How Federally Qualified Health Centers Select and Implement Multi-level Evidence-based Interventions to Improve Colorectal Cancer Screening: A Qualitative Study

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Background

Federally Qualified Health Centers (FQHCs) have much lower colorectal cancer (CRC) screening rates than the national goal of 80% by 2018. FQHCs are working to close this gap by implementing multi-level evidence-based interventions (EBIs).

The aim of this study was to explore *how* FQHCs are selecting, incorporating, and evaluating EBIs aimed at improving CRC screening rates; which barriers and facilitators are significant; and what external resources are being used to support implementation.

Methods

Members of the **Cancer Prevention and Control Research Network (CPCRN)** conducted in-depth interviews with key informants in 14 FQHCs across eight states. We recruited centers that are partially or fully implementing EBIs at multiple levels as reported in a previous survey.

A semi-structured interview guide was used to assess the decision-making process, implementation strategies, and contextual factors, as well as implementation barriers and facilitators. The **Consolidated Framework for Implementation Research (CFIR)** guided question development.

The interviews were recorded and transcribed. The codebook was developed using the initial research questions and the **CFIR constructs**: Characteristics of the Intervention, Inner Setting, Outer Setting, Individuals Involved, and Implementation Process.

Trained coders established inter-coder reliability by double-coding a sub-sample of transcripts and resolving discrepancies. Common themes were identified by directed content and thematic analysis.

Participants (n=28)	
Medical Director/CMO	9
CEO	7
Quality Improvement Director/CQO	6
Nurse Manager/Director of Nursing/CNO	4
Clinical Manager/Director	2

Results

Screening Approaches Reported by FQHCs	
One-on-one patient education	13
Patient reminders	12
Small media	10
Patient navigators	8
Provider assessment and feedback	8
Reminder and recall systems	7
FIT kits (Flu/FIT, mailed FIT)	6
Group education	1

External Change Agents motivated implementation of EBIs.

- Other FQHCs, networks of FQHCs and community health centers **(10)**
- Federal entities: US Preventive Services Task Force, Agency for Healthcare Research & Quality, Centers for Medicare and Medicaid Services, Health Resources & Service Administration **(9)**
- American Cancer Society **(8)**
- For-profit entities **(7)**
- State or local health departments **(5)**
- Organizations dedicated to quality improvement **(5)**

"…it was a push at the American Cancer Society to say, 'Let's work on colorectal.' She came to us with the Flu/FIT idea and [we] said, 'Sounds good, let's try it because we're not doing good where we are.' That's how we got started on that."

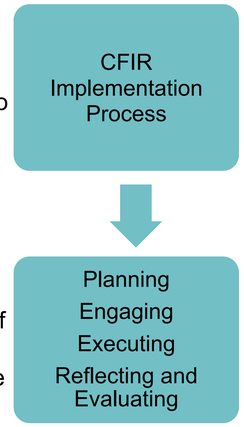
Implementation Process in FQHCs

Planning: Few informants described assessing the factors contributing to low screening rates prior to implementation.

Engaging: Individuals were key to success. Some described a **champion** who encouraged staff enthusiasm and commitment, while others described a formally appointed "implementation leader" who was often someone hired through grant funding.

Executing: Setting goals, communicating about them, reporting on performance, and motivating staff were described. Many informants described **Plan Do Study Act** cycles, or small tests prior to implementation.

Reflecting and Evaluating: Evaluation was predominantly based on review of Uniform Data System data. Other efforts included using electronic medical records (EMRs) to track distribution and return of FIT/FOBT kits, and to ensure diagnostic testing was performed.



Support Needed

- **Patient education**, more educational materials needed
- Increasing **staff awareness and capacity**
- **Payment** for diagnostic testing and colonoscopies when screening results are positive
- **Patient navigators**
- More **time**
- **Reliable EMR system**

"Being able to afford diagnostic testing when screenings are positive… [is] huge."

Discussion

- Quality improvement infrastructure and processes varied across FQHCs
- CRC screening initiatives were motivated by numerous external change agents
- Few FQHCs were assessing the multi-level factors that may influence screening rates
- The most comprehensive QI efforts were related to screening programs (e.g., Flu/FIT or mailed FIT), particularly when supported by external funding

Implications for D&I Research

These study results inform the further development of implementation supports (i.e., training, tools, and technical assistance) for FQHCs and other primary care settings interested in increasing CRC screening rates.

Application of these findings will ensure that support systems are targeting relevant barriers, building on successful implementation strategies, and aligning with FQHCs' preferences for collaboration.

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CPCRN Cancer Prevention and Control Research Network