Improving Diabetes Control with Implementation of Continuous Glucose Monitoring (CGM): A Family Nurse Practitioner Fellowship Quality Improvement Initiative

Maria Pizzirusso, DNP, MPH, FNP-BC, Brianna Bouchez, DNP, FNP-C, Keshia Okorie, MS, RDN, CDN, CLC, CDCESMS, Ashley Klimavicius, MA, G. Oscar Anderson, MSN, FNP-BC, Ciara Mottier, DNP, MPH, FNP-BC, Julia Thomae, MS, MSN, FNP-BC, Marie Toupou, DNP, FNP-BC, A. Tatyana Lovell, DNP, FNP-BC, Mika Long, MSN, FNP-BC, Julia Grytsayo MSN, RN, Jessie Kravet, MSN, RN, Nikole Lesmes-Rincon, MSN, RN, Kadia Smith, MSN, RN

Background

Problem

- Many patients with uncontrolled diabetes continue to experience suboptimal glycemic control despite advances in diabetes care.[1]
- CGMs enable early detection of hyperglycemia and hypoglycemia, facilitate precise treatment adjustments, and empower patients to understand the impact of lifestyle behaviors on their glycemic control.[2]
- Studies have shown that CGM use is associated with improved glycemic outcomes, increased time in target range, and enhanced patient engagement.[2]

Setting

- Community Healthcare Network (CHN) is a federally qualified health center (FQHC) serving patients across 11 sites across New York City.
- CHN is home to the FNP Fellowship, which equips nurse practitioner graduates with the skills to independently manage complex patients.

Local Gap

- Approximately 31.6% of CHN patients have uncontrolled diabetes (Hgb A1c >8%).
- Only 23.9% of eligible patients use CGM.
- More than 50% of patients lacked scheduled follow-up with a primary care provider (PCP).

Project Aims

By September 2026, develop and implement a standardized CGM workflow to:

1. Increase CGM adoption among eligible patients with uncontrolled diabetes.
2. Improve provider confidence in CGM prescribing and interpretation.
3. Identify barriers and facilitators to sustainable CGM implementation across CHN.

Intervention

Intervention Workflow

Identify patients using Population Health Registry

↓

Patients outreached by FNP Fellows and Nursing Students

↓

Patients educated about CGM

↓

Patients initiated on CGM

↓

Patients referred to Nutrition

↓

CGM data reviewed & treatment adjusted by PCP at monthly follow-up visits

Key Components

- ✓ FNP-led patient outreach
- ✓ Standardized CGM prescribing workflow
- ✓ RN and clinician EHR templates
- ✓ Nutrition counseling integration
- ✓ Prior authorization support
- ✓ Monthly CGM follow-up visits
- ✓ Interprofessional staff training

Results

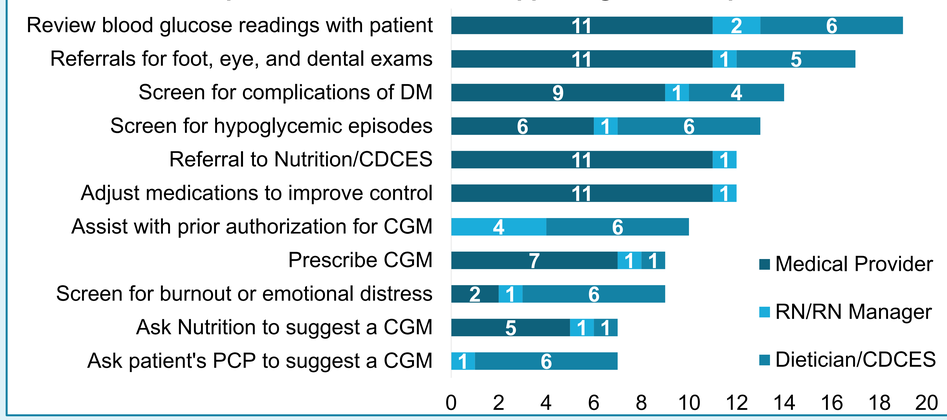
Reach & Enrollment

- **Patients identified:**126
- **Patients contacted:** 95 (75%)
- **Accepted enrollment:** 13 (10%)
- **Actively enrolled in CGM:** 9 (7%)

Follow-Up Success

- **Active CGM users:** 9
- **Scheduled monthly follow-up:** 8 (89%)

Interprofessional Activities Supporting CGM Adoption



Discussion

Key Accomplishments

- 13 patients previously not offered CGM accepted intervention; **9 patients successfully enrolled**.
- Of the 9 patients enrolled in CGM, **8 scheduled for monthly visits with PCP**.
- FNP fellows led the implementation of this initiative, developing confidence and proficiency in integrating CGM into clinical practice.
- **FNP fellows subsequently served as CGM champions,** providing education and training to pre-clinical NP students, nursing staff, and other allied health professionals at CHN.

Challenges to Implementation

- Difficulty contacting patients (e.g., unable to reach or leave voicemail).
- Scheduling challenges due to patient availability.
- Insurance coverage limitations and cost barriers for self-pay patients.
- High no-show rates across all visit/provider types.
- Technology-related challenges with CGM use.
- Limited provider participation in the survey assessing CGM comfort and use.

Next Steps

- Continue patient recruitment until all eligible patients have been contacted.
- Complete six-month follow-up for enrolled patients.
- Evaluate clinical outcomes, including Hgb A1c, CGM adherence, and time in range.
- Assess patient experiences and perspectives regarding CGM use.
- Formally evaluate FNP Fellow and NP student confidence in incorporating CGM into routine DM management.
- Secure grant funding to provide long-term CGM access for self-pay patients.

This intervention is ongoing. Final analysis will be conducted following completion of the six-month implementation period and will evaluate changes in hemoglobin A1c, CGM adherence, and other clinical outcomes among patients who initiated CGM use.

References

1. American Diabetes Association Professional Practice Committee. Standards of care in diabetes—2026. *Diabetes Care*. 2026;49(suppl 1):S1-S306. doi:10.2337/dc26-SINT
2. Hirsch IB, Garg SK, Repetto E, Snell-Bergeon J, Ulmer B, Perkins C, Bergenstal RM. Continuous glucose monitoring frequency andglycemic control in people with Type 2 Diabetes. *JAMA Netw Open*. 2025;8(10):e2539278.doi:10.1001/jamanetworkopen.2025.39278