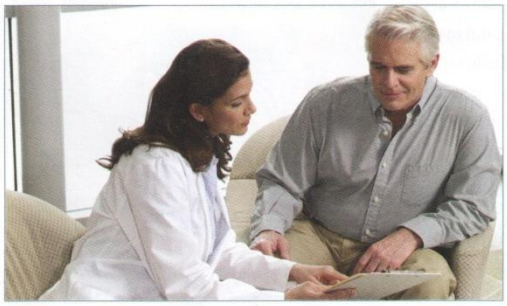
Siemens DCA HbA1c Results: A Convenient Aid to Diagnose Diabetes and Pre-Diabetes

New clinical guidelines to aid healthcare professionals in diagnosis and treatment

Summary: In 2009, an International Expert Committee comprised of representatives from American Diabetes Association (ADA), the International Diabetes Federation (IDF), and the European Association for the Study of Diabetes (EASD) recommended the use of Hemoglobin A1c tests to diagnose diabetes.[1]

Why measure HbA1c?

HbA1c measurements represent the degree of glucose exposure over a three-month period and are more useful than relying upon a single or episodic measurement of glucose levels to guide patient management and therapy adjustment.[2] Unlike the traditional protocols, HbA1c testing does not require a patient to fast, drink glucose beverages, or be subjected to serial venous blood draws over a three-hour period. It is standardized and aligned to the Diabetes Control and Complications trial and UK Prospective Diabetes study, exhibits less biologic variability and preanalytic instabilty, and is relatively unaffected by acute (e.g., stress or illness related) fluctuations in glucose levels.[3]



What are the accepted clinical guidelines?[3]

- An HbA1c level above 6.5% (48 mmol/mol) is an indicator of diabetes.
- Diabetic patients should keep HbA1c levels below 7% to minimize the risk of diabetes complications.
- Levels between 5.7% and 6.4% (39 mmol/mol to 46 mmol/mol) may indicate pre-diabetes.
- Pre-diabetic or at-risk patients should make lifestyle changes or explore pharmacologic treatment.
- Measuring HbA1c levels every 3 months is a useful tool for monitoring glycemic control.

Choose a system for accuracy and more

Independently recognized as one of only two methods that meet the accuracy and precision required for in-office testing[4], DCA™ analyzers are used by three out of four physicians who perform HbA1c testing in the office.[5] They offer:

- Simplicity: requires 1 µl sample of capillary or venous blood, no reagent preparation, and 6 minutes to results.
- Decision-support tools including A1c trend graphs, estimated average glucose*, albumin-to-creatinine ratio test for early kidney disease detection, and on-board GFR calculator.
- Proven DCA technology has been in use for more than two decades with performance documented in more than 140 independent clinical studies.
- Precision necessary for tracking HbA1c levels over time: <2.5% co-efficient of variation at clinically significant levels.[6]
- Good correlation with lab methods: in-house study with 127 patients showed correlation co-effcient of 0.9912 vs. Tosoh.[6]
- A continuous track record of annual IFCC and NGSP certifications.

2012 CAP proficiency survey results published at www.ngsp.org demonstrate the instrument's precision and accuracy based on results reported by more than 300 DCA system users.

Siemens DCA® HbA1c test kit[7] can now be used as an aid to diagnose diabetes and identify patients at risk for developing the disease.
Learn more at www.siemens.com/dcadx

References
1. Diabetes Care, Volume 35, Supplement 1, January 2012.
2. Standards of Medical Care in Diabetes - Diabetes Care, Volume 35, Supplement 1, January 2012.
3. American Diabetes Association. Diagnosis and classification of diabetes mellitus. Diabetes Care 2012;35(Suppl 1):S64–S71.
4. Six of Eight Hemoglobin A1c Point-of-Care Instruments Do Not Meet the General Accepted Analytical Performance Criteria, Erna Lenters-Westral, et al., Clinical Chemistry January 2010 vol. 56 no. 1 44-52.
5. GHX Market Intelligence, market data report. Q4 2012 Report.
6. DCA Systems Hemoglobin A1c Addendum to Instructions for Use. 10698776 Rev A, 2012-08.
7. Not all product offerings are available in all countries. Not available for sale in the U.S. Kit#10698915.

*Not available in the U.S.

For additional information visit **www.siemens.com/dcadx**

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