Using Shared Decision Making and Team-Based Care to Overcome Socioeconomic and Cultural Barriers to Colorectal Cancer Screenings

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Recommended Citation
Powell, Amanda; Pyle, Debra; Rowse, Kristin; Weeman, Misty; Kidder, Rachel; Internal Medicine/Pediatric Clinic; Hanselman, Ruth; Nayak, Suneela; Tyzik, Stephen; and Sparks, Amy, "Using Shared Decision Making and Team-Based Care to Overcome Socioeconomic and Cultural Barriers to Colorectal Cancer Screenings" (2019). Operational Excellence. 29. https://knowledgeconnection.mainehealth.org/opex/29

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**Project:** Using Shared Decision Making and Team-Based Care to Overcome Socioeconomic and Cultural Barriers to Colorectal Cancer Screenings  
**Last Updated:** 7.25.2019

**Team Members:** Kristin Rowse, Misty Weeman, Rachel Kidder, MMP Population Health, MMP IM-Pediatric Clinic Team: PSRs, MA’s, Physicians, Nurses, Providers, Interns, and Residents

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**Problem/Impact Statement:**

Colorectal cancer is the third leading cause of cancer death in the United States. It disproportionately affects minorities and those in lower socioeconomic groups. As one of the oldest and most rural states in the nation, Maine has needed to be innovative in its efforts to screen the growing population of eligible patients. Annual use of fecal immunochemical testing (FIT) represents a low barrier, low cost and low risk screening tool with the potential to reach patients that might otherwise never be screened for colorectal cancer. In appropriate patients, FIT use offers the opportunity to overcome social determinants of health, such as low health literacy, lack of access to care in rural communities and other socioeconomic barriers.

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**Scope:**

In scope: Patients at MMC Internal Medicine Clinic  
Out of scope: Patients at other MMC/MH/MMP clinics, patients outside the MH system

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**Goal/Objective:**

A minimum of 80% of eligible patients will be screened for colorectal cancer by October, 2019

- Increase patient use of FIT Kits as a low barrier, low cost high impact option
- Increase rate of return for FIT Kits

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**Baseline Metrics/Current State:**

Baseline Colorectal Cancer Screening Rates - September 2018

<table>
<thead>
<tr>
<th></th>
<th>IM-PEDs Clinic</th>
<th>All MMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>68.5%</td>
<td>77%</td>
<td></td>
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</tbody>
</table>

**FIT Test Return Rate**

<table>
<thead>
<tr>
<th></th>
<th>IM-PEDs Clinics vs. All MMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-18</td>
<td>32</td>
</tr>
<tr>
<td>Feb-18</td>
<td>32</td>
</tr>
<tr>
<td>Mar-18</td>
<td>32</td>
</tr>
<tr>
<td>Apr-18</td>
<td>32</td>
</tr>
<tr>
<td>May-18</td>
<td>32</td>
</tr>
<tr>
<td>Jun-18</td>
<td>32</td>
</tr>
<tr>
<td>Jul-18</td>
<td>32</td>
</tr>
<tr>
<td>Aug-18</td>
<td>32</td>
</tr>
<tr>
<td>Sep-18</td>
<td>32</td>
</tr>
</tbody>
</table>

**Total Charge Amount for a Colonoscopy – 1x per 10 years:** $1,900.00

**Total Charge Amount for FIT Screening – 1x per year:** $470.00 ($474 per year)

**FIT kits represent a possible cost reduction of $1,432.50 for the patient, which furthers our mission to keep our community healthy.**

**Root Cause Analysis:**

- Patient Care
  - Managing Comorbidities
  - No Adult BMI practice within the MMP system
  - No Adult CHF practice within the MMP system

- Patient Culture
  - Negative Perception of Screening Procedures
  - Lack of Understanding of Preventive Medicine
  - History of Trauma Leading To Fear of Self-Advocacy

- Social Determinants Of Health
  - Language Barrier

- Barriers to CRC screening for a vulnerable patient population at an Academic Primary Care Setting
  - Standard Practice for Physicians, esp. Physician learners, to increase use of FIT kits

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**Countermeasures**

**Action** | **Owner** | **Status**
---|---|---
1. Resident education | Amanda Powell | Ongoing
2. Graphic reminder for residents to put in order for colonoscopy or FIT during office visits | Rebeca Sulem | Feb 2018 - October 2018
3. KPI: All patients age 50-75 will have an order for a colonoscopy or FIT in their chart | IM-PEDs Clinic Team | Feb 2018 - October 2018
4. Project KPI – F/U with patients for FIT completion. Phone calls x2, then a letter to patients to remind them to complete and return tests | PSRs | November 2018 – March 2018
5. Clinical staff maintaining kit inventory & expiration dates | MA, LPN, Unit Helper | Ongoing
6. Reissuing kits to patients who have either lost them or the kit has expired | MA, LPN, Unit Helper | Ongoing
7. Population Health making reminder phone calls and mailing CRC health letters to patients | Population Health | Ongoing

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**Outcomes**

**Colorectal Cancer Screening Rates**

<table>
<thead>
<tr>
<th></th>
<th>IM-PEDS Clinic vs. All MMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-18</td>
<td>71.4%</td>
</tr>
<tr>
<td>Jul-18</td>
<td>73.3%</td>
</tr>
<tr>
<td>Aug-18</td>
<td>73.9%</td>
</tr>
<tr>
<td>Sep-18</td>
<td>74.0%</td>
</tr>
</tbody>
</table>

**FIT Test Return Rate**

<table>
<thead>
<tr>
<th></th>
<th>IM-PEDS Clinics vs. All MMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-18</td>
<td>58.5%</td>
</tr>
<tr>
<td>Jul-18</td>
<td>62.5%</td>
</tr>
<tr>
<td>Aug-18</td>
<td>64.4%</td>
</tr>
<tr>
<td>Sep-18</td>
<td>70.2%</td>
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</tbody>
</table>

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**Next Steps**

- Continue to identify interventions to meet the 80% target
- Increase use of whole care team to impact other MMP heat map metrics, including breast cancer screening
- Correlate care team participation in patient care with employee engagement scores

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Since the start of the project in October, 2018, out of 64 ordered, 6 FIT tests have indicated that patients need further testing. This represents 6 potential opportunities to rule out or diagnose colon cancer early. Rule-outs and early diagnosis are essential to improving patient outcomes and reducing cost of care.