

# A Toolkit to Support Implementation of a Systems-Based Colorectal Cancer Screening Program in Diverse Primary Care Practices

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NAPCRG PBRN Conference  
June 2018



Acknowledgements: National Center For Advancing Translational Sciences of the National Institutes of Health UL1 TR000423 and Agency for Healthcare Research and Quality R25HS023207. The content is solely the responsibility of the authors.

# Background

- ▶ Colorectal cancer screening is effective and widely under-utilized
- ▶ Systems-based approaches that reduce structural barriers to colorectal cancer screening are effective for increasing colorectal cancer screening rates
- ▶ Primary care practices need support to change care paradigm – from visit-based to population-based
- ▶ Types of tools and support which are most effective are not well described

# Objectives

1. Determine the acceptability and usability of a web-based toolkit to support implementation of a systems-based colorectal cancer screening program
2. Identify adaptations made to the colorectal cancer screening program across diverse primary care practices

# Methods

## Setting:

- ▶ 3 primary care practices (2 hospital-based clinics, 1 federally qualified health center) in the WWAMI region Practice and Research Network (WPRN).

## Support Provided:

- ▶ Access to ProCRCScreen web-based toolkit to support implementation
- ▶ 2 hours in-person technical assistance, additional assistance through telephone and email contact

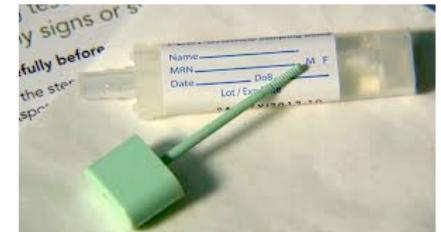
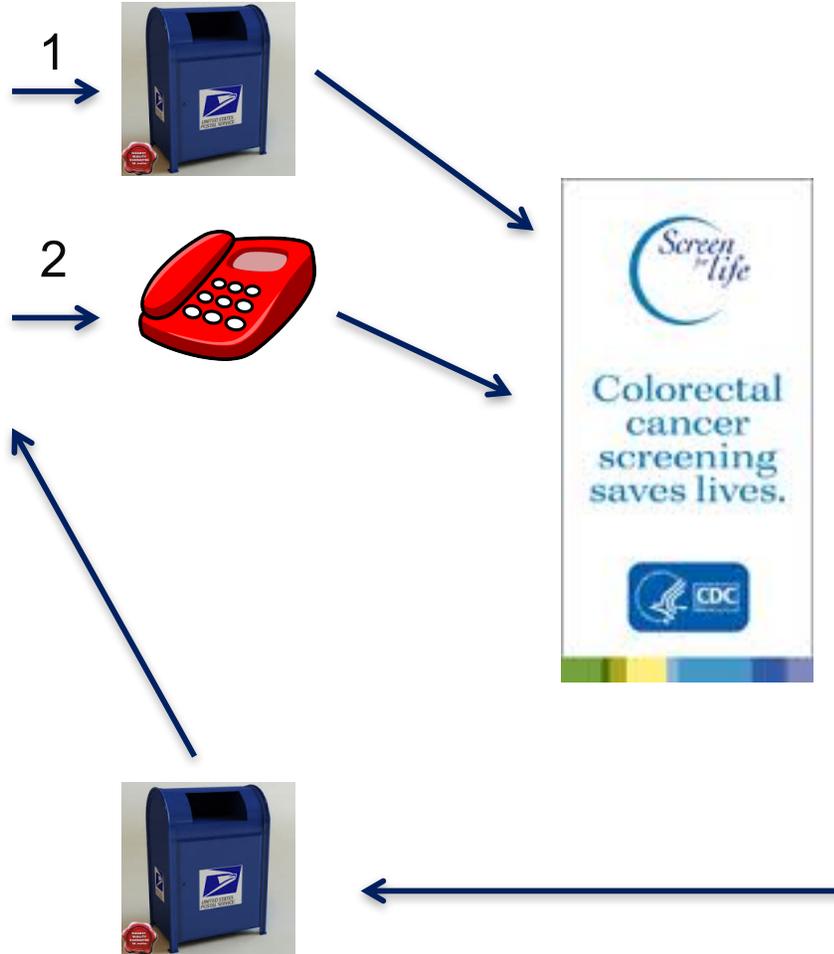
## Evaluation

- ▶ Qualitative analysis of interviews with primary care clinical staff and of field notes from technical assistance to assess the usability of toolkit and support
- ▶ Measures of completed colorectal cancer screening tests

# Mail-based Colorectal Cancer Screening Programs



Search By	Patient Name	DOB	MRN	DOB	Specialty	Location	Work
First Name	John Doe	1/15/1950	123456789	1/15/1950	Internal Medicine	Wash DC	123456789
Last Name	Doe	1/15/1950	123456789	1/15/1950	Internal Medicine	Wash DC	123456789
MRN	123456789	1/15/1950	123456789	1/15/1950	Internal Medicine	Wash DC	123456789
DOB	1/15/1950	1/15/1950	123456789	1/15/1950	Internal Medicine	Wash DC	123456789
Specialty	Internal Medicine	1/15/1950	123456789	1/15/1950	Internal Medicine	Wash DC	123456789
Location	Wash DC	1/15/1950	123456789	1/15/1950	Internal Medicine	Wash DC	123456789
Work	123456789	1/15/1950	123456789	1/15/1950	Internal Medicine	Wash DC	123456789



# ProCRCScreen Toolkit

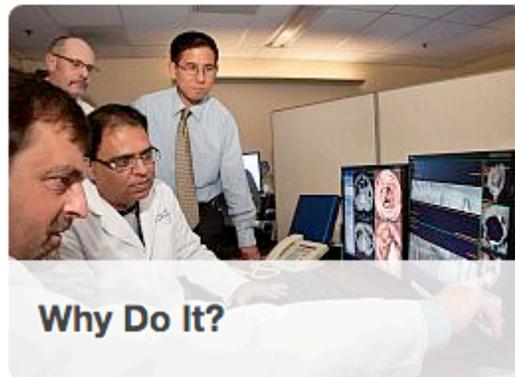
- Why Do It
- How it Works
- Program Materials
- Staff Training
- Frequently Asked Questions
- Contacts

## ProCRCScreen IMPLEMENTATION TOOLKIT

Search...

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Health Sciences



### What is ProCRCScreen?



members of translational health sciences  
ACCELERATING RESEARCH. IMPROVING HEALTH.

# Adaptations

## Site 1

- ▶ Offered mailed FIT primarily to patients who had previously completed a FIT in the past
- ▶ Limited success in mailing to all eligible patients – resulted in program cessation
- ▶ Additional staff hire was needed to meet additional workload demand

## Site 2

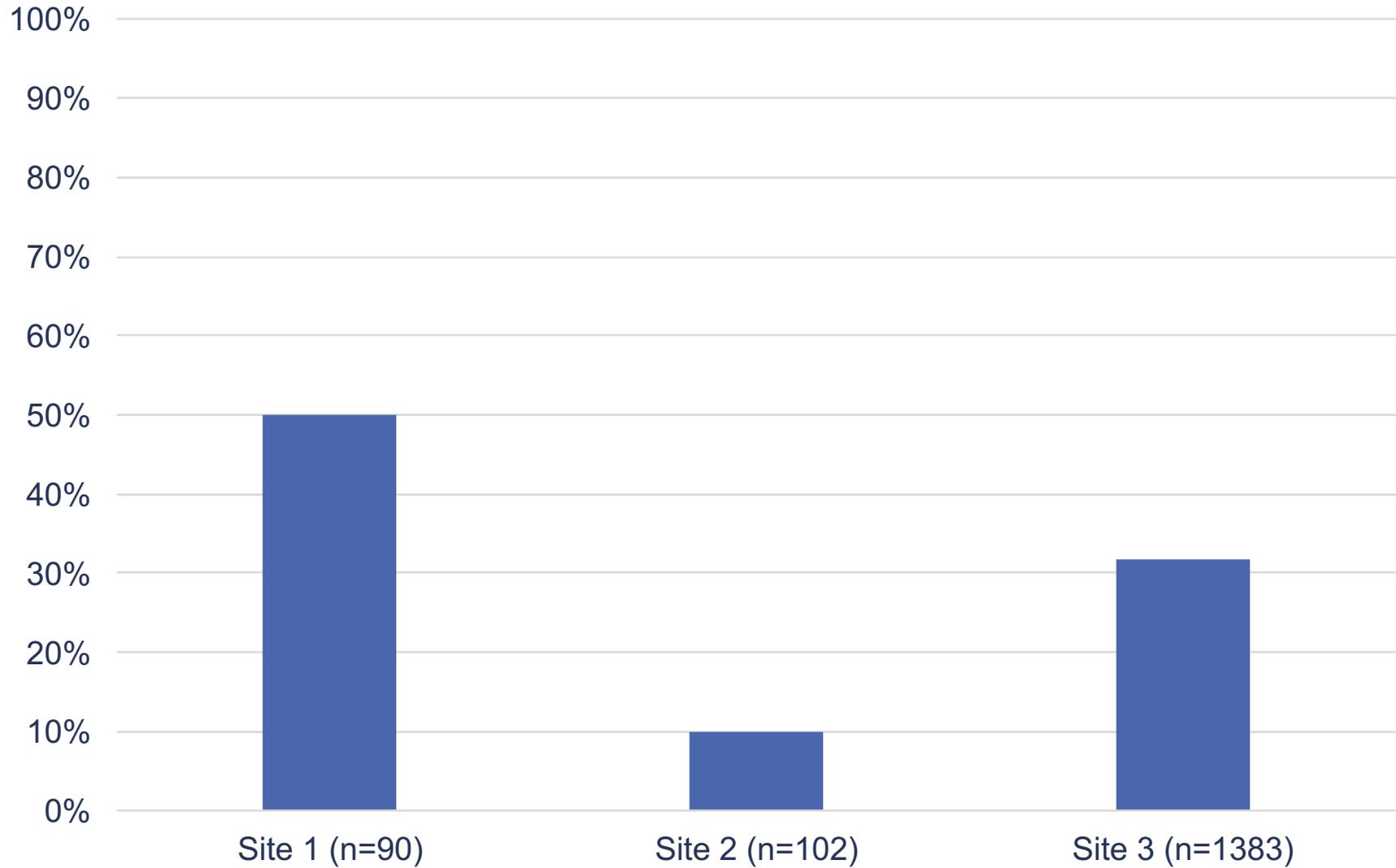
- ▶ Started with small number to estimate return rate and determine potential costs
- ▶ Lack of a clinical champion delayed implementation

## Site 3

- ▶ Menu of 4 colorectal cancer screening quality improvement strategies available to teams, including mailed FIT
- ▶ Provided onsite patient education and access to phone follow-up as a solution to high level of errors in returned FIT kits. Site would like an phone application or video as an alternative patient education tool.

# Results

FIT Kit Return Rate



# Interview Results

# What promoted adoption?

- ▶ Intervention addressed a priority metric for the organization or system
- ▶ Interest from clinic leadership on this specific intervention
- ▶ Past failures to improve this metric created desire for new intervention

*“We have done a lot of things to try to improve our colorectal cancer screening rate and we have always had a screening rate of 28-30% and it hasn’t changed much. We were looking for something new to try.”*

# Challenges: Financial Barriers

## Patients

- ▶ Access to colonoscopy for uninsured patients (with positive FIT).
- ▶ Out of pocket costs for colonoscopy (with positive FIT) are higher as diagnostic test than screening test.

# Challenges: Financial Barriers

## Clinics

- ▶ Organizational cost of implementing and sustaining intervention is high, when return rates are low
- ▶ Burden on clinicians and increased workload may require additional staffing

*“The main challenge was access to colonoscopy. People can go on a waiting list, but it took a clinic physician to call and move it forward. It took a lot of physician time.”*

# Workflow Challenges

## Clinic

- ▶ Challenges with accurately identifying patients needing screening
- ▶ Difficult and slow to roll out
- ▶ No workflow to process returned intro letters, so pre-mailing didn't result in change.
- ▶ Additional workload strained staff and physicians

## Patients

- ▶ Mechanics of putting together FIT kit mailings was technically challenging, resulting in error
- ▶ Patients had difficulty understanding and following instructions
- ▶ Difficult for clinic staff to reach patients by phone

# Challenges: Physician Attitudes

- ▶ Physician knowledge and attitudes about perceived inferior effectiveness of FIT, compared to colonoscopy, resulted in push back and limited buy in.
- ▶ Absence of physician encouragement may have been a deterrent.

# Conclusions

- ▶ A web-based toolkit is useful in supporting implementation of a systematic colorectal cancer screening program across diverse primary care practices.
- ▶ Local context requires significant adaptation of evidence-based programs prior to implementation. The effect of these adaptations on program effectiveness is not clear.
- ▶ Support needed
  - Choosing target population
  - Electronic health record/clinic workflow
  - Institutional buy in – making the business case
  - Tailoring patient oriented materials
  - Roll out planning

# Limitations

- ▶ Non random recruitment of clinics
- ▶ Small scale implementation at all 3 sites
- ▶ No patient-level data for evaluation

# Questions?