Understanding Quality Improvement Collaboratives through an Implementation Science Lens

An evaluation of a quality improvement collaborative designed to improve colorectal cancer screening rates in community health centers.

Background

Little is known about how or under what circumstances QI collaboratives are successful. To address this gap, we applied IS frameworks to evaluate a QI collaborative on colorectal cancer (CRC) screening in Federally Qualified Health Centers (FQHCs).

Methods

In 2018, the American Cancer Society & the North Carolina Community Health Center Association sponsored a collaborative. They provided funding, training, facilitation, & audit & feedback to build FQHC capacity to increase CRC screening rates. We assessed FQHC engagement in the collaborative, their use of QI tools, and their impact on screening rates. At the end, participants' perceptions were captured in a focus group.

Results

Nine of 40 NC FQHCs (23%) participated. FQHC engagement was high but staff attendance decreased over time. Teams completed all 4 QI tools. FQHCs implemented new strategies to improve CRC screening uptake and increased their rates by 8.0% from 2017-2018. Focus group findings uncovered participants' views on the feasibility & appropriateness of the strategies & tips for future collaboratives.

Conclusion

Results support the collaborative's positive impact on FQHC's capacity to implement QI tools and improve screening rates.

The Collaborative

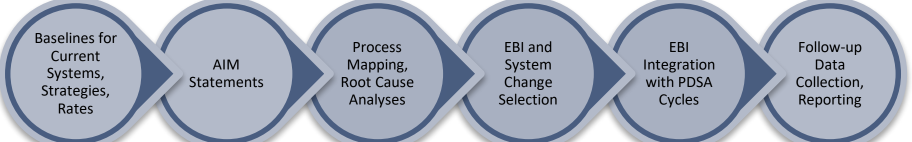
The collaborative provided FQHCs with in-person and virtual meeting support for peer co-learning, data management, patient/provider education materials, EHR troubleshooting, individual technical assistance (on-site & virtual) & in-person training on Institute for Healthcare Improvement QI tools (right) and processes (below):

Plan Do Study Act Cycles

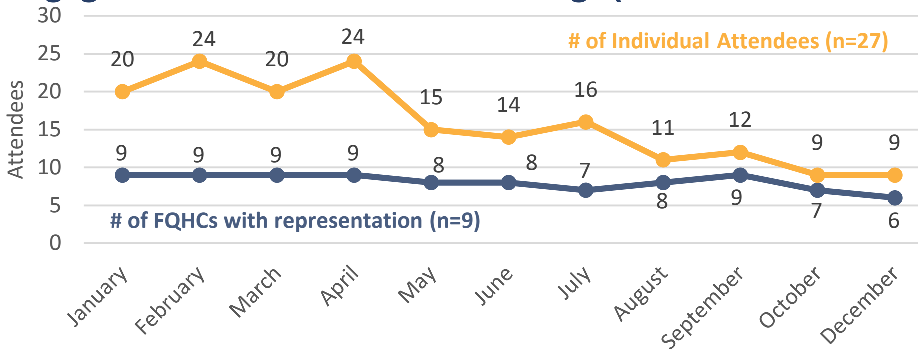
Gap Analyses

Aim Statements

Process Mapping



Engagement in Collaborative Meetings (In-Person & Virtual)



FQHC Characteristics					
FQHC	# Sites	# patients age 45-75	Racial Minority	Hispanic	Uninsured
A	2	1,478	46.92	3.16	9.25
B	23	19,001	51.88	20.45	33.92
C	1	3,109	82.42	39.28	54.53
D	5	3,622	86.15	5.58	25.05
E	2	1,015	28.97	15.57	30.33
F	5	6,529	76.74	50.50	48.64
G	6	1,878	92.47	26.14	9.10
H	3	1,791	83.49	29.52	74.74
I	1	850	40.91	32.40	44.53

Feedback on Implementation Strategies

Formal commitments and **funding** *motivated engagement*

In-person trainings were valued for *the QI process overview, peer networking & hands-on experience*

Virtual meetings were *difficult to prioritize* over clinic needs

FQHCs *valued* **personalized problem solving** & **support**

Audit & Feedback of data was valued for *generating friendly competition & holding teams accountable*

Implementation Teams should be *multidisciplinary*

Colorectal Cancer Screening Rates (n=8*)

FQHC	% Up to Date			% of All Patients Served by FQHC	Weighted Average of % Up to Date		
	2016	2017	2018		2016	2017	2018
A	30.7	41.3	50.0	3.9	1.2	1.6	1.9
B	32.8	35.6	46.0	49.5	16.2	17.6	22.8
C	15.1	19.8	26.5	8.1	1.2	1.6	2.2
D	11.9	12.8	13.0	9.4	1.1	1.2	1.2
E	18.4	26.0	33.0	2.6	0.5	0.7	0.9
F	43.0	45.0	46.3	17.0	7.3	7.6	7.9
G	15.7	25.7	58.0	4.9	0.8	1.3	2.8
H	18.6	17.1	17.0	4.7	0.9	0.8	0.8
			Total	100.0	29.2	32.4	40.5

*FQHC I was not in operation until 2017 and was excluded.

3.3 (2016–2017) 8.0 (2017–2018)

Recommendations for the Future

In-Person Meetings

- Hold 2+ in-person meetings
- Increase time between the 1st training and 1st data collection to show progress
- Focus less on CRC content & more on QI processes

Monthly Calls

- Provide more time for each health center to check-in
- Offer overview call before the first in-person meeting

CRC Screening Data Reporting

- Provide clear instructions on reporting & time frames
- Collect data at baseline & then one month at a time

QI Tools

- Offer different choices of tools, especially for root cause analyses
- Spend more time going over each tool

Critical Elements of the Collaborative

Face-to-Face Interactions

Monthly Accountability

Data Reporting

Contractual Agreements

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