacist;
    b. A pharmacist who orders a laboratory test shall interpret the results of the test and advise the patient;
    c. A pharmacist must refer the patient to an appropriate health-care provider if a test result indicates an issue outside of their authority or competence;
    d. The pharmacist is to adjust medication therapy only in accordance with all applicable Regulations, Standards, and College guidance; and
    e. The pharmacist shall refer a patient who asks for interpretation of tests ordered by another health-care provider, when the interpretation of a test is outside of a pharmacist's authority or competence.

6. **Critical Values:** The pharmacist shall have a system in place to receive critical values for ordered testing, which includes, but is not limited to:

    a. Being available and accessible 24/7 or having an alternate plan in place to respond to and act upon any critical values reported, such as participating in on-call groups with other pharmacists; and
    b. making after-hours and emergency contact information available to the facility processing the lab test.
    c. Pharmacists must ensure that their contact information, as well as that of their designated backup pharmacist, is accurate and up to date with the College. Pharmacists must immediately update their online profile with the College when their contact

information or the contact information of their designated backup pharmacist changes;

d. all **critical values** must be assessed by the pharmacist or their designate;
e. the pharmacy manager must create and monitor a written policy and process for the review and steps to follow-up on all critical values; and
f. in the event of receiving a critical value, documentation of the process is to be retained on the patient's profile.

7. Complete Follow-Up:

a) The pharmacist shall ensure that there is appropriate follow-up on tests ordered, conducted, received and interpreted;
b) when test results are outside of the normal range, the pharmacist shall undertake appropriate follow-up actions;
c) the pharmacist shall ensure follow-up of abnormal, inappropriate and/or critical test results. This includes consulting with other health-care professionals as needed and promptly sharing the results with the patient's primary health-care provider(s), where applicable;
d) if a patient does not have another primary health-care provider, the pharmacist shall, as appropriate for the situation:
   i. counsel the patient that emergency or other medical care should be obtained; and
   ii. advise the patient about available health-care resources.
e) The pharmacist shall communicate directly with the patient regarding tests to be ordered including any related follow-up plan regarding test results, or communication to other health-care professionals.

8. Documentation: Details of the test order, administration, result, interpretation, communication of interpretation and any action taken must be recorded within the patient's clinical record.

Additional Resources

1. Horizon Laboratory Orientation & Resources
2. Choosing wisely Canada
3. Standards of Practice, Testing, Nova Scotia College of Pharmacists, 2023
4. Horizon Skyline (Intranet)
5. Horizon Blood and Specimen Collection Online Appointment Booking