

Reducing Patient Barriers to Colorectal Cancer Screening via At-home Provision of Multitarget Stool DNA Testing Kits

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DEFINE

BACKGROUND

- Colorectal Cancer (CRC) is the third-leading cause of cancer-related mortality in the United States for both men and women.¹
- CRC screening strategies include colonoscopy, sigmoidoscopy, and stool tests.²
- Stool-based screening is noninvasive and can be done at home.²
- Cologuard offers a convenient, at-home, stool collection and preservation method coupled with prepaid UPS pickup label.³

GAP IN QUALITY

- Patients noncompliant for colorectal cancer screening.

AIM STATEMENT

We aimed to improve routine colorectal screening for Non-Compliant (NC) patients in Southeast Minnesota by 17 percent, from 13,561 NC to 11,256 NC by 02/01/2023.

MEASURE

Location
SEMN health systems
Participants
Non-compliant, moderate-risk, patients aged 45-75
Baseline Sample Size
12,032 patients
Balancing Measure
15,561 patients

CRC SCREENING RESULTS

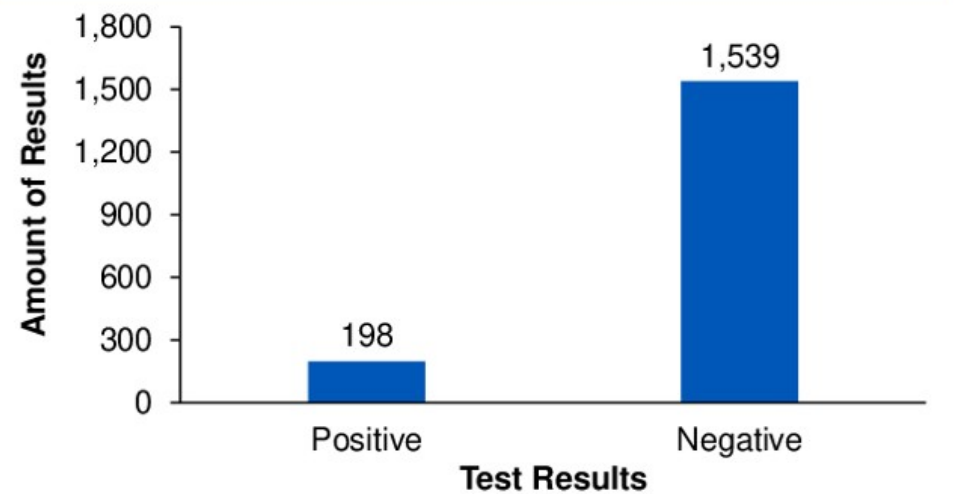
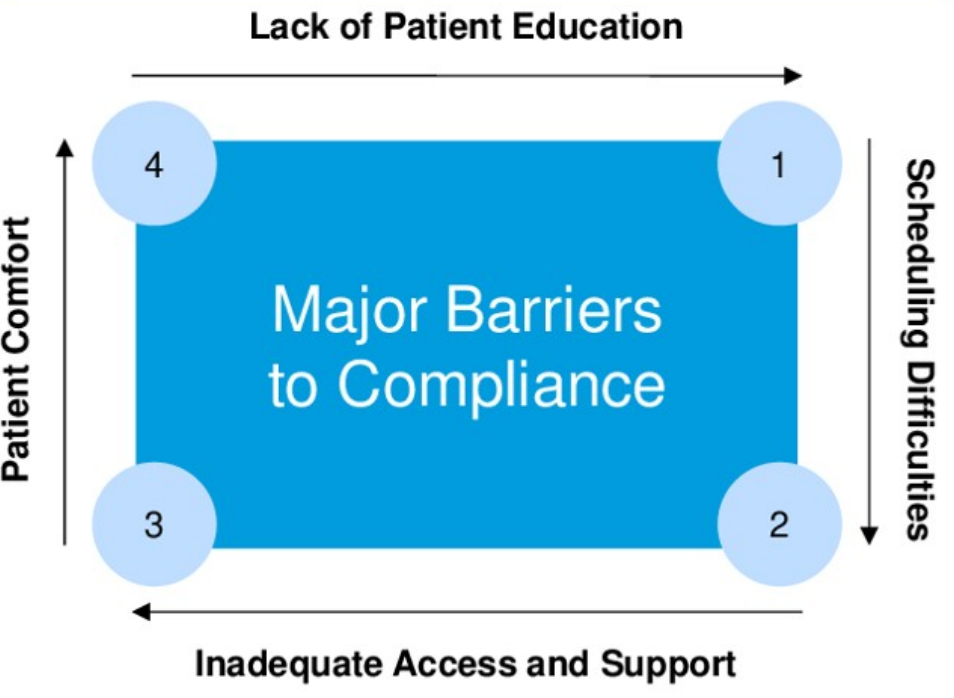


Figure 1: The outcome of the returned kits is shown. Most test results came back negative. 11.4% of the kits came back with a positive result. These patients were notified and were recommended to get a colonoscopy.

ANALYZE



PERCENT OF CRC KIT RETURN BY ETHNICITY

Ethnicity	Screening completed	Total kits Sent	% Screening completed
Asian	13	91	14.2%
Black or African American	21	246	8.54%
Other or unknown	33	2,306	1.43%
White	1,671	9,389	17.7%
Total	1,738	12,032	14.4%

IMPROVE

INTERVENTIONS SELECTED & TESTED

- Cologuard kits were sent out to patients who were CRC non-compliant, Cologuard eligible, and between the ages of 45-75.
- A portal message was sent explaining the Cologuard process.
- Patients who did not refuse, received the kits to their home address.
- Patients were responsible for stool sample collection to test for cancerous DNA and fecal occult blood.

CONCLUSIONS

- 1,738 tests were returned with 198 positive, requiring further testing.
- Colorectal screening improved by 14.4% at our study's conclusion and counting.

CONTROL

LESSONS LEARNED

- The importance of completing CRC screening to identify cancer or precancerous lesions early.
- The importance of provider encouragement for patients to complete screening.

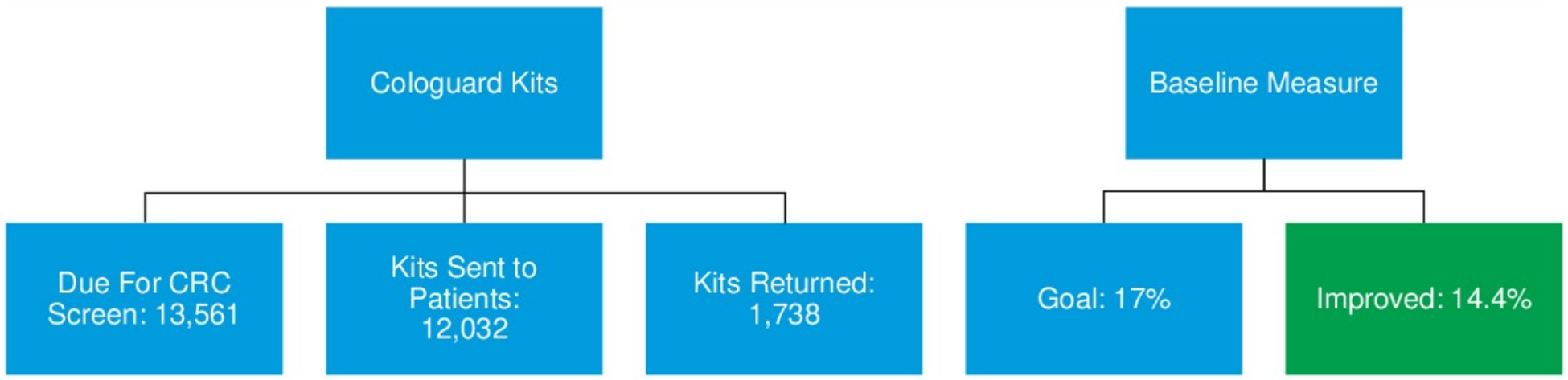
HAND-OFF PLAN

- The project was transitioned to the Midwest Ambulatory Quality Committee, SEMN Colon Cancer Screening Subgroup, CIM/FM, Division, and the Provider Panel for staff awareness.

REFERENCES

- Siegel RL, Miller KD, Fuchs HE, et al. Cancer statistics, 2021. *CA Cancer J Clin* 2021; 71:7–33.
- Imperiale TF, Ransohoff DF, Itzkowitz SH, Levin TR, Lavin P, Lidgard GP, Ahlquist DA, Berger BM. Multitarget stool DNA testing for colorectal-cancer screening. *N Engl J Med*. 2014 Apr 3;370(14): 1287-97. doi: 10.1056/NEJMoa1311194. Epub 2014 Mar 19. PMID: 24645800.
- Cologuard® for hcps: Colorectal Cancer (CRC) screening test. *Exact Sciences Corporation*. <https://www.cologuardhcp.com/>

BASELINE



PATIENT PREFERRED LANGUAGE

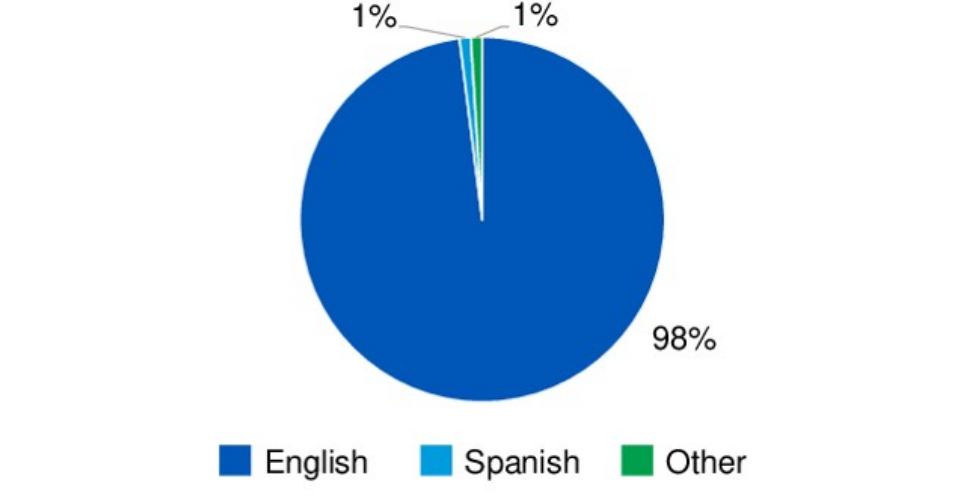


Figure 2: The preferred language of those who returned their kit is shown. The kits were only sent out in English. Of the 1,738 patients who completed kits, 1,696 were English speaking. Spanish speakers account for 25 returned kits.

PERCENT OF TOTAL CRC KIT RETURN

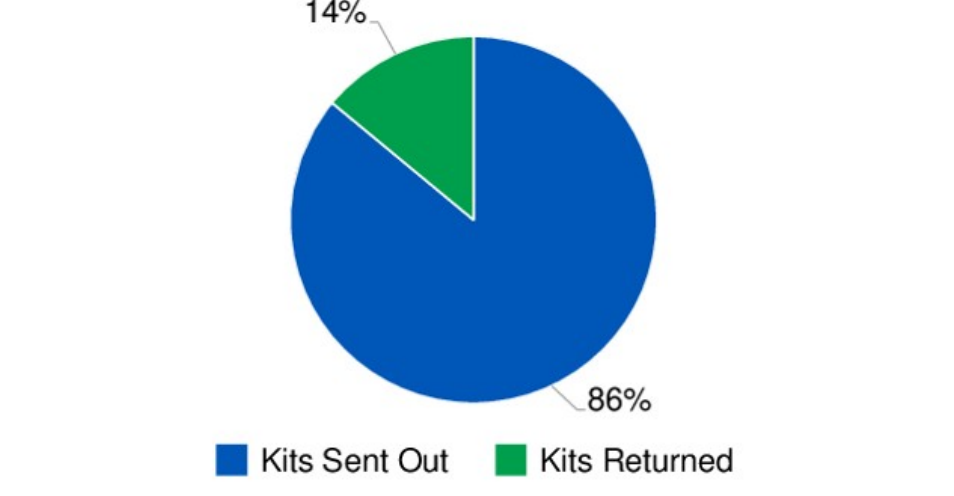


Figure 3: 1,738 out of the 12,032 individuals who were due for a CRC screening sent back their Cologuard kits. Cologuard kits increased the CRC screening rate by 14.4% from baseline.