Colorectal Cancer Screening in Latinos - Closing the Gap
Projects from Spanish Bilingual Primary Care Clinics in Oakland and San Francisco

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Colorectal Cancer Screening in Latinos—Closing the Gap

Project Sites: Kaiser Oakland Salud En Español and Kaiser San Francisco Centro de Salud

Goal statement - What are we trying to accomplish?
Improve screening rates for colorectal cancer (CRC) for Spanish-speaking patients in East Bay Service Area (EBA) & San Francisco through increased FIT testing.

Process:
Oakland: Presented Spanish language videos on I-pads to deliver enhanced in-reach to Spanish speaking patient in the primary care setting.
San Francisco: Used I-pads as well as patient education room with a demonstration toilet to teach Spanish speaking patient how to do FIT.

Sponsorship:
• Regional Diversity Advancement Grants
• East Bay and San Francisco Facilities

Team Members:
• Service area leadership
• Outpatient Quality Managers
• Department of Adult and Family Medicine staff and physicians at Salud En Español and Centro de Salud

Objectives:
• Implement small tests of change to improve our rate of FIT testing and therefore rates of colorectal cancer screening.
• Replicate these tests of change in our network of Spanish bilingual modules in NCAL.
This project is in alignment with KP National Quality goals to address CRC disparities in the Latino membership.
Improving Colorectal Cancer Screening Among Hispanics

Courtesy of Winston Wong, MD, ECHO (KP Equitable Care Health Outcomes)

**Challenge**

Improve Colorectal Cancer Screening among Hispanics¹

**Prevention Goal**

Screening Options for Average-Risk Adults*

- High-sensitivity guaiac fecal occult blood test (gFOBT) every 1 – 2 years.
- Immunochemical fecal occult blood test (iFOBT/FIT) every 1 – 2 years.
- Flexible sigmoidoscopy at least every 10 years.
- Colonoscopy every 10 years.

**Leverage Points (potential indicators)**

- Lack of Patient Engagement (no visits, no internet use)
- Failure to Respond (contact, but no test on record)
- Failure to Follow Up (positive test, no record, no follow up)
- Failure to Test (no test on record, late stage diagnosis)

**Targets for Disparities Reduction**

- Access Barriers (location, schedule, transit, language, health literacy)
- Cultural and Linguistic Accessibility (knowledge of options, preferences for screening, perspectives)
- Real-Time Data for Clinical Staff (screening info available at time of any clinical encounter)
- Patient Knowledge/Beliefs/Cultural Norms

**Specific Disparities Reduction Strategies (examples)**

- Assessment of Patient Barriers (solicit preferences/beliefs, customize screening options)
- Culturally & Linguistically Appropriate Outreach and Education (e-telenovelas, community based classes, one on one training through promotoras/community health workers)
- Clinical Staff Recommendation/Re-enforcement (Health Connect prompts during check in for any visit)
- Partner with Community Providers and Organizations (barber shops, churches)

*Choice of test may be subject to regional and practice-level variation & may be related to patient screening rates.
Screening Options for Average-Risk Adults*

- High-sensitivity guaiac fecal occult blood test (gFOBT) every 1 – 2 years.
- Immunochemical fecal occult blood test (iFOBT/FIT) every 1 – 2 years.
- Flexible sigmoidoscopy at least every 10 years.
- Colonoscopy every 10 years.
- A combination of high-sensitivity gFOBT every 1 – 2 years and flexible sigmoidoscopy every 10 years.
- A combination of iFOBT/FIT every 1 – 2 years and flexible sigmoidoscopy every 10 years.
Clinical and Financial Impact

FIT is the most cost-effective screening modality for Colorectal Cancer.

Per person screened, the cost of screening and recommended cancer treatment, including biologics for stage IV cancer:

<table>
<thead>
<tr>
<th>Screening Method</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIT screening</td>
<td>$1,833</td>
</tr>
<tr>
<td>No screening</td>
<td>$1,901</td>
</tr>
<tr>
<td>High sensitivity FOBT</td>
<td>$2,084</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>$2,100</td>
</tr>
<tr>
<td>Low sensitivity FOBT</td>
<td>$2,192</td>
</tr>
<tr>
<td>Flexible sigmoidoscopy</td>
<td>$2,263</td>
</tr>
<tr>
<td>CT colonography</td>
<td>$2,409</td>
</tr>
<tr>
<td>Fecal DNA test (2nd standard)</td>
<td>$2,491</td>
</tr>
<tr>
<td>Fecal DNA (first standard)</td>
<td>$2,720</td>
</tr>
</tbody>
</table>

*Heitman, Steven. [http://fightcolorectalcancer.org/research_news/2010/12/fit_beats_all_other_screening_for_effectiveness_and_cost](http://fightcolorectalcancer.org/research_news/2010/12/fit_beats_all_other_screening_for_effectiveness_and_cost)*
Clinical and Financial Impact

FIT screening reduces the incidence and death from colorectal cancer screening.

- It is estimated that annual testing with FIT reduced cases of colorectal cancer from 4,857 to 1,393 and deaths from 1,782 to 457 over the lifetime of every 100,000 people in North America.*

- NCAL Kaiser Regional average for FIT return rate when mailed to patients is 56%. Spanish speaking patients in our pilot who were given a FIT kit in clinic returned the kit at a rate of 68% and those who watched the video returned the FIT at a rate of 87%.

*Heitman, Steven. http://fightcolorectalcancer.org/research_news/2010/12/fit_beats_all_other_screening_for_effectiveness_and_cost
Kaiser Oakland, Salud En Español
Colorectal Cancer Screening Project

Goals

Process

Results
### Kaiser Oakland, Salud En Español

#### Organizational Goals/Driver Diagram for Project:

<table>
<thead>
<tr>
<th>AIM</th>
<th>Primary Drivers</th>
<th>Focus Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve Colorectal screening rates for our Spanish speaking patients in the East Bay to meet or exceed non-Spanish-speaking patients’ CRC rate</td>
<td><strong>Education</strong>&lt;br&gt;Training for Staff</td>
<td>Staff meeting devoted to educating physicians/MA regarding importance of CRC screening and disparity in Latino patients. 2nd meeting lead by IT to review skills in how to use the I-pad to administer video/survey. UBT guided implementation.</td>
</tr>
<tr>
<td></td>
<td><strong>Leveraging Technology to improve Patient Care</strong></td>
<td>Worked with Technical Support team to embed FIT video and survey on to I-pad.</td>
</tr>
<tr>
<td></td>
<td><strong>Using Quality Metrics to drive care</strong></td>
<td>Involved Quality team from start of project to help obtain baseline data, follow up on patients who participated in pilot and prepare outcome data. Close work with Quality Team allows for expansion of project to other populations/quality metrics</td>
</tr>
<tr>
<td></td>
<td><strong>Service</strong></td>
<td>Used technology to enhanced member education at point of care. Improved service for members with limited computer access at home and/or low literacy.</td>
</tr>
<tr>
<td></td>
<td><strong>Access</strong></td>
<td>By providing on site language concordant educational materials regarding the importance of CRC screening we improve access to this valuable screening tool</td>
</tr>
</tbody>
</table>
### How will we know a change is an improvement? Family of measures

#### Key measures for the project

<table>
<thead>
<tr>
<th>Measure</th>
<th>Operational definition</th>
<th>Type (outcome, process, balancing)</th>
<th>Data collection plan (How will you collect data &amp; how frequently)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of importance of CRC</td>
<td>Survey patients after watching video</td>
<td>Process</td>
<td>Summarize findings of survey</td>
</tr>
<tr>
<td>Improve FIT return rate</td>
<td>Compare pre-intervention return rate with post-intervention return rate</td>
<td>Outcome</td>
<td>Collection prior to intervention and after intervention</td>
</tr>
<tr>
<td>Improve CRC screening rate in modules identified</td>
<td>Compare pre-intervention to post-intervention screening rates</td>
<td>Outcome</td>
<td>Collect prior to intervention and after intervention</td>
</tr>
</tbody>
</table>
Process Map: Salud en Español

1. Reception identifies Patient who needs in reach
2. Patient watches video and completes online survey
3. Fit Kit provided
4. MR # is sent to quality to be tracked for return rate and time to return
5. Two week follow up call if FIT kit not returned
What changes lead to improvement?

<table>
<thead>
<tr>
<th>Change Concept</th>
<th>PDSAs</th>
<th>Adopt, Adapt, Abandon?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wi-Fi signal weak in Salud En Español</td>
<td>PLAN: Test runs proved would be challenging to show video/do survey.</td>
<td>ADAPT: Worked with IT support to embed FIT video and survey on to I-pad itself</td>
</tr>
<tr>
<td>MA in Salud en Español were not showing the video to all Spanish speakers</td>
<td>STUDY: Discussed with staff. There was a misunderstanding that if patients had returned in FIT kit in the past they did not need to see the video.</td>
<td>ADAPT: Education provided the video should be viewed by all Spanish speakers due for FIT. Future checks indicated the all patients were being offered the video.</td>
</tr>
<tr>
<td>Blood pressure clinic did not have a large number of eligible patients</td>
<td>STUDY: Blood pressure clinic did not have a large number of eligible patients</td>
<td>ADAPT: We are changing the location for viewing of this video to the Flu clinic where we do comprehensive preventative health assessments and are more likely to reach more eligible patients.</td>
</tr>
</tbody>
</table>
### Survey Results: Patient response to I-Pad FIT Video (N=28)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Previously received FIT kit</td>
<td>61%</td>
</tr>
<tr>
<td>Previously submitted FIT kit</td>
<td>37%</td>
</tr>
<tr>
<td>Found Video Easy to Understand</td>
<td>100%</td>
</tr>
<tr>
<td>Understood importance of Colorectal Cancer Screening prior to watching video</td>
<td>48%</td>
</tr>
<tr>
<td>Understood importance of Colorectal Cancer Screening after watching video</td>
<td>100%</td>
</tr>
<tr>
<td>Felt they understood how to do FIT after watching video</td>
<td>100%</td>
</tr>
<tr>
<td>Were committed to turning in FIT after watching video</td>
<td>100%</td>
</tr>
<tr>
<td>Felt watching a video on an I-pad in the physicians office was a good way to receive information about their health</td>
<td>100%</td>
</tr>
</tbody>
</table>

Video was well received and increased awareness regarding the importance of colorectal cancer screening as well as how to complete the FIT kit.
Patient comments regarding video

- “The video was very helpful. I can not read in Spanish or English and have not been able to understand the instructions when the kit was mailed to me.”
- “Stop the video. I now understand how important this is and will do it right away.”
- “I like using these new things (the I-pad) to learn. You should use this more.”
Results: FIT return rate video vs. no video

<table>
<thead>
<tr>
<th></th>
<th># of Patients</th>
<th>FIT Kit Returned</th>
<th>% of FIT Kit Returned</th>
<th>FIT Kit Returned within 2 weeks</th>
<th>% of FIT Kit Returned within 2 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Watched</td>
<td>23</td>
<td>20</td>
<td>87%</td>
<td>13</td>
<td>57%</td>
</tr>
<tr>
<td>No Video</td>
<td>47</td>
<td>32</td>
<td>68%</td>
<td>11</td>
<td>23%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>70</td>
<td>52</td>
<td>74%</td>
<td>24</td>
<td>34%</td>
</tr>
</tbody>
</table>

Patients who watched the video were 19% more likely to return the FIT kit.
Colorectal Cancer Screening Rates before and after I pad pilot by Facility

Salud En Español, Running Colon Cancer Screening Rate

<table>
<thead>
<tr>
<th>Date</th>
<th>Percent Screened (Spanish speaking)</th>
<th>Percent Screened (All other languages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/3/12</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>7/6/12</td>
<td>72%</td>
<td>66%</td>
</tr>
<tr>
<td>10/12/12</td>
<td>82%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Pinole, Running Colon Cancer Screening Rate

<table>
<thead>
<tr>
<th>Date</th>
<th>Percent Screened (Spanish speaking)</th>
<th>Percent Screened (All other languages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/3/12</td>
<td>38%</td>
<td>36%</td>
</tr>
<tr>
<td>7/6/12</td>
<td>64%</td>
<td>65%</td>
</tr>
<tr>
<td>10/12/12</td>
<td>74%</td>
<td>76%</td>
</tr>
</tbody>
</table>

- In both facilities colon cancer rates increased throughout the year. This is expected and due to multiple local and regional efforts to screen patients.
- No significant disparity is observed between Spanish speaking and English speaking patients.
- Both facilities on track to meet overall 84% screening rate goal set for the East Bay.
Kaiser San Francisco, Centro de Salud
Colorectal Cancer Screening Project

Goals

Process

Results

Moving Forward
Patient Education: TV/DVD

- Created a waiting room video with preventive health messages
- Alternating in Spanish and English
- Includes videos on including importance of CRC screening, other cancer screenings, and general health messages such as exercise and healthy eating
Staff Education

- Physicians provided staff education regarding anatomy of the digestive system and CRC screening
- Providers and staff discussed barriers to CRC screening
“FIT Room”

- Exam room was fitted a limited-access computer (“kiosk”) and a demonstration model toilet
- Patients receive additional hands-on instruction and watch a video on how to complete a FIT kit
FIT Videos

- Existing instruction videos did not address our patients’ health literacy needs
- Filmed new videos in English and Spanish with support from QOS (Berny Gould)
- iPads purchased to show videos other educational videos in exam rooms
iPads

- Seven iPads have been purchased for use in exam rooms
- FIT videos have been downloaded to the iPads
- Additional health education videos in English and Spanish
Work Flow : Post Visit

- FIT tracking sheet: MA documents patient name, date, language, and MA name
- FIT tracking sheets are collected and evaluated monthly
- First month: verify that FIT orders are placed in Health Connect
- Second month: Patients receive reminder call or secure message if not completed
- Third month: Second reminder call or secure message
- Fourth month: Reminder letter or secure message sent
Monthly FIT Contests

- Monthly celebrations recognize staff and provider involvement
- Prizes for:
  - Staff who handed out 20 or more FIT kits
  - MD with the most FIT kits
- Contests motivate our team and create cohesion around the importance of CRC screening
Save A Life Awards

- Charts were reviewed to determine all abnormal FIT results
- Tracked pre-cancerous or cancerous lesions
- Traced these back to the MA who gave the FIT kit
- MAs receive plaque and are recognized for saving a life
- Reinforces the importance of MA involvement and early detection
Monitoring the measures: FIT return rates

- April – October 2012: Our project compared to the Regional FIT outreach program
  - Estimated Regional FIT outreach program return rate: 65%
- Return rate for our project is equal for Spanish speakers vs others.

<table>
<thead>
<tr>
<th>Centro de Salud</th>
<th>Spanish</th>
<th>Others</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Month</td>
<td>63-75%</td>
<td>60-73%</td>
<td>65-70%</td>
</tr>
<tr>
<td>2nd Month</td>
<td>71-79%</td>
<td>70-78%</td>
<td>74-77%</td>
</tr>
<tr>
<td>3rd Month</td>
<td>77-80%</td>
<td>75-80%</td>
<td>76-80%</td>
</tr>
</tbody>
</table>
Monitoring the measures: FIT return rates

- Rate of return for FIT kits was improved after patients received reminder phone calls

<table>
<thead>
<tr>
<th></th>
<th>Spanish</th>
<th>Others</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>After 1st call, return rates increased by:</td>
<td>2-13%</td>
<td>5-14%</td>
<td>6-12%</td>
</tr>
<tr>
<td>After 2nd call, return rates increased by an additional:</td>
<td>3-6%</td>
<td>0-2%</td>
<td>1-3%</td>
</tr>
</tbody>
</table>
CRC SCREENING COMPLIANCE COMPARISON OF APC3 TO SFO
Measurement Period 9/30/11 to 8/31/12
Moving forward

- **Keys to Success**
  - Careful analysis and identification of cultural barriers
  - Staff education and engagement through UBT
  - Collaboration with IT & outpatient Quality Department

- **Barriers Lessons learned**
  - Technology barriers (iPads, Wi-Fi)
  - Clinic time & space
  - Analyst support

- **Lessons Learned**
  - Videos are powerful tools with our low health literacy patients
  - Choose your intervention site with care
  - Identify KP partners who can support project (IT, QOS, Multimedia, Regional Health Education, data analysts) at your department or facility

- **Next steps**
  - Continue to lobby for data on Spanish speakers/Latinos in CRC screening (and all quality measures) for our clinic, our facility, and for comparisons regionally. Identify ‘bright spots’ of quality around the region; share best practices
  - Expand use of videos and iPads