



Cardi-OH Update

The Ohio Cardiovascular & Diabetes Health Collaborative (Cardi-OH) is a statewide initiative of health care professionals who share knowledge to improve Medicaid patient outcomes and eliminate health disparities across Ohio.

February 2021 Webinar

Integrating Behavioral Health and Primary Care Services: Lessons Learned From Three Ohio Practices



Watch the recording of the February 10, 2021, webinar featuring Trygve Dolber, MD, from Case Western Reserve University.

[CLICK TO WATCH →](#)

Tune in to Cardi-OH Radio



Taking Care of the Heartland: Rural Telehealth During COVID-19

Check out the latest featuring L. Austin Fredrickson, MD, from Northeast Ohio Medical University (NEOMED) and Madhuri Medarametla, MD, from Signature Health, Inc. in Ashtabula, Ohio.

[CLICK TO LISTEN →](#)

News You Can Use



Prospective Cohort Study Finds Both Artificially Sweetened Beverages and Sugary Drinks Associated with Increased Cardiovascular Disease Risk

Currents provide brief summaries of the latest advances in medicine or clinical practice related to diabetes or hypertension and include links to additional resources.

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CAPSULE New!

Understanding A1C Targets and Possible Factors for Discordance

Do you know which patient conditions may be associated with A1C discordance?

Capsules provide busy clinicians brief summaries of best practices that are ready to be implemented in clinical care.

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JANUARY 2021 - CAPSULE 11
Understanding A1C Targets and Possible Factors for Discordance
CONTRIBUTING AUTHOR: International Diabetes Federation, American Diabetes Association, Diabetes Care 2020;43(1):55-62.

The glycated hemoglobin test, also referred to as HbA1c, is a measure of the proportion of hemoglobin molecules that have been glycosylated and reflects the plasma glucose concentration in the past 120 days (life span of erythrocytes). The HbA1c goal should be individualized based upon patient characteristics, including age, treatment burden, hypoglycemia risk, length, complications, comorbidities, preferences, and capability/motivation of the patient (Table 1).¹

Randomized controlled trials in patients with type 1 and type 2 diabetes have demonstrated that an HbA1c target of 7% or less reduces macrovascular complications. However, the effect of glucose control on macrovascular disease is modest, and observed only with early implementation and prolonged follow-up (10 years or more).²

HbA1c results are not affected significantly by acute fluctuations in blood glucose concentrations, such as with illness or after meals, and may not reflect recent changes in treatment regimens nor recent changes in glycemic control. HbA1c is lower in Caucasians compared to other racial and ethnic groups when accounting for average glucose derived by other methods.³

However, the prognostic value in predicting complications is similar across race or ethnicity, and targets do not differ by race or ethnicity. If the HbA1c test is to be available or discordant with glucose monitoring (see Table 2), alternative markers of glycemic control, such as fructosamine, glycated albumin, or continuous glucose monitoring can be considered.⁴ Table 2 was developed by Cardi-OH as a resource to guide clinicians in identifying explanations for possible A1C discordance.

For more information, access Cardi-OH's expanded resource on [Glycemic Monitoring](#).

REFERENCES
1. American Diabetes Association. Standards of medical care in diabetes. Diabetes Care 2020;43(1):55-62.
2. Nathan DM, et al. Intensive diabetes treatment and cardiovascular complications in patients with type 2 diabetes. N Engl J Med 2008;359(1):977-86.
3. Sacks DL, Avolio A, Balko G, et al. Discrepancies and recommendations for laboratory analysis in the diagnosis and management of diabetes mellitus. Clin Chem 2013;59(10):1631-1637.
4. International Diabetes Federation. [Glycemic Monitoring](#).
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Health Status	A1C (%)	Fasting/premeal (mg/dL)	Peak Postprandial (mg/dL)	Bedtime (mg/dL)
Healthy	7.0	80-130	180	*
Healthy	7.5	90-130	*	90-150
Intermediate	8.0	90-150	*	100-180
Poor	8.5	100-180	*	110-200

*Age, comorbidities, hypoglycemia risk, length, complications, comorbidities, preferences, and capability/motivation of the patient.

Falsely Decreased A1C ¹	Falsely Increased A1C ²
Iron deficiency anemia	Iron deficiency anemia
Acute blood loss	Chronic kidney disease (low erythropoietin)
Iron deficiency anemia	Iron-BPG deficiency anemia ³
Vitamin C	Hypothyroidism
Proteinuria	Hypertension
Microalbuminuria	Chronic alcohol use
Blindness	Chronic salicylate use
Erythropoietin/hydroxyurea treatment	Chronic opiate use

¹Age 18-74, per decade after age 10.
²Age 18-74, per decade after age 10.
³Iron-BPG deficiency anemia is a rare condition that causes a decrease in the amount of iron-binding protein (BPG) on the surface of red blood cells, leading to a falsely low hemoglobin level and a falsely low A1C.

Spring 2021 TeleECHO Clinic

Motivational Interviewing in the Context of Type 2 Diabetes

View highlights from the Tackling Type 2 Diabetes TeleECHO Clinic on February 18, 2021, featuring James Werner, PhD, from Case Western Reserve University.

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Sharing best practices to improve cardiovascular health and diabetes.

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