



March 29, 2010

To: Submitting Physicians and Other Providers

From: John G. Newby, M.D.
Medical Director

Subject: Changes in Reporting of A1c / Glycohemoglobin

Effective April 13, 2010, Hagerstown Medical Laboratory will make a change in the reporting of Hemoglobin A1c (Glycohemoglobin) results. Although nothing has changed in the analysis performed by HML, these changes are made in accordance with recent recommendations by the American Diabetes Association.

In the *Standards of Medical Care in Diabetes – 2010*, published in Diabetes Care, volume 33, supplement 1 (January 2010), the ADA has affirmed a recent recommendation from an international expert panel that the Hemoglobin A1c test can be used for purposes of diagnosing and screening for diabetes, rather than just for therapeutic monitoring of those already diagnosed with diabetes mellitus. This recommendation at this time applies only to non-pregnant adults without conditions that may cause increased turnover of red blood cells.

Using the A1c test rather than either the oral glucose tolerance test (OGTT) and/or the fasting plasma glucose (FPG) has certain advantages. Compared to the OGTT, the A1c requires less patient preparation and requires only a single specimen. The A1c has several advantages to the FPG, including greater convenience (since fasting is not required), evidence that suggests greater preanalytical stability, and less day-to-day perturbations during periods of stress and illness.

When used diagnostically, an A1c level equal or greater than 6.5% is considered diagnostic of diabetes mellitus. A1c levels from 5.7% to 6.4% identify individuals at increased risk of future diabetes, to whom the term pre-diabetes may be applied. Comments to this effect will be added to our A1c results, and we will also adjust our reference range to indicate normal as less than 5.7%.

The ADA indicates that the diagnostic use of A1c tests is only valid for methods certified by the National Glycohemoglobin Standardization Program (NGSP) and standardized by or traceable to the Diabetes Control and Complications Trial (DCCT) reference assay (as is HML's assay). Point-of-care A1c assays are not sufficiently accurate at this time to be used for diagnostic purposes.

Any questions concerning this change in reporting may be referred to me or to HML's Chemistry Specialist, Myrna Hale at 301-665-4983.