

Pathology and Laboratory Medicine Memorandum

To: Physicians and Health Service Directors, Central Zone

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Date: April 25, 2016

Subject: Changes to Lipid Profile Testing

Effective May 23, **2016** patient fasting is not mandatory for full lipid profile testing, including total cholesterol, high density lipoprotein cholesterol (HDL-C), triglycerides, calculated low density lipoprotein cholesterol (LDL-C), and non-HDL-C). Determination of fasting is at the discretion of the ordering physician and must be indicated on the requisition.

Laboratory Recommendations:

- 1. It is recommended that non-HDL-C be used for initial assessment of cardiovascular disease risk; fasting is no longer required.
- 2. In non-fasting states, triglyceride concentration is on average 15-20% higher than in a fasting state. Please consider the following:
 - A triglyceride concentration > 4.5 mmol/L, LDL-C is automatically measured by the direct method, instead of being calculated by the Friedewald Formula. Repeating an abnormal LDL is not necessary.
 - Non-fasting triglyceride concentration >10mmol/L, repeat only the triglyceride measurement with a fasting sample (after an interval of 5 days, but within 2 weeks) and review for potential causes of secondary hyperlipidemia.
- 3. Lipid profile testing should **not** be done on hospitalized patients except :
 - On patients who present to the Emergency Department with suspected acute coronary syndrome.
 - If required and the patient is in a stable metabolic condition.
- 4. A full fasting lipid panel is recommended for screening youths with risk factors for developing heart disease, (American Academy of Pediatrics).

If you have further questions, please contact Dr. Lou at 902 473 1528