

Multi-level interventions to improve colorectal cancer screening in an urban Native American community: A pilot randomized clinical trial

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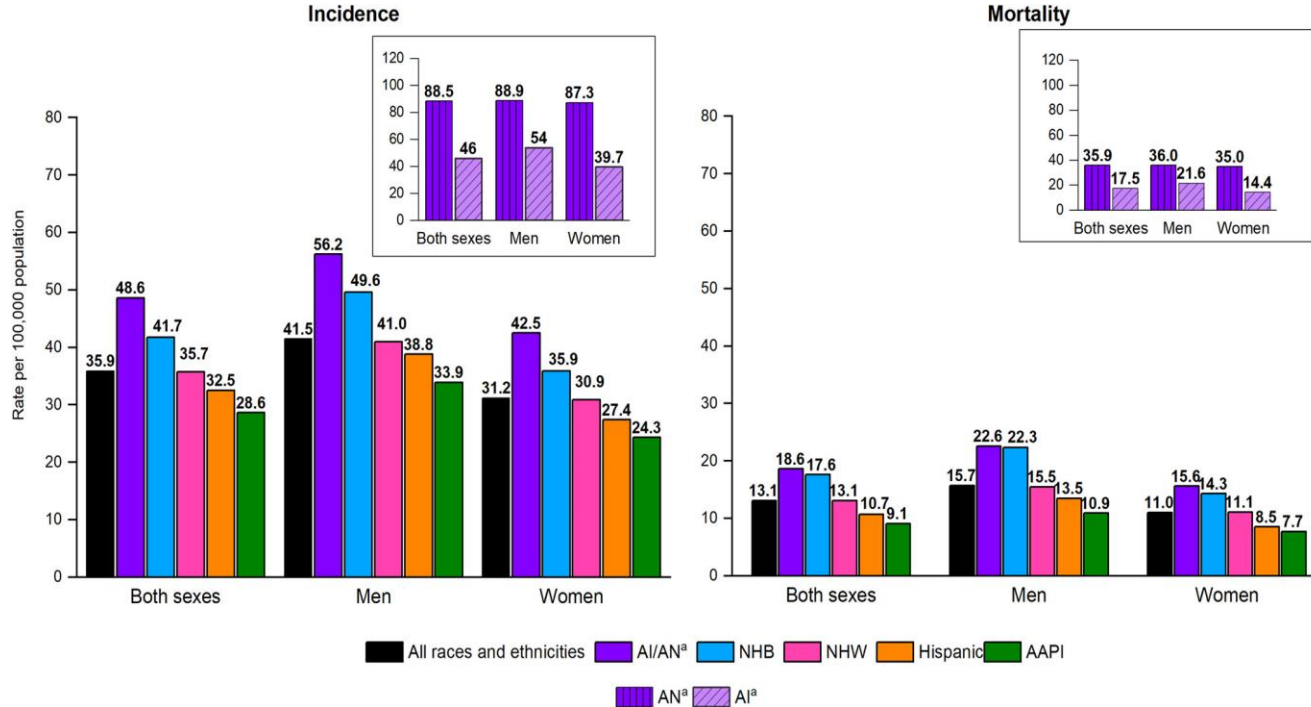
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Background

- Native Americans have the highest rates of CRC incidence and mortality in the US
- Lowest rates of screening
- FQHCs screening rates: 45%
- Pandemic disruption
- Poor recovery post pandemic

Colorectal cancer statistics, 2023

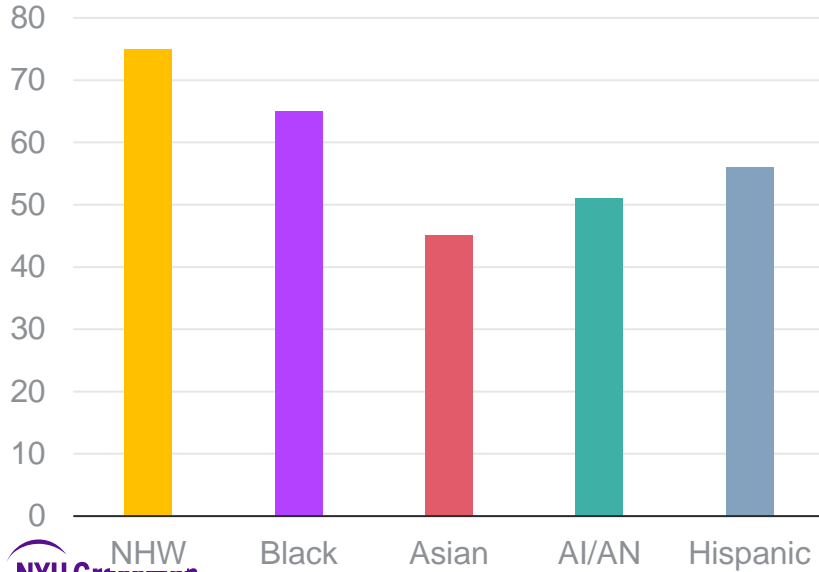


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Colorectal Cancer Screening in Minnesota

Minnesota Colorectal Cancer Screening: 73% up to date (BRFSS: ranked 9th in nation)

Screening by Race/Ethnicity

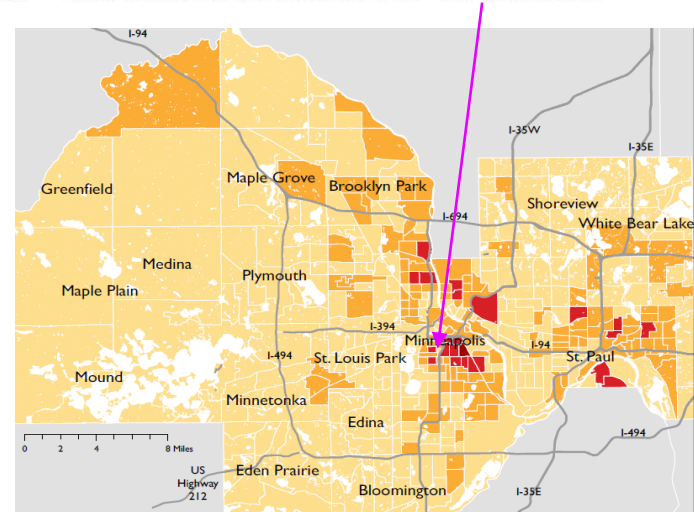


Specific Aims

- To implement a strategy of mailed invitation and FIT followed by navigation vs. standard-care CRC screening at the Native American Community clinic for the following outcomes:
- Rates of CRC screening
- Rates of colonoscopy completion for those with abnormal FIT
- Qualitative interviews of patients and providers about the program

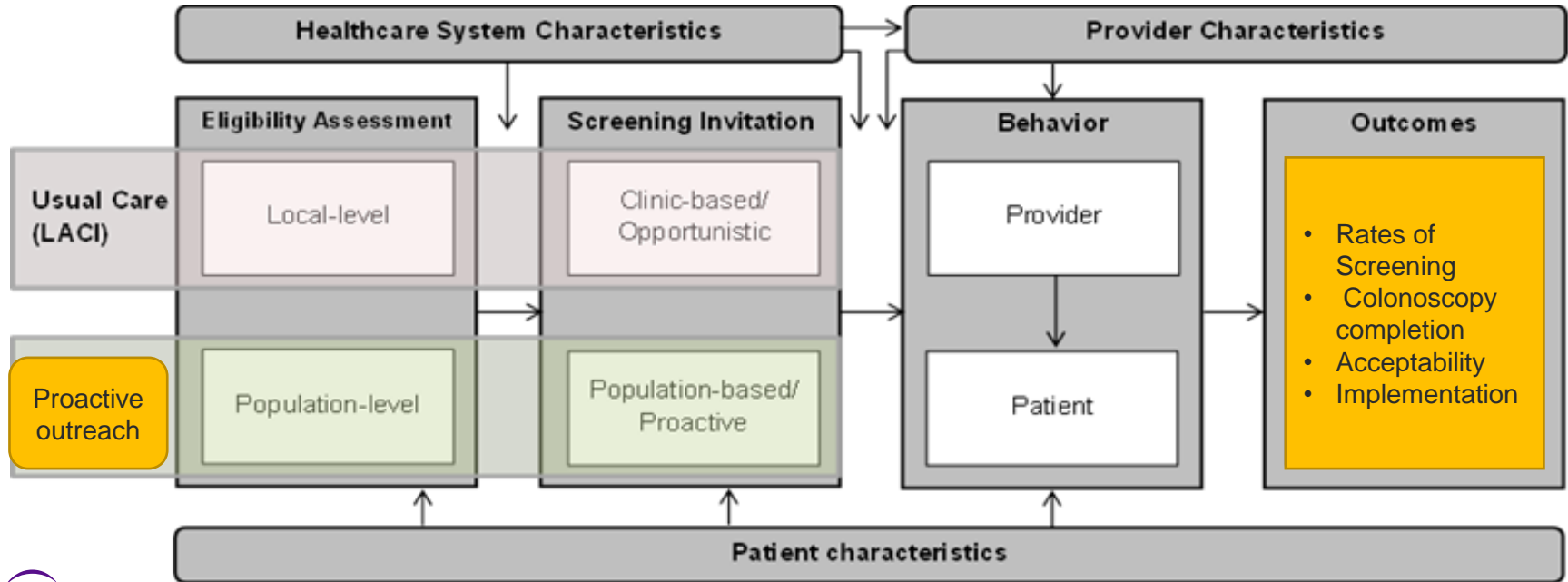


NATIVE AMERICAN COMMUNITY CLINIC
HONORING HEALTH AND TRADITION



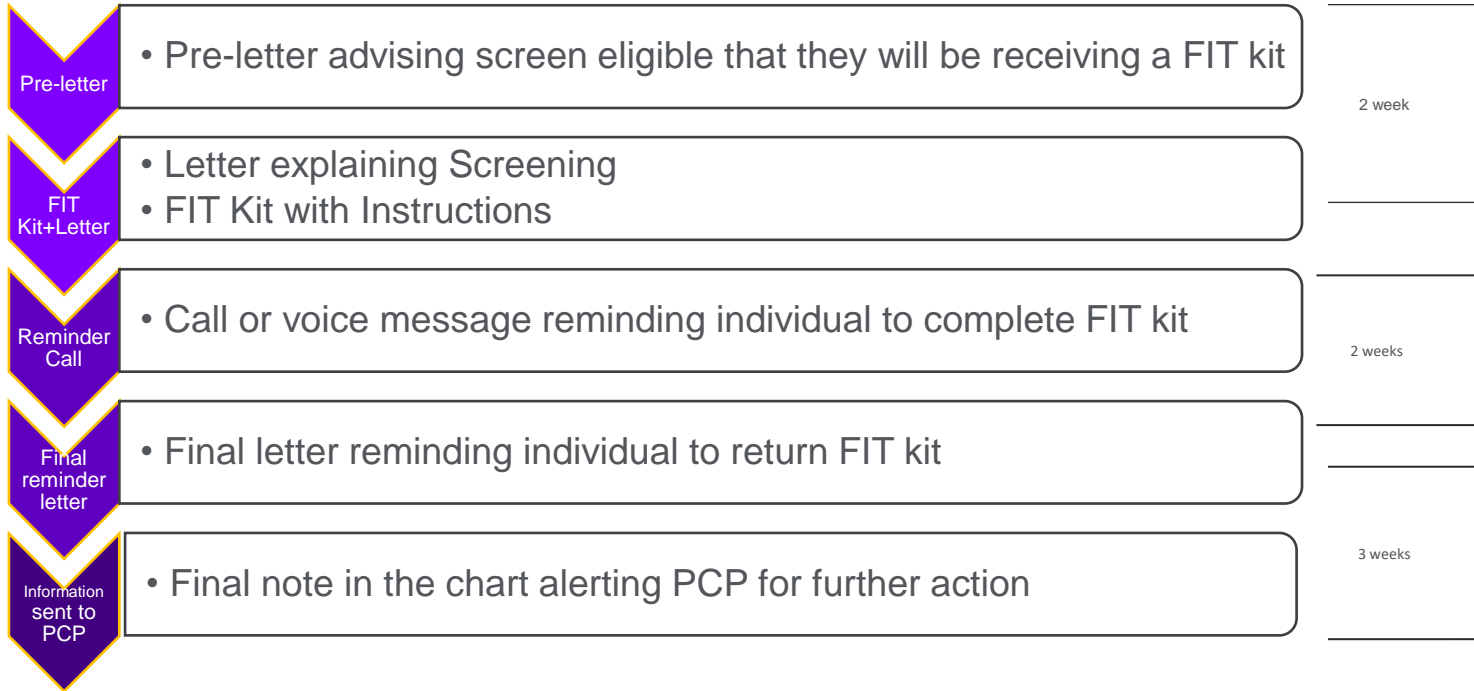
- Urban FQHC
- 80% AI, 8% Black
- 75% <200% federal poverty line

Framework



Methods program:

Randomized 100 to usual care vs. Outreach



Results:

Characteristic	Overall, N = 200	Outreach, N = 100	Usual Care, N = 100
Age (Years)	60 (8)	60 (8)	60 (9)
Sex			
Female	100 (50%)	50 (50%)	50 (50%)
Male	100 (50%)	50 (50%)	50 (50%)
Race			
Asian	0 (0%)	0 (0%)	0 (0%)
Black	16 (8.3%)	9 (9.5%)	7 (7.1%)
Native American	124 (64%)	60 (63%)	64 (65%)
Native American and Black	6 (3.1%)	3 (3.2%)	3 (3.1%)
Native American and White	13 (6.7%)	7 (7.4%)	6 (6.1%)
Native Hawaiian/Pacific Islander	3 (1.6%)	0 (0%)	3 (3.1%)
White	31 (16%)	16 (17%)	15 (15%)
Unknown	7	5	2
Ethnicity			
Hispanic	17 (11%)	10 (14%)	7 (8.9%)
Non-Hispanic	132 (89%)	60 (86%)	72 (91%)
Unknown	51	30	21
BMI (kg/m ²)	31 (9)	32 (7)	31 (10)
Unknown	24	14	10
Smoking status			
Never	71 (53%)	37 (51%)	34 (56%)
Current - Some Days	43 (32%)	26 (36%)	17 (28%)
Current - Everyday	20 (15%)	10 (14%)	10 (16%)
Unknown	66	27	39

Results:

Outcomes	Overall, N = 200	Outreach, N = 100	Usual Care, N = 100
Completed FIT/study		12 (12%)	1 (1%)
Reported other CRC screening		8 (8%)	2 (2%)
Requested colonoscopy		1 (1%)	
Non-responder		68 (68%)	
Opted out		6 (6%)	
Lost to follow-up		4 (4%)	
Deceased		1 (1%)	
No CRC screening per medical records		79 (79%)	97 (97%)

Screening increased by 16.8 percentage points (95% CI: 7.4, 26.3)

Qualitative Interviews

- **Patients:**
 - No conversation about CRC screening in their communities
 - Barriers described were economic and social
 - No smartphone/access to technology, transportation
 - Inability to pay for the tests or preparatory medications
 - No time off from job or household-related responsibilities
 - Distrust of the medical system based on personal or historical community experiences
- **Providers:**
 - Lack of time to discuss risk factors and CRC options with patients
 - Patient reluctance
- **Improvements:**
 - Culturally appropriate messaging
 - Delivered by trusted community member
 - CHW from community
 - Education at social events

Summary

Limitations:

Study are its small size and limited generalizability to other underserved racial and ethnic minorities

Conclusions:

The study demonstrates the need for testing and developing population specific programs, within the evidence-based framework of multi-level interventions with stakeholder input

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