Finding the Right FIT

Community-led Mixed Methods Study of Rural Patient Preferences for Fecal Immunochemical Test (FIT) Characteristics

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Background

• Colorectal cancer (CRC) is the 3rd leading cause of cancer death in the US

• CRC screening aids in early detection & treatment

• Fecal testing is an important form of CRC screening

• Little practical guidance for stakeholders regarding selection of Fecal Immunochemical Tests (FIT)
FITs Vary: Mode of collection, instructions, packaging, number of samples

**Study Goals:** (1) To assess and describe patient preferences for FIT characteristics and (2) To use findings from user testing in concert with evidence on effectiveness to inform selection of a regional FIT
Method

• Study design, data collection, and analysis driven by community-based team members
  – 6 FITs identified for user testing
  – Eligible participants: English/Spanish speaking, Uninsured/Medicaid/Medicare, screening age (50-75)

• Sequential explanatory mixed-methods design
Mixed-Methods Design

Quantitative

Use descriptive data from FIT user testing and specimen analysis to assess:
- Acceptability
- Ease of completion
- Test characteristics
- Adequacy of completion and packaging

Qualitative

Gather data from focus groups to:
- Refine FIT rankings
- Gain deeper insight into the pros and cons associated with FIT kit characteristics
Participants

- 18 participants completed 76 FITs (Mean: 4 FITs / participant, Range: 3-6 FITs)
  - 10 kits returned for laboratory processing
  - 66 included in specimen adequacy analysis
- 13 individuals participated in 3 focus groups

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N=18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>9 (50.0)</td>
</tr>
<tr>
<td>Age, Mean (SD)</td>
<td>55.6 (4.3)</td>
</tr>
<tr>
<td>Primary language</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>9 (50.0)</td>
</tr>
<tr>
<td>Spanish</td>
<td>9 (50.0)</td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>9 (50.0)</td>
</tr>
<tr>
<td>Medicare</td>
<td>2 (11.1)</td>
</tr>
<tr>
<td>Uninsured</td>
<td>3 (16.7)</td>
</tr>
<tr>
<td>Private</td>
<td>3 (16.7)</td>
</tr>
<tr>
<td>Unknown</td>
<td>1 (5.5)</td>
</tr>
</tbody>
</table>
## Final FIT Ranking and Characteristics

<table>
<thead>
<tr>
<th>Kit Ranking</th>
<th>Collection Tool</th>
<th>Instructions</th>
<th># Sampling Days</th>
<th># Cards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Probe</td>
<td>Stick</td>
<td>Brush</td>
<td>Colored Pictures</td>
</tr>
<tr>
<td>1. OC-Light®</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2. Hemosure® iFOB Test</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3. InSure® FIT™</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4. QuickVue®</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. OneStep+</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Hemoccult® ICT</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key Findings From FIT Kit Comparison

- General Perceptions:
  - Quick collection, confident completed correctly
  - “Disgusting” but preferred over colonoscopy

- Specific Patterns
  - Single sample kits preferred
  - Tests with probe and vial ranked highest for sample collection. Brush also considered easy to use
  - Most popular instruction characteristics: large font size, limited words, simple pictures, lots of white space
Collection Challenges

- More errors were made with stool-to-card collection
  - Participants strongly disliked having to apply the stool to the cards
  - 20% did not meet criteria for adequate sample
  - Multiple day sample cards appeared to have been completed with single sample
- Pre-applied labels were often not legible
- Kit packaging varied widely (only 64% of vial based tests packaged correctly)
- Participants expressed uncertainty as to why the number of samples varied, how much sample was needed, and how to catch the sample using paper provided
Included
FIT kits
Recommendations

FIT kit selection
- Select FIT that are clinically effective and patient-preferred
- Choose a single-specimen probe-and-vial kit
- Use clear, plain language instructions and ensure contents are easy to repackage after specimen collection

Facilitate patient completion
- When dispensing:
  - Pre-label vials with patient information
  - Review FIT kit contents and instructions with patients
- Offer instructions in English and Spanish
- Allow patients to return specimens by mail or in-person
- Provide follow-up care/navigation for abnormal FITs
Final Thoughts

- We tested 6 FITs being used in the region, two did not have public data on clinical effectiveness.
- Although our goal was to identify a single FIT, patients preferred test characteristics shared by more than one kit.
- More public health education about CRC is needed to help normalize the subject, especially within the Latino population.

Potential Impact: Selecting FITs that are both clinically effective and display characteristics preferred by patients may improve test completion rates and ultimately lead to reductions in CRC morbidity and morality.
Thank You to Participants and Partners!

- Columbia Gorge Coordinated Care Organization (CCO)
  - Community Advisory Council (CAC) and Clinical Advisory Panel (CAP)
  - Columbia Gorge Health Council
  - PacificSource Community Solutions
- Community Health Advocacy and Research Alliance (CHARA)
- Gloria Coronado, PhD
- Paul Lindberg, Collective Impact Specialist
- Oregon Rural Practice-based Research Network (ORPRN)
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Finding the Right FIT Study Team

- Suzanne Cross, MPH, CHW, Senior Project Manager, Columbia Gorge Health Council (CGHC)
- Bianca Fernandez, BA, Community Health Worker, The Next Door, Inc (NDI)
- Kathryn Corson, PhD, Research Consultant
- Kristen Dillon, MD, Director, PacificSource Columbia Gorge Coordinated Care Organization (CCO)
- Coco Yackley, Operations Consultant, CGHC
- Robyn Pham, BS, Project Manager, Oregon Rural Practice-based Research Network (ORPRN)
- Melinda M Davis, PhD, Director of Community Engaged Research, ORPRN
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