



**Baystate
Pathology Associates**

A Baystate Medical Practice

759 Chestnut Street
Springfield, Massachusetts 01199

Phone: 413.794.4500
Fax: 413.794.1235

James H Nichols, PhD, DABCC, FACB

*Medical Director, Clinical Chemistry
Department of Pathology
Baystate Medical Center*

*Professor of Pathology
Tufts University School of Medicine*

james.nichols@baystatehealth.org



**Baystate
Reference Laboratories**

Service of Baystate Medical Center

www.baystatehealth.org/brl

May 17, 2010

TO: All physicians ordering Hemoglobin A1c

FROM: James H. Nichols, Ph.D., DABCC, FACB
Medical Director, Clinical Chemistry

RE: ADA recommends Hemoglobin A1c for diagnosis of diabetes

On or about June 1, 2010, Baystate Reference Laboratories (BRL) will offer three Hemoglobin A1c tests: a **HgbA1c (diagnostic)**, a **HgbA1c (monitoring)**, and a **HgbA1c with eAG**. While the HPLC methodology is the same for all tests, the interpretive comments accompanying the test results will differ as follows:

- 1) The **HgbA1c (diagnostic)** test is intended for diagnosis of diabetes in response to the recent recommendations of the American Diabetes Association (ADA). (Diabetes Care, Volume 33, Supplement 1, January 2010) By ordering the HgbA1c (diagnostic) test, patient results will be accompanied by the following interpretive comments:

HgbA1c (diagnostic)

≥ 6.5% Results consistent with Diabetes Mellitus according to 2010 ADA guidelines

5.7% – 6.4% Increased risk for Diabetes Mellitus

≤ 5.6% Normal Test

- 2) **HgbA1c (monitoring)** is intended for management of patients already diagnosed with diabetes. The HgbA1c (monitoring) test results will be accompanied by the comments:

HgbA1c (monitoring)

<6%

6 – 7%

7 – 8%

8 – 9%

>10%

Glycemic Control Index

Excellent

Very Good

Good

Fair

Poor

- 3) A “**HgbA1c with eAG**” test is also available for monitoring patients and will calculate an estimated average glucose (eAG) along with the HbA1c test results for monitoring diabetic patients. The eAG is calculated using the recommended ADA equation: <http://professional.diabetes.org/GlucoseCalculator.aspx>

$$eAG \text{ (mg/dL)} = 28.7 \times \text{HbA1c} - 46.7$$

Reference: Nathan D, Kuenen J, Borg R, Zheng H, Shoefeld D, Heine RJ for the A1c-Derives Average Glucose (ADAG) Study Group. Translating the A1c Assay into Estimated Average Glucose Values. Diabetes Care 2008;31(8):1473-8.

Requisitions will be updated to reflect this new offering in late June. Should you have any questions, please contact the laboratory at (413) 794-4541 or Dr. Nichols at (413) 794-1206.

*Baystate Medical Center
The Western Campus of Tufts University School of Medicine*

