Pre-View: An Interactive Video
Doctor Plus Provider Alert

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PreView

- **PREventive VIdeo Eduction in Waiting Areas**

- Interactive Video Doctor Plus Provider Alert

- Targets all cancer and cancer screening discussions for which a participant is potentially due
  - Men and women aged 50-70
  - Breast, cervical, colorectal and discussion about PSA screening
Age-specific cancer screening
- Breast, cervical, colorectal
- Prostate cancer screening discussion

Patient is asked a series of questions about health history, history of cancer screening and reasons why he/she may not be up to date on cancer screenings on an interactive iPad

Patient receives information that is individually tailored to responses

Provider Alert: printed sheet summarizing patient’s screening history, readiness to change and individual roadblocks and suggestions for appropriate messages are given to the physician with patient’s chart
- Physician can discuss patient’s relevant concerns and can tear off a “Prescription for Prevention”
PreView Components

* Assessment
  * Individual stages of change
  * Individual barriers to screening

* Introduction of Video Doctor
  * Individualized messages based on stages of change and perceived barriers

* Provider Alert
  * Stage of change and perceived barriers
  * Paper copy given to provider to be used during the visit
Participants are given a list of reasons from which to choose about why they have not been screened.

They then receive messages in response to their individual roadblocks.
Pre-View Example:
Barriers to Mammography

- I have a hard time seeing a doctor
- I have questions for the doctor
- I do not think I am at risk for breast cancer
- I need more information about the test
- My doctor did not recommend it
- Getting a mammogram regularly is a problem
- I have too many other health problems to get tested
- I don’t have a regular doctor
Introductory Screen

- Login screen to complete the assessment/video doctor session
Assessment Question

A mammogram is an x-ray of the breast that looks for signs of cancer. Has your doctor or nurse ever recommended that you have one?

- [ ] Yes
- [ ] No
- [x] I am not sure

- Participants use touch screen interface to respond to each question
- They can also hear questions and response categories read to them via headphones
Readiness to Change: Spanish

The Spanish version of Preview is identical to the English version, asking the participant to rate their readiness to change on a scale from 1 to 10.
Sample
Provider Alert:
Colon Cancer Tests

PreView

Colon Cancer Tests
ID: test
Date: 10/1/2015

READINESS
About talking with you about a colorectal test, your patient said she is
Ready ___  Unsure ___  Not Ready ___X___

BARRIER
Your patient’s biggest barrier is described below and a possible response is described as well.
I don’t need to get tested because I don’t have any symptoms.

POSSIBLE RESPONSE
You still need to get a colon cancer test! This is the best way to prevent colon cancer.

ACTION
At today’s visit, we (check all that apply):
☐ Discussed patient’s concerns about colon cancer testing
☐ Ordered a colon cancer test
☐ Did not discuss colon cancer tests

Rx: Your Prescription for Better Health

Signed ____________________________________________
Overview

- Development of PreView
  - Modification with new cancer screening recommendations
- Pilot Study for Feasibility and Acceptability
- Randomized Controlled Trial at 6 Clinical Sites
- PreView in Spanish
- Maintenance
- Dissemination
- PreView as a web based app
Pilot Study

* Usability testing to ensure that individuals were able to use PreView and that branching flowed smoothly
  * 24 individuals
  * No dominant “most preferred” or “least preferred” module
  * All found computer easy to use
* Pilot test for feasibility and acceptability in 5 clinical sites
  * 80 participants (33 men and 47 women)
  * Outcomes were interest in testing or discussion
  * Majority felt the information helped them decide whether or not to be screened
We enrolled 508 participants at 6 clinical sites:

* John Muir
* San Ramon Valley Primary Care (SRVPC)
* Family Care Associates (FCA)
* Highland
* Lifelong Medical Clinic
* Southeast Health Center (SEHC)
* Potential participants with upcoming appointments identified in advance
* MD gave approval to contact
* Phone call to ask if they would be willing to come early to do PreView
* Complete consent and do PreView before MD appointment
* Randomized to intervention or control
* Return to iPad for post-visit assessment
Main outcome is cancer screening test or discussion done up to 14 months after PreVlew Intervention
<table>
<thead>
<tr>
<th>Baseline Characteristics</th>
<th>Control (n=257)</th>
<th>Intervention (n=251)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>156 (60.7%)</td>
<td>150 (59.8%)</td>
</tr>
<tr>
<td><strong>Race</strong> *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>9 (3.5%)</td>
<td>11 (4.4%)</td>
</tr>
<tr>
<td>Asian or other Pacific Islander</td>
<td>26 (10.1%)</td>
<td>23 (9.2%)</td>
</tr>
<tr>
<td>Black or African-American</td>
<td>93 (36.2%)</td>
<td>83 (33.1%)</td>
</tr>
<tr>
<td>White</td>
<td>127 (49.4%)</td>
<td>137 (54.6%)</td>
</tr>
<tr>
<td>Some Other Race</td>
<td>22 (8.6%)</td>
<td>21 (8.4%)</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>236 (91.8%)</td>
<td>230 (91.6%)</td>
</tr>
<tr>
<td>Spanish</td>
<td>7 (2.7%)</td>
<td>9 (3.6%)</td>
</tr>
<tr>
<td>Other</td>
<td>14 (5.4%)</td>
<td>12 (4.8%)</td>
</tr>
<tr>
<td><strong>Mean Age</strong></td>
<td>58.8</td>
<td>58.9</td>
</tr>
</tbody>
</table>

* Patients could select more than one race
African-American, 35%

White, 51%

American Indian or Alaskan Native, 4%

Asian, 7%

Hispanic/Latino, 9%

Native Hawaiian or other Pacific Islander, 3%

Other Race, 8%
RCT Main Results

- In clinics with overall high screening rates at baseline, no or nonsignificant increase in mammography, Pap and colorectal screening rates
- PSA discussion significantly increased in intervention group
  - 58% vs 36%: p<0.01
- Significant increases in discussion about mammography, pap and colorectal cancer screening
After the RCT

* Maintenance of PreVlew in existing clinic sites
Goal of maintenance phase is for PreView to be available to patients in the waiting areas without requiring the presence of a research assistant.

- iPad is secured in the waiting room with signs etc directing patients to use it.
- Provider Alerts printed behind the counter and given to the doctor by a staff member.
Maintenance Phase Challenges

* Getting people to use it
* Patients need to exit if called for their appointment
* Printing has to be done behind the counter and relies on a staff member to get the printouts
* Maintaining Security of the iPad
* Being sure the iPad is charged and ready for use each day
* IT Challenges
Focus Groups and Staff/Provider Interview

- Focus groups in each of the clinic sites
  - English and Spanish
- “What would get you to use PreView?”
- Once patients knew about it, they wanted to use it
- Staff and provider interviews discussed barriers to use
Barriers to patient use

* Losing seat in waiting room
* Not hearing if called for appointment
* Not having enough time
* Personal phones
Bigger, brighter signs
Simpler words
Phrases that grab attention
Using Clinic TVs, newsletters
Staff involvement
  Asking staff to hand things out, direct people to PreView
Fewer distractions as patient waits
- Relies on staff to bring it in and out
  - Medical assistants have multiple tasks
- Still requires printout
Staff/Provider Barriers

* Trying to fit this in with all the other things they had to do
* Remembering to bring the iPad into the room
* Having to get printouts
Dissemination Phase

- Dissemination to 3 clinics not involved in original RCT
  - No expectation of RA involvement
  - Tried in waiting room and in exam rooms
- Use remained relatively low overall
PreView at Home:

* Many suggestions to have PreView to use at home
* Preview now developed as a web based app
  * [https://preview.ucsf.edu](https://preview.ucsf.edu)
* Patients can do it at home before their appointments
  * Can save as PDF or print
  * In some settings, can send to PCP in advance
Welcome to PreView! PreView is an easy-to-use program to let you know which cancer screenings and discussions you may need from breast, cervical, colorectal, and prostate cancer.

This is appropriate for those who are aged 50 to 70 and speak Spanish or English.

Please select your language preference to begin learning about important screening tests to discuss with your doctor.

**After selecting your language, click "Next" to move forward.**

¡Bienvenido a PreView! PreView es un programa fácil de usar que le permite saber qué exámenes y análisis de cáncer puede necesitar de cáncer del seno, cáncer de cuello uterino, cáncer de colon y cáncer de la próstata

Esta es apropiado para quienes tienen entre 50 y 70 años y hablan español o inglés.

Selezione su preferencia de idioma para comenzar a aprender sobre las pruebas de detección importantes para analizar con su médico.

**Después de seleccionar su idioma, haga clic en "Next" para avanzar.**
Dissemination Toolkit/Website

* Developed a website to enable others to implement PreView
* Training materials, English and Spanish program materials
* Target cue sheets
* Training webinars
* FAQs
* [http://previewvideodoctor.org/](http://previewvideodoctor.org/)
http://previewvideodoctor.org/
Future Directions

* How best to disseminate now that it is a web based application
* PreView in areas where decisions are complex
  * Shared Decision Making for Mammography for women in their forties and over age 75
  * Lung Cancer Screening
* Incorporating PreView responses directly into EHR
Soliciting your Input

* We welcome your input on PreView
* Questions?