

Exploring the Effect of the Composition and Combinations of Evidence-based Intervention Implementation to Increase Colorectal Cancer Screening Rates

Cynthia Calef, MAML,¹ Hiluv S. Johnson, LMSW,¹ Ranina M. Outing, MHA,¹ Lauren Workman, PhD,¹ Kim Hale, BS,² Beth E. Graham, MPH,² Heather M. Brandt, PhD

¹University of South Carolina; ²American Cancer Society

Background

- ❖ Colorectal cancer screening (CRCS) rates are low compared to other types of cancer screening.
- ❖ Federally-qualified health centers (FQHCs) are frontline providers of high quality clinical care.
- ❖ *The Community Guide* identifies provider reminders, provider assessment and feedback, and client reminders as three recommended, evidence-based interventions (EBIs) to increase CRCS. Previous research has shown multicomponent EBIs to be effective at increasing CRCS.
- ❖ Less is known about which combinations are most effective in increasing CRCS rates.

Goal: To examine the composition and combination of EBIs to increase CRCS being implemented simultaneously with FQHCs.

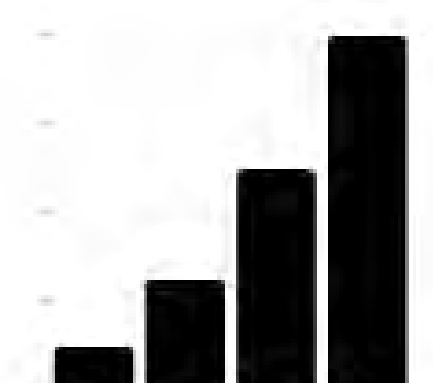
Methods

- ❖ The Colorectal Cancer Screening Program in South Carolina works with FQHCs to implement EBIs: provider reminders, provider assessment and feedback, and client reminders. Partners select two to implement.
- ❖ Plus all FQHCs implement supportive (e.g., professional education) and additional activities (e.g., standing order policy development).
- ❖ Composition of each EBI is documented and monitored through development of process maps, observation forms, and regular meetings.
- ❖ Combination of EBIs also is documented and monitored.
- ❖ Primary outcome is CRCS rates monitored quarterly and reported annually.

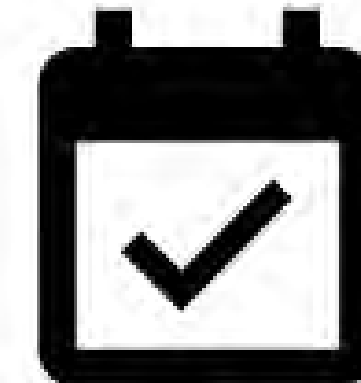
EBIs:



Provider Reminders (PR)








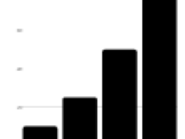

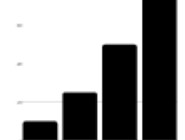







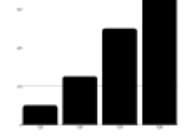
Provider Assessment and Feedback (PAF)

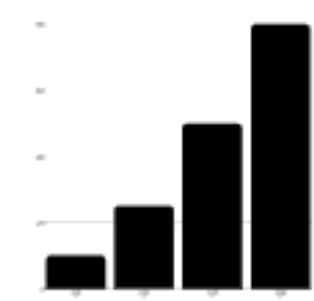


Client Reminders (CR)

Results

Table 1. Composition and Combinations of EBIs by FQHC Site

FQHC	EBIs	Composition of EBIs
A	 	PR: Daily list, EHR prompt PAF: Identifiable reports, quarterly
B	 	PR: Daily huddle, EHR prompt, rescreen alert PAF: Identifiable office display, quarterly
C	 	PR: Daily list, daily huddle, EHR prompt PAF: Identifiable report cards, monthly
D	 	PR: Daily huddle PAF: Identifiable report cards, monthly
E	 	PR: Daily list, EHR prompt, blue star magnet CR: Mailed letter to client
F	 	PR: EHR prompt CR: Phone calls, text messages, emails
G	 	PR: Daily list, daily huddle, EHR prompt CR: Birthday cards, EHR notifications
H	 	PR: Daily list, daily huddle, EHR prompt PAF: Identifiable report cards, monthly



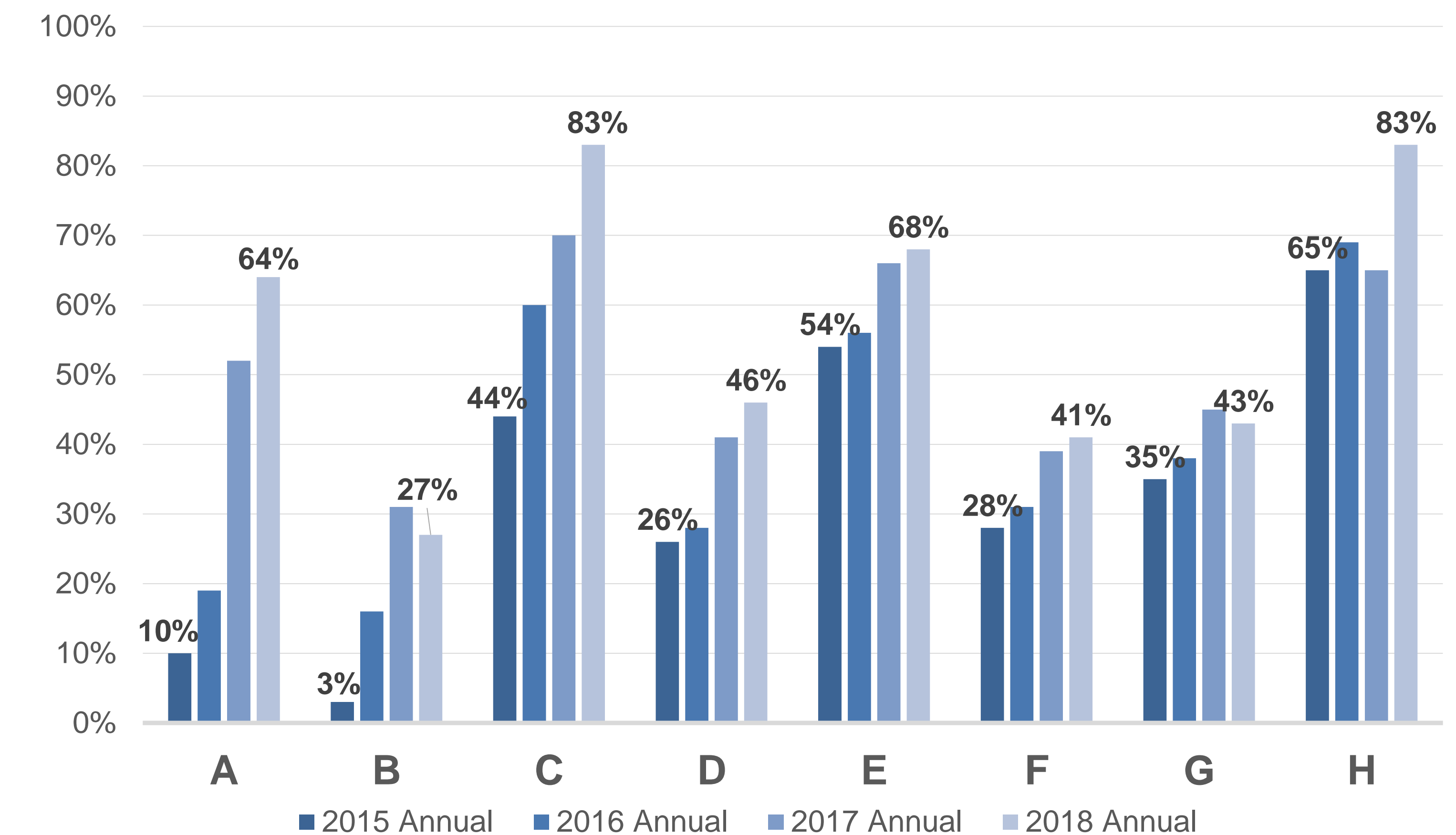
5 sites +31%*



3 sites +12%*

*Average of actual change in CRCS rates from 2015 to 2018

Figure 1. CRCS Rates by FQHC Site



Conclusions

- ❖ Combination of provider reminders and provider assessment and feedback yielded the greatest increases in CRCS rates for the FQHC sites.
- ❖ Understanding the combination of EBIs being implemented simultaneously can inform selection of EBIs for other health care providers and settings.