Incorporating approaches to enhance patient participation within the continuum of cancer control in Mozambique

Doug Perin JD, MPH
Consultant for Leidos Biomedical Research, Inc.
(in support of U.S. NCI-Center for Global Health)

World Cancer Congress
1-4 Oct 2018
Kuala Lumpur - Malaysia
Center for Global Health
Mozambique Background

- 45% between 0-14 years old (yo). (INE 2010)
- 65% of the population live in rural areas. (INE 2018)
- Several ethnic groups, including Macua, Sena, Xona, Tsonga.
- Official language (Portuguese) but 90% use other languages.
- 44.9% of adult population are illiterate. (IOF 2014/2015)
- Low income country with one of the lowest HDI – 181 out of 188 countries.
- Cancer incidence: 131.0 cases per 100,000 people (GLOBOCAN 2018).
- Cancer mortality: 97.8 deaths per 100,000 people (GLOBOCAN 2018).
Mozambique Plan for Noncommunicable Diseases (NCD)

- NCD Prevention and Control Strategy – 2008-2014:
  - Cancer;
  - Cardiovascular disease;
  - Diabetes;
  - Chronic respiratory diseases.
- Better communication with patients and families to increase awareness and capacity to control NCDs.
What is a National Cancer Control Plan (NCCP)?

- A strategic plan to control cancer based on the country’s cancer burden, cancer risk factor burden and the resources available to implement the plan in the context of the culture and health care system in that country

(Union for International Cancer Control)

- NCCPs should:
  - Consider unique country context and social determinants of health;
  - Communicate clearly to intended audiences;
  - Be developed by multi-stakeholder team;
  - Be implemented and measured.
Mozambique NCCP

- Ministry of Health of Mozambique (MISAU) requested international expert assistance to develop NCCP.
- Local and international stakeholders:
  - Maputo Central Hospital;
  - Mozambican Association for the Fight against Cancer,
  - International Cancer Control Partnership,
  - Doctors without Borders,
  - WHO, IAEA, UNAIDS...
- Priorities based on Mozambique cancer burden and NCD plan.

From left to right: José Humberto Fregnani (Barretos Cancer Hospital-Brazil), Cesaltina Lorenzoni (MISAU), Ellen Baker (MD Anderson Cancer Center-USA), Walter Zoss (National Cancer Institute-Brazil), Doug Perin (U.S. National Cancer Institute-USA).
Mozambique NCCP timeline

- **2016:** Initial planning
- **2016/2017:** Virtual working group meetings
- **October 9-13, 2017:** NCCP Workshop in Maputo
- **October 22, 2018:** NCCP launch
- **2019:** Budget & implementation plan
Mozambique NCCP

- Vision/Mission: reduce cancer morbidity and mortality in Mozambique.
  - multidisciplinary and integrated approach;
  - effectively utilizing available resources;
  - expanding the country capacity for cancer prevention and control.

- Guiding principles:
  - Listen to representatives of civil society, NGOs, and the local community to identify priorities and elaborate feasible objectives and effective strategies.
  - Facilitate the involvement of patients, community, health professionals, government, health organizations, and others to support effective implementation of the strategies.
Mozambique NCCP - Enhancing patient participation

- Increase general knowledge and awareness about cancer prevention and control.
  - Lead public awareness campaigns, considering high-risk and vulnerable populations, and diversity of languages and ethnic groups.
- Increase number of qualified health professionals.
  - Develop and implement oncology curriculum in medical schools.
  - Integrate international training programs, including telementoring.
- Address cancer stigma among patients and health professionals.
  - Improve capacity for treatment and palliative care.
Going forward

- Opportunity to include strategies for enhancing patient participation while developing budget & action plan.
- Increase country capacity for cancer prevention and control.
- Engaging national, regional and local stakeholders to define responsibilities.
- Ensuring accountability and sustainability.
- Room for improvement considering NCCP global analysis.
- International partners offering local & virtual training.
Questions?

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Consultant - Leidos Biomedical Research, Inc.
ICSN Program Coordinator and Support for Global Health Program & Policy Analysis at U.S. National Cancer Institute/Center for Global Health

Resources

International Cancer Control Partnership
https://www.iccp-portal.org/

World Health Organization
http://www.who.int/cancer/nccp/en/

International Atomic Energy Agency
https://www.iaea.org/services/key-programmes/programme-of-action-for-cancer-therapy-pact#content
Background

• NCD control program in India recommends screening of men & women (30+ years) for hypertension, diabetes, oral, breast & cervical cancer

• Long distance, inadequate transport facilities and loss of wages are major barriers to access NCD services

• Women are the worse victims of health inequity as a consequence of discriminatory beliefs and practices

• “CHWs” are the health aides selected, trained & working in the communities from which they come - WHO

• There is robust evidence that CHWs can undertake actions that lead to improved health outcomes - WHO

Objectives

- A pilot study was conducted in rural India to
  - Evaluate the feasibility and acceptability of delivery of the NCD early detection services by trained CHWs at home
  - Identify the common risk factors of hypertension and diabetes in rural India
Men & Women of 30-60 years of age

Community Health Workers make home visits

- Awareness about healthy lifestyle & ill effects of tobacco
- Blood pressure check with digital machine
- Random sugar with glucometer
- Oral visual exam for tobacco habitués
- Breast Awareness**
- Self-sampling for HPV test**

For: BP >=140/90

For: Random sugar >=140 mg/dl

For: Oral visual exam for tobacco habitués - Positive

For: Breast Awareness** - Self-detected abnormalities - Positive

Primary health center

Medical consultation to confirm hypertension/diabetes
Oral/breast examination by trained clinician
Visual assessment for treatment by gynecologist

Referral to GBH hospital for
Treatment of breast/cervix and oral cancer

** for women only
• 10 female CHWs were trained
• 4997 women & 1988 men screened in 6 months
• Mean age: Men - 44 years; Women - 38 years
• Refusal to screening <10%
## Tobacco Habit & Screening Test Results

<table>
<thead>
<tr>
<th></th>
<th>All participants</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants screened</strong></td>
<td>6,985</td>
<td>1,988</td>
<td>4,997</td>
</tr>
<tr>
<td>Tobacco chewing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>5,752 (82.3)</td>
<td>901</td>
<td>4,851  (97.1)</td>
</tr>
<tr>
<td>Current</td>
<td>1,160 (16.6)</td>
<td>1029</td>
<td>131    (2.6)</td>
</tr>
<tr>
<td>Past</td>
<td>73 (1.0)</td>
<td>58</td>
<td>15     (0.3)</td>
</tr>
<tr>
<td>Blood pressure status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;140/ 90</td>
<td>4,578 (65.5)</td>
<td>975</td>
<td>3,603  (72.1)</td>
</tr>
<tr>
<td>High at screening</td>
<td>2,275 (32.6)</td>
<td>955</td>
<td>1,320  (26.4)</td>
</tr>
<tr>
<td>Known hypertensive</td>
<td>132 (1.9)</td>
<td>58</td>
<td>74     (1.5)</td>
</tr>
<tr>
<td>Blood sugar levels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;140 mg/ dl</td>
<td>6,395 (91.6)</td>
<td>1,734</td>
<td>4,661  (93.3)</td>
</tr>
<tr>
<td>High at screening</td>
<td>522 (7.5)</td>
<td>213</td>
<td>309    (6.2)</td>
</tr>
<tr>
<td>Known diabetic</td>
<td>68 (1.0)</td>
<td>41</td>
<td>27     (0.5)</td>
</tr>
</tbody>
</table>
## BMI Distribution & Screening Test Results

<table>
<thead>
<tr>
<th>BMI grade (Kg/m²)</th>
<th>All participants</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participants screened</strong></td>
<td>6,985</td>
<td>1,988</td>
<td>4,997</td>
</tr>
<tr>
<td><strong>Underweight (&lt;18.5)</strong></td>
<td>1,349 (19.3)</td>
<td>284 (14.3)</td>
<td>1,065 (21.3)</td>
</tr>
<tr>
<td><strong>Normal (18.5-&lt;25.0)</strong></td>
<td>4,864 (69.6)</td>
<td>1,314 (66.1)</td>
<td>3,550 (71.0)</td>
</tr>
<tr>
<td><strong>Overweight (25.0-&lt;30.0)</strong></td>
<td>606 (8.7)</td>
<td>302 (15.2)</td>
<td>304 (6.1)</td>
</tr>
<tr>
<td><strong>Obese (30.0+)</strong></td>
<td>166 (2.4)</td>
<td>88 (4.4)</td>
<td>78 (1.6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oral visual inspection findings</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>6,803 (97.4)</td>
<td>1,828 (92.0)</td>
<td>4,975 (99.6)</td>
</tr>
<tr>
<td>Abnormal</td>
<td>182 (2.6)</td>
<td>160 (8.0)</td>
<td>22 (0.4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HPV results</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td></td>
<td>4,566 (91.4)</td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td></td>
<td>429 (8.6)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Breast symptoms</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td></td>
<td>4,967 (99.4)</td>
<td></td>
</tr>
<tr>
<td>Abnormal</td>
<td></td>
<td>28 (0.6)</td>
<td></td>
</tr>
</tbody>
</table>
Diagnosis & Treatment at PHC
## Results of Evaluation of Screen Positives

<table>
<thead>
<tr>
<th>Disease</th>
<th>Positive on screening test</th>
<th>Further assessed</th>
<th>Confirmed diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypertension</strong></td>
<td>2275</td>
<td>1475 (64.8%)</td>
<td>624 (42.3%)</td>
</tr>
<tr>
<td>≥160/90</td>
<td>277</td>
<td>232 (83.8%)</td>
<td>175 (75.4%)</td>
</tr>
<tr>
<td><strong>Diabetes</strong></td>
<td>522</td>
<td>412 (78.9%)</td>
<td>144 (35.0%)</td>
</tr>
<tr>
<td><strong>Cervical neoplasia</strong></td>
<td>405</td>
<td>306 (75.5%)</td>
<td>CIN 1: 10; CIN 2/3: 9; Cancer: 1</td>
</tr>
<tr>
<td><strong>Oral cancer</strong></td>
<td>182</td>
<td>181 (99.5%)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Breast Symptoms</strong></td>
<td>28</td>
<td>28 (100%)</td>
<td>0</td>
</tr>
</tbody>
</table>
### Effect of participant characteristics at baseline on hypertension and/or diabetes status as endpoints

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Hypertension only</th>
<th>Diabetes only</th>
<th>Both hypertension &amp; diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-34</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>35-39</td>
<td>1.3</td>
<td>1.6</td>
<td>1.1</td>
</tr>
<tr>
<td>40-44</td>
<td>1.7</td>
<td>2.4</td>
<td>1.8</td>
</tr>
<tr>
<td>45-49</td>
<td>2.0</td>
<td>2.5</td>
<td>3.8</td>
</tr>
<tr>
<td>50-54</td>
<td>3.0</td>
<td>2.7</td>
<td>5.7</td>
</tr>
<tr>
<td>55-60</td>
<td>3.5</td>
<td>4.6</td>
<td>9.5</td>
</tr>
<tr>
<td><em>p-value for trend</em></td>
<td><em>&lt;0.001</em></td>
<td><em>&lt;0.001</em></td>
<td><em>&lt;0.001</em></td>
</tr>
<tr>
<td><strong>BMI grade (Kg/m²)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underweight (&lt;18.5)</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Normal (18.5-&lt;25.0)</td>
<td>1.5</td>
<td>1.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Overweight (25.0-&lt;30.0)</td>
<td>3.1</td>
<td>2.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Obese (30.0+)</td>
<td>4.6</td>
<td>4.1</td>
<td>15.1</td>
</tr>
<tr>
<td><em>p-value for trend</em></td>
<td><em>&lt;0.001</em></td>
<td><em>&lt;0.001</em></td>
<td><em>&lt;0.001</em></td>
</tr>
</tbody>
</table>

Variables included in the Regression Analysis Model: Age, Sex, Education, BMI, Chewing status, Smoking Status, Alcohol consumption. Except age and BMI, other variables were not significant after adjustment.
Conclusions

• Screening for NCDs at home settings by trained health workers is feasible & acceptable

• PPV of high BP at screening for final diagnosis of hypertension- 42.3%

• PPV could be improved to 75.4% with a cutoff of 160/90

• PPV of high random glucose at screening for final diagnosis of diabetes- 35.0%

• Prevalence of hypertension, diabetes and HPV infection reported in our study match with similar statistics from other Indian studies*

• Being overweight is an independent risk factor for both hypertension and diabetes even in rural population

• A larger study is needed to quantify the benefits and harms of the novel approach

*IDSP Non-Communicable Disease Risk Factors Survey, Phase-I States of India, 2007-08
Polli U et al. JGO 2018;4:1-7
Acknowledgement

• The study was sponsored by Indo-American Cancer Association (IACA)
• IARC Team
  • Dr Partha Basu (PI)
  • Dr R Sankaranarayanan
  • Dr Richard Muwonge
  • Mr Eric Lucas
• AIIMS Udaipur Team
  • Dr Manoj Mahajan (PI)
  • Dr Kirti Jain
  • Dr Nilesh Mehta
• IACA Team
  • Dr Swamy Aiyer
  • Ms Navami Nayek
Effectiveness of Engaging Family Physicians to Increase Screening Participation

Linda Rabeneck MD MPH FRCPC
Outline

• Ontario context
• Screening Activity Report
• Conclusions
• **gFOBT** for **average risk** (50–74, no symptoms)
• **Colonoscopy** for **increased risk** (first-degree relative with CRC)
• Mailed invitation to see your primary care provider (PCP)
• PCP orders gFOBT
• PCP refers gFOBT+ for colonoscopy
Screening Activity Report (SAR)

• Launched in 2013
• Secure web portal (prior registration)
• Audit-and-feedback tool
• Supports PCPs
# Screening Activity Report (SAR)

## Primary Care Physician ID#

<table>
<thead>
<tr>
<th>Summary</th>
<th>Breast</th>
<th>Cervical</th>
<th>Colorectal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total eligible individuals</td>
<td>21</td>
<td>23</td>
<td>40</td>
</tr>
<tr>
<td>Action required</td>
<td>14</td>
<td>7</td>
<td>27</td>
</tr>
<tr>
<td>Abnormal screen, follow-up needed</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Overdue for screening</td>
<td>13</td>
<td>7</td>
<td>27</td>
</tr>
</tbody>
</table>
Up to Date with Screening

![Bar chart showing the percentage of patients up to date with screening for Breast, Cervical, and Colorectal cancer among Me, MDs in my region, and MDs in Ontario.]

- Breast: Me is close to the average of MDs in my region and MDs in Ontario.
- Cervical: Me is significantly higher than MDs in my region and MDs in Ontario.
- Colorectal: Me and MDs in my region are close, while MDs in Ontario is significantly lower.
SAR Registration by PCPs

- PEM Physicians in Ontario
- SAR Registered PEM Physicians

- Nov 30, 2014
- Oct 31, 2015
- Sep 30, 2016
- Dec 31, 2017
- Mar 31, 2018
SAR Viewing by PCPs

Number of PEM Physicians Viewed SAR

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of PEM Physicians Viewed SAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 30, 2014</td>
<td>5000</td>
</tr>
<tr>
<td>Oct 31, 2015</td>
<td>5000</td>
</tr>
<tr>
<td>Sep 30, 2016</td>
<td>5000</td>
</tr>
<tr>
<td>Dec 31, 2017</td>
<td>6000</td>
</tr>
<tr>
<td>Mar 31, 2018</td>
<td>6000</td>
</tr>
</tbody>
</table>
• SAR registration (OR ranged from 1.06–1.15)
• SAR log-in (OR ranged from 1.07–1.18)

How Many More Persons Screened?

• Colorectal: 26,650
• Breast: 17,890
• Cervix: 18,870
Conclusions

• Small, but significant impact of SAR
• Enhance (embed in EMR)
• Complement with other strategies
Thank You
Impact of an Australian televised mass media campaign on bowel cancer screening participation rates

Kate Broun, Sarah Durkin, Belinda Morley
Cancer Council Victoria

World Cancer Congress - 3 October 2018
Symposium: Challenges in increasing cancer screening participation
T2-103
Bowel cancer burden in Australia

• Bowel cancer is the third most common cancer, second biggest cancer killer

• In 2018:
  ➢ 17,004 Australians will be diagnosed with bowel cancer and 4,129 will die from the disease

• 90% of bowel cancer cases can be successfully treated if found early

• The Australian National Bowel Cancer Screening Program invites people aged between 50 and 74 to screen for bowel cancer using a home screening test (iFOBT) every 2 years
  ➢ Incrementally rolled out since 2006
National Bowel Cancer Screening Program (NBCSP)

- Current participation rates, 2015/16:
  - National rate = 41%
  - Second round screeners, re-participation rate = 77%
  - Men, people aged 50-54, Aboriginal and Torres Strait Islanders, culturally diverse, low socio-economic status = lower participation
- NBCSP expected to prevent 116,500 cases and 75,800 deaths (2015-2040) if participation increased to 50% by 2020
  - If increased to 60%, up to 84,000 lives could be saved*

Bowel screening campaign

• Delivered by Cancer Council Victoria
  ➢ Leading cancer prevention agency in Victoria, Australia

• Objectives:
  ➢ To increase the number of Victorians aged 50-74 who complete a NBCSP iFOBT
  ➢ To promote wider understanding of the NBCSP, so that people are primed to expect their kits and possibly discuss screening with family and friends
  ➢ To increase awareness of the significance of bowel cancer
Bowel screening campaign

• The 7 week campaign included:
  - Television – 30 second advertisement plus longer advertorials
  - Radio advertising
  - Digital advertising, including YouTube, Facebook
  - Public relations campaign
  - GP engagement strategy
  - Priority communities campaign
    - Greek, Italian, Aboriginal and Torres Strait Islanders
Television commercial

Bowel cancer kills 80 Australians every week.

If found early, 90% of bowel cancers can be successfully treated.

Are you 50 or over?

Do the free test when it's sent to your home.

It could save your life.
Evaluation design

VIC (Campaign)

2017
- 19 Jun – 24 Jul
- 30 Jul – 16 Sep
- 4 Sep – 27 Sep

2018
- Mar

Baseline Survey
N=850

Campaign burst (~800 TARPs)

Follow-up Survey
N=680

NBCSP kit return rate
Invitees to NBCSP in last 4 months

SA (Comparison)

Baseline Survey
N=850

Follow-up Survey
N=680

NBCSP kit return rate
Invitees to NBCSP in last 4 months
The television-led campaign was widely recognised by Victorians in the target age-range – total campaign awareness was 80%.
Discuss the campaign

- A high proportion, 40% reported they had discussed the campaign and this occurred equally across demographic groups.
Intend to do the FOBT

- Increase in intentions to complete the iFOBT, particularly those who had not completed or were not up-to-date with screening

**Overall**

<table>
<thead>
<tr>
<th></th>
<th>Vic</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>63.3%†</td>
<td>61.9%†</td>
</tr>
<tr>
<td>Follow-up</td>
<td>71.9%</td>
<td>65.3%</td>
</tr>
</tbody>
</table>

State*time $p=0.07$

**FOBT never or not in the last 2 years**

<table>
<thead>
<tr>
<th></th>
<th>Vic</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>52.0%†</td>
<td>50.2%†</td>
</tr>
<tr>
<td>Follow-up</td>
<td>60.5%</td>
<td>56.7%</td>
</tr>
</tbody>
</table>

State*time $p=0.19$

NOTE: Reference category (†).
NBCSP kit return rate 2017

This increase in the kit return rate translated into:

<table>
<thead>
<tr>
<th></th>
<th>South Australia</th>
<th>Victoria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Est. extra kits on average per week (95% CIs)</td>
<td></td>
<td>1,387 (850-1,925)</td>
</tr>
<tr>
<td>Est. extra kits from campaign period (95% CIs)</td>
<td></td>
<td>12,483 (7,650-17,325)</td>
</tr>
</tbody>
</table>

Extrapolating using NBCSP 2017 Report %s

<table>
<thead>
<tr>
<th></th>
<th>South Australia</th>
<th>Victoria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Est. extra positive (8.3% tests positive) (95% CIs)</td>
<td>-</td>
<td>1,036 (635-1,438)</td>
</tr>
<tr>
<td>Est. extra follow-ups (70.4% assessed) (95% CIs)</td>
<td>--</td>
<td>729 (447-1,012)</td>
</tr>
<tr>
<td>Est. extra polyps (25.6% of assessed) (95% CIs)</td>
<td>--</td>
<td>187 (114-259)</td>
</tr>
<tr>
<td>Est. extra adenomas (12.7% of assessed)(95% CIs)</td>
<td>--</td>
<td>93 (57-129)</td>
</tr>
<tr>
<td>Est. extra cancers (3.5% of assessed) (95% CIs)</td>
<td>--</td>
<td>26 (16-35)</td>
</tr>
</tbody>
</table>

- Almost 12,500 extra FOBT kits were returned, leading to the detection of at least 26 people with suspected or confirmed cancer.
Conclusions

• The bowel screening campaign had good cut through and was widely recognised by Victorians in the target group
• Prompted a considerable amount of discussion of bowel screening
• Increased Victorian adults’ intentions to participate in the screening program, particularly those who had not completed or were not up-to-date with screening
• Led to a significant increase in NBCSP kit returns demonstrating the importance of television-led bowel screening campaigns to improve bowel screening participation
• Further analysis demonstrated the campaign was very cost effective leading to a return on investment for government
Acknowledgements

• The campaign was funded by Cancer Council Victoria thanks to a donation from the Hynam Family
• Supplementary campaign elements supported by the Victorian government
• Access to NBCSP screening data facilitated by the Australian government
• Australian Institute of Health and Welfare (AIHW) for assistance with sub-set NBCSP screening data
Thank you

Kate.Broun@cancervic.org.au
Addressing challenges to increasing cancer screening participation

Use of direct mail to increase bowel cancer screening participation

Abigail Brown, Head of Health Campaigns & Marketing
Cancer Research UK
BOWEL CANCER SCREENING
ROUTE TO DIAGNOSIS: BOWEL CANCER

- Bowel cancer 4th most common cancer in UK
- Only 10% of bowel cancers detected via screening
- Screening is one of the most effective ways of detecting cancer at the earliest stage
BOWEL SCREENING UPTAKE IN ENGLAND

Uptake of National Screening Programmes, England

Inequalities in uptake based on:
- Deprivation
- Gender (lower in men)
- Age

- Bowel (FOBT)
- Breast (50-70)
- Cervical (25-64)
CAMPAIGN OBJECTIVE:

To increase uptake of FOBT bowel screening amongst eligible population (60 – 74 year olds)
INTERVENTIONS

FAMILIARITY
Traditional advertising to increase awareness and knowledge of the programme

NUDGE
Letter from Cancer Research UK 2-3 days after test kit – to endorse the programme and act as a timely reminder

EASE OF USE
Packs with gloves/poo catchers to make the test easier to complete
KEY FINDINGS
PILOT 1: LONDON (2013)

A. CRUK LETTER INSERTED WITH NHS TEST KIT
- No impact

B. CRUK LETTER + POO CATCHER & GLOVES SENT 2-3 DAYS LATER
- +1.7% pnt increase in uptake

C. CRUK LETTER INSERTED WITH NHS TEST KIT + POSTER ADVERTISING
- +2.2% pnt increase in uptake

D. CRUK LETTER + POO CATCHER & GLOVES SENT 2-3 DAYS LATER + ADVERTISING
- +6.1% pnt increase in uptake
PILOT 2: WALES (2015)

A. CRUK LETTER SENT 2 - 3 DAYS AFTER NHS TEST KIT

First Timers: +9.1% point increase

B. CRUK LETTER + GLOVES SENT 2 – 3 DAYS AFTER NHS TEST KIT

First Timers: +5.5% point increase

C. CRUK LETTER + GLOVES & POO CATCHERS SENT 2 – 3 DAYS AFTER NHS TEST KIT

Non-Responders: +2.4% point increase

D. POSTER ADVERTISING ONLY

No impact

First Timers: +9.1% point increase

Non-Responders: +2.4% point increase
PILOT 3: NW ENGLAND (2017)
PARTNERSHIP WITH PUBLIC HEALTH ENGLAND

A. ADVERTISING INC TV only
('Be Clear on Cancer')

Max +3.9% pnt increase

B. ADVERTISING INC TV + CRUK LETTER
(FIRST TIMERS AND PREVIOUS NON-RESPONDERS)

Max +3.7% pnt increase
SUMMARY OF KEY FINDINGS

• A CRUK endorsement letter inserted in the NHS test kit was not effective (London)
• A CRUK endorsement letter sent 2-3 days following an NHS test kit most effective (+9.1% pt) and cost effective in Wales
• Advertising (without TV) helped to uplift the impact of direct mail in London
• Advertising with TV was most effective in North West England (max 4% pt uplift), but more costly
DIRECT MAIL: RECOMMENDATIONS

- Test and learn – start small and build for regional differences
- Gather behavioural/ audience insight
- Allow time to access personal data (care re: regulations)
- Use existing suppliers to deliver where possible
- Prepare local services for increased workload, modelling response levels where possible
- Target most problematic groups e.g. previous non-responders; men
THANK YOU

Together we will beat cancer
Addressing challenges to increasing cancer screening participation

How reasonable adjustments and tailored recruitment strategies can improve bowel cancer screening

Sara Hiom,
Director of Health Professional Engagement and Early Diagnosis
Cancer Research UK
Accelerate, Coordinate, Evaluate (ACE)

- Streamlining diagnostic pathways
- Expanding the roles of health professionals
- Implementing change successfully
- Developing pathways for patients with vague symptoms
- Bowel screening uptake, including amongst vulnerable groups

- Proactive lung approaches
- Self-referral
- Pharmacists
- Optometrists

- eCDS Tools

- Early diagnosis of cancer

- Including multidisciplinary diagnostic centres
Why include bowel screening in ACE?

Put simply, bowel cancer screening can save lives.

BOWEL CANCER SURVIVAL
BY STAGE AT DIAGNOSIS

= People surviving their bowel cancer for five or more years

**DIAGNOSED AT STAGE 1**
EARLIEST STAGE

MORE THAN 9 IN 10

**DIAGNOSED AT STAGE 4**
LATEST STAGE

LESS THAN 1 IN 10

Data for patients diagnosed in the East of England 2006-2010
Calculated by Public Health England

LET'S BEAT CANCER SOONER
cruk.org
Why include bowel screening in ACE?

- Poor uptake with the national bowel cancer screening programme
- Strong socio-economic gradient in screening uptake
- Few people are set against screening & following discussion are willing to test
What did the ACE screening cluster do?

Gathered **evidence** from 12 NHS-based projects, who ....

- Explored *‘how to’* improve participation in guaiac FOB screening
- Used GPs to engage with screening non-responders via:
  - Targeted population groups – e.g., ethnicity, learning disabilities
  - **Promoted** screening awareness at community events
ACE bowel screening results

- Engaging with primary care clinicians works
- **GP endorsement** increased participation by 3 - 5%
- Family and friends have a key role in encouraging participation
- GPs need sample test kits to improve understanding
- GPs couldn’t order replacement kits for patients
Reasonable adjustments can assist learning disability (LD) clients e.g.,

- a flag on the screening IT system denoting a patient has a LD
- resources for local community health teams to support LD patients

Additionally, access to interpreters to overcome language issues
Recommendations

For policy makers & key opinion leaders

• GP endorsement mandated

• Protocol for GPs to request test kits

• Timely bowel screening data

For commissioners of local services

• Specifications prioritise reducing inequalities

• Adopt different communications for different people
Recommendations

For GP practices

- Engage in bowel screening
- Encourage positive dialogue
- Re-engage patients for colonoscopy following positive screening

Positive conversations influence screening participation
Thank you

Reports, resources available at:

www.cruk.org/ace

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