Reshaping Diabetes Care in Rural Health Clinics: A Multisite Quality Improvement Project

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Background

- Adults in rural areas experience high rates of type 2 diabetes (T2D) and obesity, while access to comprehensive care remains limited.
- Rural clinics often face constraints in staffing, referral networks, and time for quality improvement (QI) work.

Aims

- Assess whether a regionally coordinated QI initiative could reduce the proportion of patients with T2D and A1C >9%
- Increase the proportion of adults with BMI >25 kg/m^2 who had a documented weight-management follow-up plan

Methods

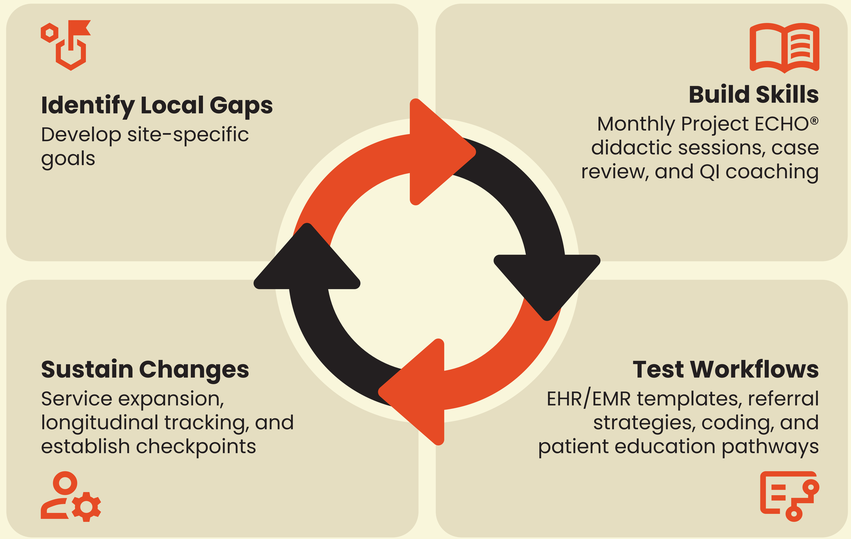
Study Design

- 12-month project conducted with the National AHEC Organization and rural health centers in Montana and Utah.*
- Clinics participated in 10 monthly virtual Project ECHO® sessions featuring brief didactics and case-based learning with QI and clinical experts.
- Each site selected site-specific aims and submitted deidentified aggregate data at baseline and project completion.
- Descriptive statistics were used to assess changes over time.

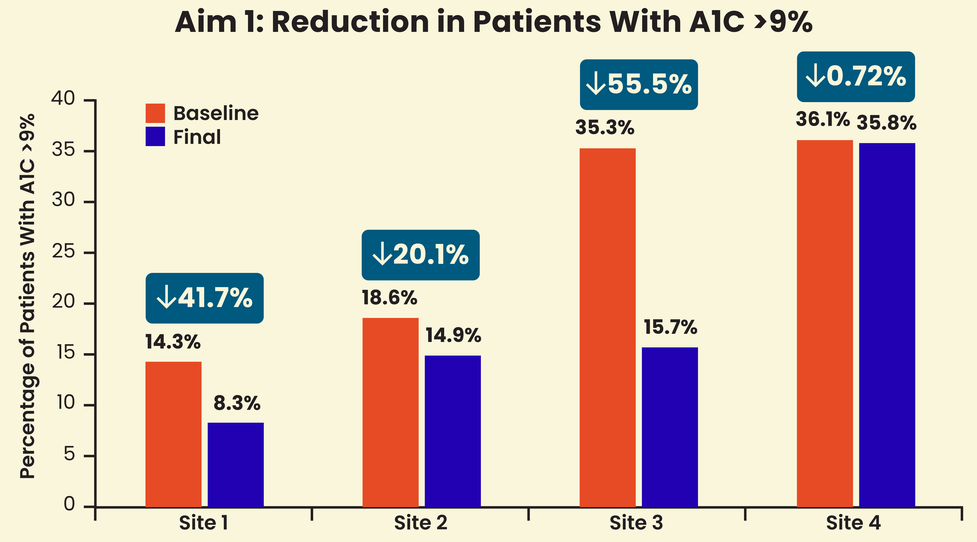


*8 clinics were enrolled in the project, with 4 clinics submitting final data.

Model for Rural Clinic QI Implementation



Aim 1: Reduction in Patients With A1C >9%



Aggregate A1C >9% reduction: 27%

AHEC, area health education centers; EHR, electronic health record; EMR, electronic medical record; QI, quality improvement; T2D, type 2 diabetes.

Aim 2: Proportion of Patients With Documented Follow-up Plans

+22.6% Increased prescribing of T2D medications with weight-loss benefit

+37% Increased documentation of patients with an obesity diagnosis

+47% Increased accuracy of EHR/EMR documentation

Additional Changes Observed

Multidisciplinary Workflow
Structured referral frameworks to aid in individualized weight-management plans

Medication Nutrition Therapy
Expanded access to nutrition support and education

Intensive Behavioral Therapy
Motivational interviewing, training, health coaching, support groups, and referrals

Data and Documentation
Chart review, EHR/EMR standardization, ICD-10 coding consistency, and documentation

Conclusion

- Targeted, scalable QI strategies can improve diabetes and obesity care in rural primary care settings.
- Participation was feasible, but project discontinuation was linked to limited time and resources that rural care centers could dedicate to QI.

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