# Integrating Interprofessional Support and CGM Prescribing to Improve Diabetes Outcomes: A Two-Year Collaborative Quality Improvement Initiative

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## BACKGROUND

- In rural southeastern Ohio, diabetes prevalence is 19.9%, ~60% higher than the national average of 12.0%, highlighting a substantial disparity.[1]
- Structural barriers such as geographic isolation, workforce shortages, and socioeconomic disadvantage contribute to delays in treatment intensification and suboptimal use of evidence-based therapies.[2]
- Team-based care models incorporating clinical pharmacists, patient navigation, and diabetes technology such as continuous glucose monitoring (CGM) have demonstrated effectiveness[3,4] but remain underutilized in resource-limited settings.
- We used iterative quality improvement testing to increase access to CGM, diabetes navigation services, and clinical pharmacist support.

## METHODS

- **Framework**: Utilized the Model for Improvement and applied Plan-Do-Study-Act cycles.
- **Setting:** Family Medicine Residency Clinic in rural Southeastern Ohio.
- **Interventions:** Multi-component interventions targeting (1) CGM initiation, (2) diabetes navigation services, and (3) clinical pharmacist support, implemented through iterative PDSA cycles as labeled in Figures 1-3.
- **Data Collection:** Extracted electronic health record (EHR) data for adults with type 2 diabetes.
- **Measurement and Analysis:**
  - Created control charts to track outcomes over time.
  - Defined the baseline period as August 2022 – September 2023.
  - Defined the intervention period as October 2023 – October 2025.

Table 1: Demographic Breakdown of Adults with Type 2 Diabetes at the Family Medicine Residency Clinic.

| Variable | Encounters | Encounters % | Individuals | Individuals % |
|---|---|---|---|---|
| **Race/Ethnicity** | | | | |
| Non-Hispanic White | 5,562 | 96.2 | 628 | 95.7 |
| Other (including Hispanic/Latino and Non-Hispanic Black) | 218 | 3.8 | 28 | 4.3 |
| **Age (years)** | | | | |
| 18-34 | 255 | 4.3 | 42 | 6.2 |
| 35-64 | 3,287 | 55.4 | 388 | 57.2 |
| 65+ | 2,395 | 40.3 | 248 | 36.6 |
| **Insurer** | | | | |
| Medicaid | 1,441 | 24.3 | 170 | 25.1 |
| Medicare | 2,655 | 44.7 | 279 | 41.2 |
| Other | 506 | 8.5 | 131 | 19.3 |
| Private/Commercial | 1,335 | 22.5 | 98 | 14.5 |

## RESULTS

- During the intervention period, 102 adults engaged with diabetes navigation services and 23 adults completed more than one clinical pharmacist visit.
- CGM prescribing initially increased from a mean of 6.7% to a mean of 20.5%, followed by an increase to 34% amongst all adults with type 2 diabetes (Figure 1).
- In adults with HbA1c ≥ 9%, CGM prescribing increased three times, starting at 15.8% to 34.2%, followed by a subsequent increase to 53.5% (Figure 2).

Figure 1: Control Chart Showing Percentage of Encounters of People with Type 2 Diabetes who Have Been Prescribed a CGM Seen at the Family Medicine Residency Clinic.

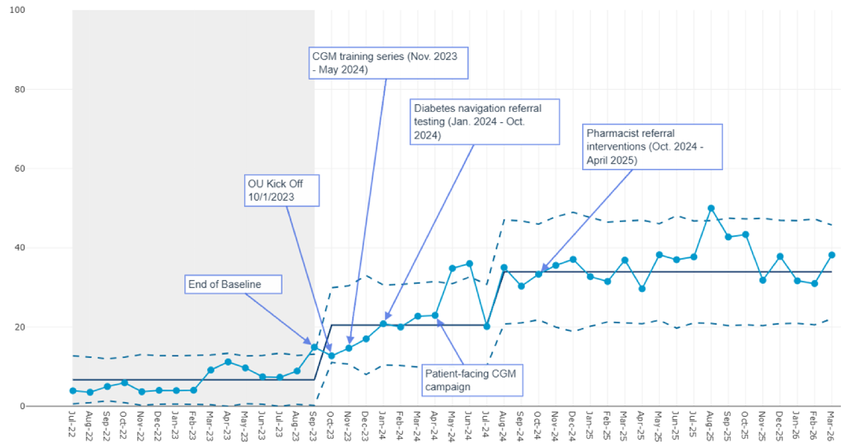



Figure 2: Control Chart Showing Percentage of Encounters of People with Type 2 Diabetes and HbA1c ≥ 9% who Have Been Prescribed a CGM Seen at the Family Medicine Residency Clinic.

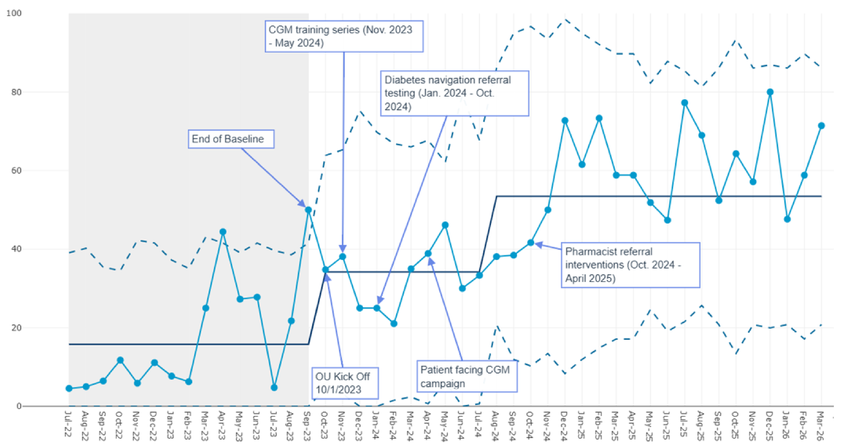
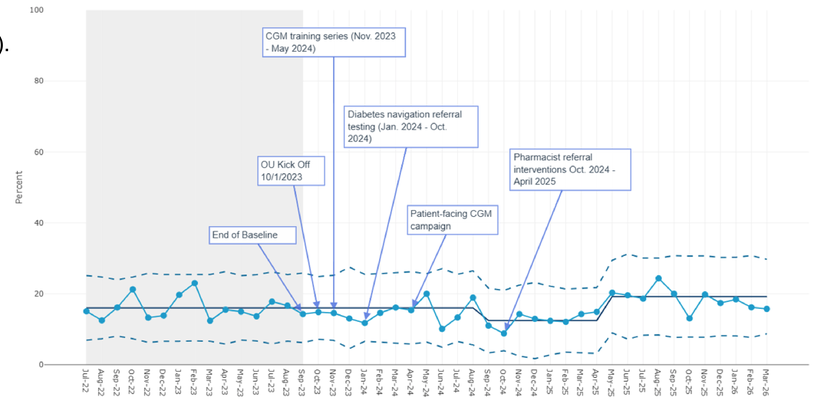



Figure 3: Control Chart Showing Percentage of Encounters of People with Type 2 Diabetes with HbA1C ≥ 9%.




## SUMMARY & CONCLUSIONS

- Implementation of diabetes navigation services and embedded pharmacist increased access to team-based care for high-risk adults with type 2 diabetes.
- CGM prescribing increased more than fivefold overall (6.7% to 34%) and more than threefold among adults with A1C ≥9.0% (15.8% to 53.5%), reflecting increased adoption of diabetes technology in a rural primary care setting.
- Prescribing for CGMs remained variable among higher-risk individuals, reflecting small sample sizes and variability in both provider adoption and patient uptake.
- The percentage of adults with HbA1c ≥9% initially decreased (16% to 12.5%), followed by an increase to 19.2% over time. As this measure is based on clinic visits rather than a fixed population, these changes may reflect increased engagement of higher-risk individuals rather than a true worsening of glycemic management.

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