

Delivering POCT Glucose in Urgent Care

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INTRODUCTION / BACKGROUND

Based on the 2023 National Health and Nutrition Examination Survey, an estimated 11 million U.S. adults are living with undiagnosed (predominantly type 2) diabetes mellitus (DM).

As primary care access and insurance coverage shift, urgent care (UC) increasingly serves as the sole point of contact for many patients. If enhanced ACA premium tax credits expire, an estimated 4.8 million people could become uninsured in 2026.

Many symptoms of undiagnosed DM are non-specific (e.g., polyuria, dizziness, blurred vision). Fingerstick capillary blood glucose (CBG) is a validated, ubiquitous point-of-care screening test. However, current UC practice relies on clinician judgment, which can lead to underscreening compared with guideline-based eligibility.

This work describes patients who received a fingerstick glucose test and compares them to patients with similar characteristics who did not, exposing potential gaps in care consistency.

ABSTRACT / SUMMARY

This study describes utilization of point-of-care capillary blood glucose testing during urgent care encounters in calendar year 2025 across two Intellivisit client systems. We summarize overall testing volume, patient demographics, and care-gap patterns to evaluate urgent care glucose testing as a practical pathway to identify previously unrecognized dysglycemia and support linkage to primary care.

METHOD / PROCEDURE

Design: Retrospective descriptive analysis of de-identified urgent care encounters (2025).

Data Source: Intellivisit encounter data and EHR-derived orders/diagnoses from two client health systems.

Case Identification: Glucose tests identified via origin diagnostic reports matched to client order mappings.

Population: Encounters from Health System A and Health System B.

Measures: Encounter counts; glucose testing counts; age, gender, BMI distributions; diabetes chronic condition flag; clinical context (chief complaints, diagnoses, chronic conditions).

LEARNING OBJECTIVES

- 1) Describe real-world utilization rates of CBG testing in urgent care encounters across two health systems.
- 2) Identify demographic and clinical characteristics associated with glucose-tested encounters.
- 3) Recognize potential care gaps in glucose testing among patients with diabetes-related risk factors.

DATA / RESULTS

94,385

Completed Encounters

0.50%

CBG Testing Rate

91.2%

Similar Patients Not Tested

By Health System (Completed Encounters)

Health System A: 23,277 encounters; 168 glucose tests (0.72%)

Health System B: 71,108 encounters; 305 glucose tests (0.43%)

Demographics: Overall vs. Glucose-Tested

Mean Age: 37.08 yrs (overall) vs. 52.58 yrs (tested)

Female: 62.2% (overall) vs. 61.7% (tested)

Mean BMI: 27.65 (overall) vs. 30.79 (tested)

Key takeaway: *Glucose-tested encounters are a small subset overall and skew older with higher mean BMI.*

Age Distribution (Glucose-Tested, n=473)

Age Group	Count	%	Age Group	Count	%
<18	24	5.1%	40-49	73	15.4%
18-29	62	13.1%	50-59	69	14.6%
30-39	51	10.8%	60-69	71	15.0%
			70+	123	26.0%

BMI Distribution (Glucose-Tested, n=473)

BMI Category	Count	%
Obese	197	41.6%
Overweight	107	22.6%
Normal	82	17.3%
Underweight	17	3.6%
Unknown	70	14.8%

Care Gap Analysis

Diabetes present: 360 encounters; 12 tested (3.33%)

No diabetes chronic condition: 94,025 encounters; 461 tested (0.49%)

Comparing matched populations

Those who got tested compared to those who did not

Encounters matched : **5,380 (5.70% of completed)**

Among matched: **4,907 (91.21%) were NOT tested**

DISCUSSION

Documented CBG testing rates were low (0.50%). Glucose-tested patients were notably older (mean 52.58 vs 37.08 yrs) and had higher BMI (mean 30.79 vs 27.65), suggesting testing is concentrated in higher-risk patients but remains rare.

Testing was slightly higher in Health System A than B, suggesting site-level workflow differences.

Among encounters with a diabetes chronic condition, only 3.33% included documented glucose testing, indicating potential underscreening in high-risk patients.

Even when demographic and chief-complaint profiles matched those of tested patients, 91.21% of such encounters did not receive documented glucose testing. These clinically similar patients represented 5.70% of all completed encounters.

Findings support urgent care as a critical access point for diabetes screening, particularly as insurance coverage uncertainty may shift more care to UC settings.

CONCLUSION / TAKE-HOME POINTS

CBG testing is documented in a small fraction of urgent care encounters in 2025 across two health systems.

Glucose testing is concentrated in older and higher-BMI patients but remains infrequent even among patients with diabetes-related chronic conditions.

Standardized UC workflows for CBG testing could help close screening gaps and support earlier detection of dysglycemia.

INTERACTIVE DATA EXPLORATION — Play With the Data Yourself

[QR CODE]

Limitations: Glucose testing identified via order mappings; underdocumentation may undercount. Data limited to two health systems and may not generalize. Symptom matching requires exact chief-complaint set match.

Bibliography

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