Chasing Compliance: Initiatives to Boost Stool-Based Colorectal Cancer Screening in Primary Care

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Background

Community Healthcare Network (CHN) is a not-for-profit organization comprising of 14 Federally Qualified Health Centers (FQHC) serving over 65,000 patients in New York City.

- Colorectal cancer (CRC) is the second leading cause of cancer-related mortality in the United States.
- However, it is also among the most preventable cancers through a range of screening methodologies, including colonoscopy, sigmoidoscopy, CT colonography, and stool-based testing.
- The American Cancer Society recommends colorectal cancer screening for individuals aged 45 to 75 years[1].
- In 2022, the national average CRC screening rate for individuals between 50 and 75 years old was 72.2%[2], while the rate for FQHC patients was 42.8%[3].
- This discrepancy highlights the challenges faced by underserved communities in accessing preventive healthcare services, including CRC screening.

Objective

Our project aimed to address CRC screening disparity in an FQHC population by implementing targeted patient outreach and care navigation to increase CRC screening rates.

How We Promote CRC Screening

Through the following approaches, CHN seeks to improve the access and use of colorectal cancer screening services, ultimately reducing the burden of this preventable disease in our community:

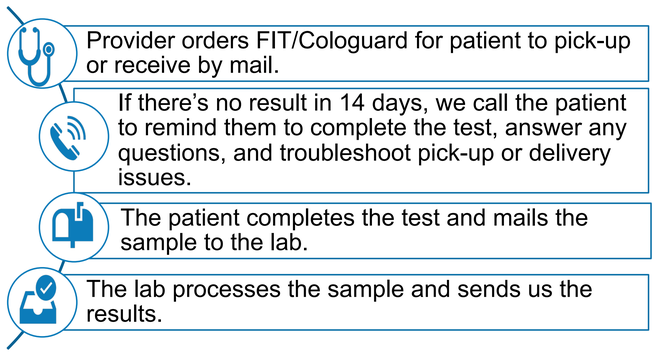
- **Automated Pre-visit Planning (PVP):** Integrated alerts within our electronic health record system notify providers of necessary services and screenings for upcoming patient appointments.
- **Targeted Outreach:** Efforts are directed towards uninsured individuals and those between 45 and 55 years to increase access and encourage participation in CRC screening.
- **Follow-up Outreach:** We engage with patients who have completed a FIT in the previous year to ensure serial testing.
- **Bulk Ordering of Cologuard Tests**

FIT & Cologuard Chase

Participants: Participants were CHN patients ages 45-75 years old who had an un-resulted test ordered for more than 14 days between 10/30/23 and 1/25/24. The 14-day threshold allowed time for test completion, sample delivery, and sample processing. We contacted 510 patients via phone call and were able to reach 272 patients (53% of patients). The 238 patients that we were not able to reach received no intervention and therefore will serve as our control group.

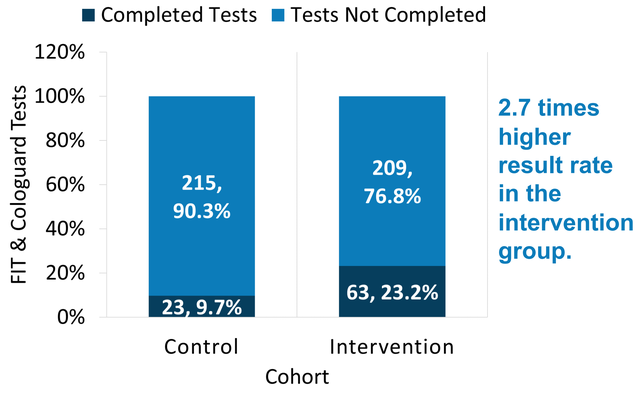
Intervention:

Figure 1. FIT and Cologuard Chase Intervention Workflow



Results:

Figure 2. FIT and Cologuard Completion Rates by Cohort



2.7 times higher result rate in the intervention group.

We conducted a chi-square test of independence to analyze whether a test being completed and resulted is related to whether the patient was in the intervention or control group. **The relationship between these variables was significant, X^2 (1, N = 510) = 16.5, p < .01. Patients in the intervention group are more likely to have a resulted test than in the control group.**

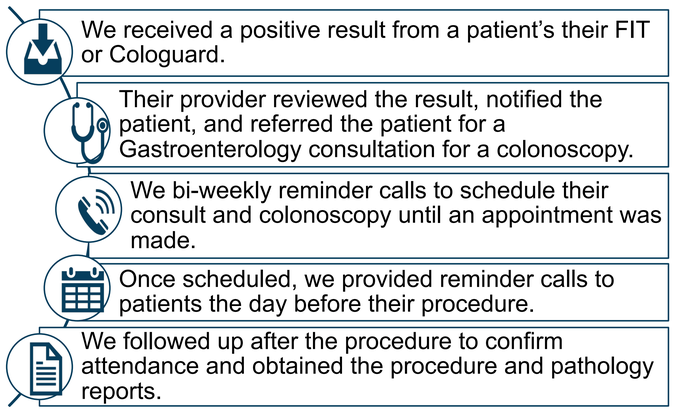
Additional post-hoc tests did not show any significant relationships between CHN center, CHN provider, insurance status or type, gender, race, ethnicity, patient language, or age.

Positive FIT or Cologuard Patient Navigation

Participants: Participants were CHN patients ages 45-75 years old who had a FIT or Cologuard test between 11/1/23 and 2/29/24.

Intervention:

Figure 3. Positive FIT or Cologuard Patient Navigation Workflow



Results:

Figure 4. All Time Number & Proportion of Patients who Completed Each Step in The Colonoscopy Completion Process

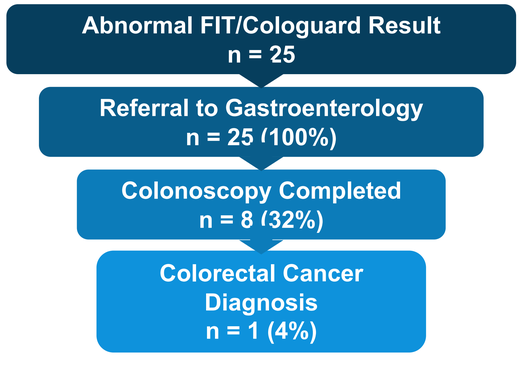
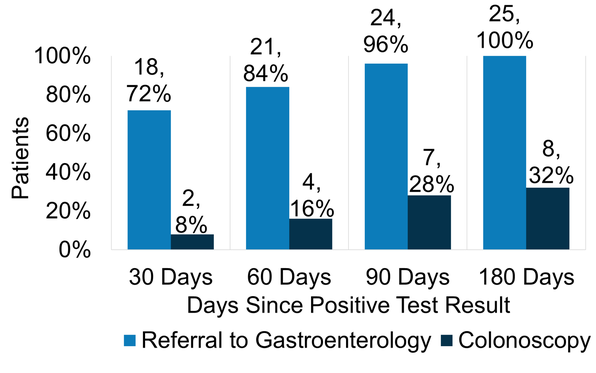


Figure 5. Gastroenterology Referral Rates & Colonoscopy Completion Rates Post-Positive FIT or Cologuard



Discussion & Lessons Learned

FIT & Cologuard Chase: We have found the chase outreach project to be significantly impactful on patient FIT and Cologuard completion rates. We learned that the volume of tests and time constraints make it difficult to conduct multiple outreach attempts for all patients, but as seen in figure 2, result rates are 2.7 times higher in the intervention group regardless.

In our next iteration of this project, we plan to implement bulk text messaging reminders to patients to remind them to complete and mail back their kit. We hope that this added form of communication will increase patient reach rate and the effect we are seeing in our intervention group.

Positive FIT or Cologuard Patient Navigation: As seen in figure 5, all patients with a positive FIT or Cologuard result were able to get a referral to gastroenterology within 180 days of the positive result. However, we saw significant attrition between the referral to gastroenterology and colonoscopy completion.

The PROSPR initiative set a 90-day benchmark for time to colonoscopy post-positive stool-based test[4]. Our median number of days to colonoscopy completion was 63.5 days, which falls within the 90-day benchmark, however, our max number of days to colonoscopy was 111 days and as seen in figure 5, our completion rate within 90 days is only 28%. In addition to the eight patients who completed their colonoscopy, and we obtained the reports during the study duration, there were two more patients who self-reported completion and we have requested reports for, and four patients with upcoming colonoscopies, which would fall within the 180-day timeframe if completed.

In the future we will collect more structured data around barriers to completing a diagnostic colonoscopy within 90 days so that we can develop new quality improvement projects to address them. In our continued work, we aim to increase the colonoscopy referral rate within 30 days to greater than 95% of patients and to increase the colonoscopy completion rate within 90 days to greater than 80%.

References

Please contact Daniel Napolitano, MD at dnapolitano@chnnyc.org for references if needed.