



EVIDENCE-BASED CLINICAL PRACTICE GUIDELINE

LABORATORY TESTING

Effective March 1, 2015

Revised February 21, 2020

Laboratory Testing Clinical Practice Guideline

The objective of this Clinical Practice Guideline (CPG) is to provide guidance to Doctors of Optometry on ordering and analyzing laboratory tests. It is based on the best available and most current optometric and medical clinical evidence and research. It is not intended to replace professional discretion and judgment; nor is it intended to be used as an all-encompassing clinical manual. Clinicians must base their diagnostic, management, treatment and referral regimens on the specific needs of the patient.

We wish to acknowledge the Alberta College of Pharmacy for their previously published Laboratory Testing Standard of Practice used in the development of this CPG.

Laboratory tests are accurate and reliable medical procedures that analyze samples of blood, urine, substances and/or other tissues. They can be used to:

- Initially diagnose a disease or condition
- Assist in the on-going management of a disease or condition
- Assist in evaluating a patient's response to a treatment, and,
- Provide valuable information on the long-term monitoring of a disease or condition.

Goals

A goal of every optometrist is to:

1. **Identify those patients who require a laboratory test, ensure the appropriate test is ordered and analyzed, avoid duplication of laboratory testing, ensure appropriate follow-up and share patient information in an appropriate and confidential manner with other members of the patient's health care team.**
2. **Collaborate and communicate with patients, legal guardians and other health care practitioners in order to:**
 - **Increase access to competent vision care services,**
 - **Maximize a patient's visual status and quality of life,**
 - **Improve patient compliance and outcomes,**
 - **Reduce the possibility of duplication of tests and services, and,**
 - **Provide vision care services in the most efficient and effective manner.**

General Guideline

1. **The following optometrists are authorized to order and analyze laboratory tests:**
 - **Optometrists who graduated after January 1 2015 and passed the OEBC exam; and/or,**
 - **Optometrists who graduated prior to January 1, 2015 and have successfully completed a certification course on laboratory testing recognized and approved by the ACO Council.**

Specific Guidelines

1. When laboratory testing is clinically indicated, an optometrist should order appropriate laboratory tests or contact an appropriate health care provider and request that the laboratory tests be ordered.
 - Optometrists must only order those laboratory tests that they are personally competent to order, interpret and use to achieve appropriate patient outcomes.
 - The optometrist should contact an appropriate health care provider and request that the necessary laboratory tests be ordered if:
 - i. the optometrist determines that he/she is not competent to order and interpret the necessary laboratory tests;
 - ii. it is inappropriate for him/her to order the necessary tests; or,
 - iii. the optometrist is unable to order the necessary tests for any other reason.
2. To avoid duplication, optometrists must review all alternative sources of current laboratory test results available to them about a patient prior to ordering a test for the patient (e.g., electronic health record, Alberta Netcare, Connect Care, communication with another health practitioner, etc.).
3. Complete the "Copy to" area on the laboratory requisition if laboratory results are required at another location/by another practitioner. The "Copy to" area must clearly indicate the complete practitioner's name (full first and last name) and full address in order to ensure delivery of results.
4. Optometrists must use their professional discretion and judgment to appropriately review, interpret and consider laboratory test results in the context of other patient-specific factors.
 - Interpretation of laboratory test results should include assessment of patient-specific factors (such as genetics, ethnicity, drugs, pregnancy, disease, timing of test, diet, organ function, etc.) as well as history and physical exam (where appropriate).
 - Optometrists should review laboratory test results with the patient.

NOTE: *Reference to a physical exam is not intended to imply that the optometrist must conduct a physical exam beyond that involving assessment of the visual system, the eye, and its associated structures. The optometrist may need to gather information regarding the results of a physical exam from the patient or another health care provider.*

5. **Optometrists must only order laboratory tests if indicated to assist in the diagnosis and/or management of an ocular condition for a patient.**
 - **Laboratory tests should only be ordered for patients with whom the optometrist has developed a professional relationship.**
 - **Optometrists should not order laboratory tests for the screening of populations where there is not an optometrist-patient relationship or where there are not preliminary indicators for such screening.**
6. **Optometrists who order laboratory tests must have a system in place to ensure appropriate follow-up of ordered laboratory tests.**
 - **Optometrists should indicate to patients and/or legal guardians when and if the optometrist will contact the patient about the results of the laboratory test.**
 - **In circumstances where the laboratory test is necessary to ensure appropriate diagnosis or treatment and the results of a laboratory test are not received within a reasonable period of time, optometrists should follow-up with the laboratory and/or the patient, as appropriate, to determine the status of the order.**
7. **Optometrists must take appropriate action if the results of a laboratory test that they order are outside the expected or normal range. Appropriate action may include but is not limited to:**
 - **Discuss the results with the patient, legal guardian and/or other members of the patient's health care team;**
 - **Develop and implement a plan for ongoing monitoring;**
 - **Change drug therapy, if authorized to do so; or, recommend changes to drug therapy to another member of the patient's health care team;**
 - **Consult with clinical/medical laboratory staff regarding unexpected or unusual results; and,**
 - **Repeat the laboratory test if there is an indication that a repeat test will yield a different result.**
8. **Optometrists must have a system in place to ensure the appropriate follow-up of critical results for ordered laboratory tests.**
 - **Optometrists must be available and accessible 24/7 or have alternate arrangements in place to respond to and act upon any critical laboratory results that are reported.**
 - **Optometrists are encouraged to consider developing agreements, partnerships, or arrangements, such as on-call groups, with other optometrists or physician colleagues to meet this requirement.**
 - **Instructions for after-hours care should be available to patients who call the office by telephone as well as on the practice's website.**

9. Optometrists who make decisions as a result of interpreting laboratory test results must:
- Document the decision and the rationale for the decision in the patient's record of care;
 - Explain the interpretation of the data, the decision and the rationale for the decision to the patient or legal guardian if the patient or legal guardian is able to understand the information and it is appropriate to do so; and,
 - Include a reference to the laboratory data, and the decision in any communications with other members of the patient's health care team.
10. Optometrists must respect the patient's right to confidentiality by ensuring that they collect, use, and disclose laboratory test results only when it is pertinent to the care they are providing and that the collection, use and disclosure is only done in accordance with the Health Information Act, other applicable privacy legislation and other legislation and standards governing optometry practice.
11. Optometrists who provide patients with results from laboratory tests they did not order must do so as per the *Information Exchange Protocol* of the electronic health record (EHR).
- As outlined in this protocol, the optometrist should only provide information if:
 - i. the optometrist has a current care relationship with the patient,
 - ii. the information can be provided using normal technology available to the optometrist,
 - iii. the provision of the information will not unreasonably interfere with the optometrist's normal day-to-day operations, and,
 - iv. the optometrist is not prevented from releasing the information by Section 11 of the *Health Information Act* (i.e., the information is not detrimental to the well-being of the patient or others).
12. Optometrists must not provide an interpretation of the results of laboratory tests ordered by other health care providers to the patient unless it is pertinent to the care being provided by the optometrist.
- In all other instances the patient must be referred to the health care provider who requested the test or created the data in the EHR for interpretation of the data.