Text Document, Supplemental Digital Content 3: Results

Randomized Controlled Trial of Personalized Colorectal Cancer Risk Assessment vs. Education To Promote Screening Uptake

**Short Title:** Colorectal cancer risk assessment vs. education

1. Timothy Yen, MD- Clinical Instructor, Stanford University School of Medicine Department of Medicine, Division of Gastroenterology, Stanford, California

2. Feifei Qin, MPH- Stanford University School of Medicine Department of Medicine, Quantitative Sciences Unit, Stanford, California

3. Vandana Sundaram, MPH- Stanford University School of Medicine Department of Medicine, Quantitative Sciences Unit, Stanford, California

4. Edgar Asiimwe, MD, MSc- Medical Student, Stanford University School of Medicine Department of Medicine, Division of Gastroenterology, Stanford, California

5. Tina Storage, MD- Stanford University School of Medicine Department of Medicine, Division of Gastroenterology, Stanford, California

6. Uri Ladabaum, MD, MS- Professor of Medicine, Stanford University School of Medicine Department of Medicine, Division of Gastroenterology and Hepatology, Stanford, California

**Table A. Baseline screening intent among all participants** (vs Precontemplation Stage)

|  |  |  |
| --- | --- | --- |
|  | **Odds ratio****OR [95% CI]** | **P-value** |
| **Age\*** |
| Contemplation | 0.95 (0.92, 0.99) | **0.022** |
| Preparation | 0.96 (0.90, 1.03) | 0.30 |
| **Family History** |
| Contemplation | 1.86 (0.54, 6.39) | 0.32 |
| Preparation | 11.87 (3.08, 45.83) | **0.0003** |
| **Perception of relative CRC risk** (Very Likely/Likely vs Unlikely/Very Unlikely) |
| Contemplation | 5.16 (1.04, 25.71) | 0.087 |
| Preparation | 14.00 (2.15, 91.11) | **0.0068** |

\*For every 1-year increase in age

**Table B. Secondary outcome: screening completion\***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Education N=116****N (%)** | **CCRAT N=114****N (%)** | **Odds ratio****OR [95% CI]** | **P-value** |
| **By 6 months** | 40 (34.5%) | 29 (25.4%) | 0.65 (0.36, 1.15) | 0.14 |
| **By 12 months** | 51 (44.0%) | 44 (38.6%) | 0.80 (0.47, 1.37) | 0.41 |

\*Based on logistic regression adjusted for intervention arm, age and gender

**Table C. Secondary outcome: screening intent\***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Education N=116****N (%)** | **CCRAT N=114****N (%)** | **Odds ratio\*****OR [95% CI]** | **P-value** |
| **Baseline** (vs no change in intent) |
| Precontemplation | 45 (38.8) | 54 (47.4) |  |  |
| Contemplation | 61 (52.6) | 49 (43.0) | 1.52 (0.81, 2.86) | 0.19 |
| Preparation | 10 (8.6) | 11 (9.6) |  |  |
| **Immediately Post-intervention** (Missing N=1) |
| Precontemplation | 26 (22.4) | 30 (26.6) |  |  |
| Contemplation | 80 (69.0) | 72 (63.7) | 1.93 (0.45, 8.34) | 0.38 |
| Preparation | 10 (8.6) | 11 (9.7) |  |  |
| **Among those unscreened at 6 months**  |
| Precontemplation | 27/76 (35.5) | 19/84 (22.6) |  |  |
| Contemplation | 43/76 (56.6) | 55/84 (65.5) |  | 0.18 |
| Preparation | 6/76 (7.9) | 10/84 (11.9) |  |  |
| **Among those unscreened at 12 months**  |
| Precontemplation  | 34/63 (54.0) | 24/65 (36.9) |  |  |
| Contemplation  | 21/63 (33.3) | 37/65 (56.9) |  | 0.021 |
| Preparation  | 8/63 (12.7) | 4/65 (6.2) |  |  |
| **Among those screened at 6 months**  |
| Precontemplation (immediately post-intervention) | 6/40 (15.0) | 4/29 (13.8) |  |  |
| Contemplation (immediately post-intervention) | 30/40 (75.0) | 18/29 (62.1) |  | 0.31 |
| Preparation (immediately post-intervention) | 4/40 (10.0) | 7/29 (24.1) |  |  |
| **Among those screened at 12 months**  |
| Precontemplation (at 6 months) | 1/11 (9.1) | 1/15 (6.7) |  |  |
| Contemplation (at 6 months) | 8/11 (72.7) | 10/15 (66.7) |  | >0.999 |
| Preparation (at 6 months) | 2/11 (18.2) | 4/15 (26.7) |  |  |

\*Based on logistic regression modeling on change in stage of intent (post-intervention – pre-intervention) adjusted for intervention arm, age and gender

**Table D. Secondary outcome: screening completion by risk tertile**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Bottom Risk Tertile 1****(CRC Risk 3.3-4.9%) N=37****N (% [95% CI]** | **Middle Risk Tertile 2****(CRC Risk 5.0-6.9%) N=38****N (% [95% CI]** | **Top Risk Tertile 3****(CRC Risk 7.1-11.1%) N=38****N (% [95% CI]** | **P-value** |
| At 6 months | 8 (21.6% [8.4-34.9%]) | 8 (21.1% [8.1-34.0%]) | 13 (34.2% [19.1-49.3%]) | 0.33 |
| At 12 months | 12 (32.4%) [17.4-47.5%]) | 12 (31.6% [16.8-46.4%]) | 20 (52.6% [36.8-68.5%]) | 0.10 |

\*Based on chi-squared tests