



# Increasing Colorectal Cancer Screening Among Newly Eligible Young Patients: A Quality Improvement Project

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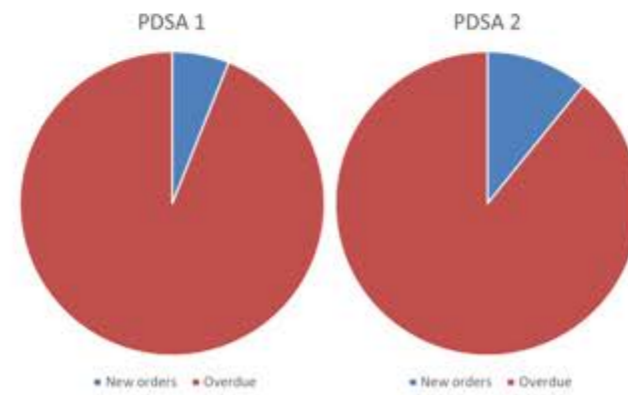
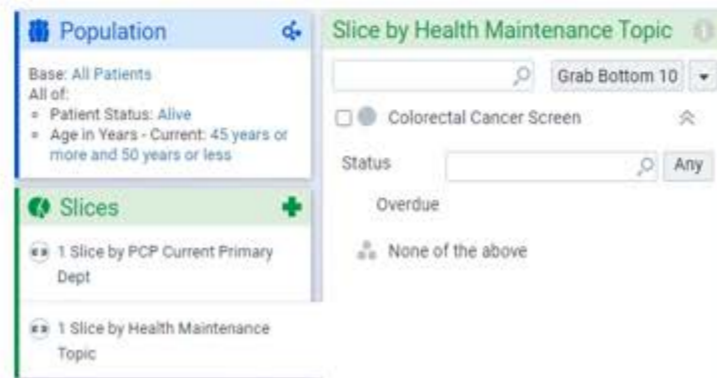
## Background

The United States Preventive Services Task Force recommends beginning CRC screening at age 45 years for a moderate CRC-associated mortality benefit. Completed screening in ages 45-59 approximately 59% nationally; effective methods to increase rates are not known. We aimed to decrease the number of our clinic patients in this population clinic overdue for CRC screening clinic by 10% in 6 months.

## Methods

The project was deemed a Quality Improvement Initiative and was deemed to be exempt from IRB approval. SlicerDicer population health data tool in the local EMR was used to obtain population health data (Fig. 1) using the search terms shown in Figure 2. We conducted two subsequent Plan-Design-Study-Act(PDSA) cycles. For PDSA 1, eligible patients were contacted via the EMR patient portal to recommend testing. For PDSA 2, patients were contacted by resident physicians via telephone. Orders for CRC screen were placed with patients' consent.

### CRC Screen Overdue (% of Eligible Patients)



## Results

- At baseline: 333 of 451 patients aged 45-49 were overdue for CRC screening. Of the 118 not-overdue patients, 8 were counted incorrectly.
- PDSA1 – 231 patients were contacted; 105 messages were read (process measures); 14 new orders were generated; 13 CRC screening tests were completed (outcome measure). 1 hour time was required (balance measure).
- PDSA2 – 107 patients were called; 19 patients were reached (process measures); 13 new orders were generated; zero screening tests were completed (outcome measure). Approximately 15 man hours were required (balance measure).
- Overdue screening rates fell from 74% at baseline to 65% at 6 months; 8% of the target population completed CRC screening.
- The run chart indicates a shift and trend toward decreased overdue screening rate in the target population. One new colon mass was identified by new CRC screening.

## Conclusion

- Iterative QI interventions may have resulted in special cause variation in overdue screening rate.
- QI interventions may have diminishing returns to impact population health metrics, but may impact individual health outcomes .
- EMR outreach appears to be less labor-intensive than telephonic outreach.
- Clinicians should consider multidisciplinary efforts to operationalize CRC screening in newly-eligible patients.