Improving access to cancer screening among people with intellectual disabilities

Dr Katie Robb
Reader in Behavioural Science and Health
Evidence
Cancer screening uptake in women in Scotland 2013

- Breast: 75%
- Cervical: 70%
- Bowel: 50%
Breast screening 50-70 years

Cervical screening 25-64 years

Bowel screening 50-74 years

Old kit

New FIT kit
Breast, cervical, bowel screening data + Prescribing data anti-depressants + GP data Charlson index of comorbidity, learning disability
Screening uptake and multiple deprivation
Uptake of cancer screening in women aged 50+ (n=68,324) in Glasgow

- Breast: 76\% (70\% all, 62\% anti-depressant use, 51\% Charlson Index of comorbidity 3+, 33\% learning disability)
- Cervical: 84\% (84\% all, 83\% Charlson Index of comorbidity 3+, 38\% learning disability)
- Bowel: 65\% (61\% all, 61\% Charlson Index of comorbidity 3+, 38\% learning disability)
ARTICLE
Epidemiology

Comparing uptake across breast, cervical and bowel screening at an individual level: a retrospective cohort study

Colin McCowan¹, Paula McSkimming², Richard Papworth², Marie Kotzur³, Alex McConnachie², Sara Macdonald⁴, Sally Wyke⁵, Emilia Crighton⁶, Christine Campbell⁷, David Weller⁷, Robert J. C. Steele⁸ and Kathryn A. Robb³

BACKGROUND: We investigated demographic and clinical predictors of lower participation in bowel screening relative to breast and cervical screening.

METHODS: Data linkage study of routinely collected clinical data from 430,591 women registered with general practices in the Greater Glasgow & Clyde Health Board. Participation in the screening programmes was measured by attendance at breast or cervical screening or the return of a bowel screening kit.

RESULTS: 72.6% of 159,993 women invited attended breast screening, 80.7% of 309,899 women invited attended cervical screening and 61.7% of 180,408 women invited completed bowel screening. Of the 68,324 women invited to participate in all three screening programmes during the study period, 52.1% participated in all three while 7.2% participated in none. Women who participated in breast (OR = 3.34 (3.21, 3.47), p < 0.001) or cervical (OR = 3.48 (3.32, 3.65), p < 0.001) were more likely to participate in bowel screening.

CONCLUSION: Participation in bowel screening was lower than breast or cervical for this population although the same demographic factors were associated with uptake, namely lower social deprivation, increasing age, low levels of comorbidity and prior non-malignant neoplasms. As women who complete breast and cervical are more likely to also complete bowel screening, interventions at these procedures to encourage bowel screening participation should be explored.

Proportionate universalism

‘Resourcing and delivering of universal services at a scale and intensity proportionate to the degree of need.’

Professor Sir Michael Marmot
Future work

- Improve access to cancer screening among people with intellectual disabilities through a rigorous process of co-design

Katie Robb & Marie Kotzur (co-PI), Deborah Kinnear, Christine Campbell, David Weller, Bob Steele.
Objective 1

Output: Systematic review detailing components, mode of delivery and intensity of interventions increasing screening among people with intellectual disabilities.
Objective 2 Stakeholder interviews (n~45)

https://www.talkingmats.com/
Objective 2 Professional stakeholder interviews

Table 2: Design for interviews with professional stakeholders

<table>
<thead>
<tr>
<th>Professional stakeholder</th>
<th>n~8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual disability nurses</td>
<td>n~8</td>
</tr>
<tr>
<td>Primary care nurses, GPs, and breast screening radiographers</td>
<td>n~8</td>
</tr>
<tr>
<td>Public Health Scotland/England/Wales/Agency Northern Ireland</td>
<td>n~8</td>
</tr>
<tr>
<td>Cancer screening co-ordinators</td>
<td>n~8</td>
</tr>
<tr>
<td>Third sector intellectual disability organisations e.g. Scottish Commission for Intellectual Disability, British Institute for Intellectual Disability, Promoting a More Inclusive Society (PAMIS)</td>
<td>n~8</td>
</tr>
<tr>
<td>Care organisations</td>
<td>n~8</td>
</tr>
<tr>
<td>Third sector cancer organisations e.g. Cancer Research UK, Bowel Cancer UK, Jo’s Cervical Cancer Trust, Breast Cancer Now</td>
<td>n~8</td>
</tr>
<tr>
<td>Government cancer screening and intellectual disabilities leads</td>
<td>n~8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>n~64</td>
</tr>
</tbody>
</table>
Objective 3 Co-design workshop to finalise recommendations
Objective 4 Acceptability testing of bowel screening recommendations
Creating a Learning Health System through Rapid-Cycle, Randomized Testing

Leora I. Horwitz, M.D., M.H.S., Masha Kuznetsova, M.P.H., and Simon A. Jones, Ph.D.

Last year at NYU Langone Health, we showed millions of best-practice alerts in the electronic health record system to prompt physicians to avoid adverse events and to promote guideline-based care. We called hundreds of patients to remind them that they were overdue for their annual physical examination. We made approximately 19,000 postdischarge telephone calls to patients in an attempt to reduce their risk of readmission. We sent thousands of letters to remind patients of unmet preventive care needs. In addition, we started a community health worker program in the emergency department to connect hundreds of high-risk patients to outpatient care. Collectively, these programs alone cost our institution more than a million dollars and used resources that potentially could have been used in other ways to improve care and outcomes. Until recently, we had no real idea whether any of these efforts were working.

Health care systems typically implement such randomized tests of existing systems-level programs (i.e., randomized quality-improvement projects). A learning health system is characterized by “continual improvement and innovation” with “new knowledge captured as an integral byproduct of the delivery experience.” We now know with confidence that changing the text of a provider-targeted prompt to give tobacco cessation counseling in an office produces a significant increase in rates of medication prescriptions and that changing just a few sentences in telephone outreach scripts can both shorten telephone calls and increase rates of appointments for annual examinations. We have also learned that our postdischarge telephone calls have made no difference in rates of readmission or patient-experience ratings, that our appointment-reminder letters were completely ineffective, and that our community health worker program was inadvertently targeting patients who were unlikely to benefit (Table 1). Interestingly, the
Thank you!

Katie.Robb@glasgow.ac.uk
@Katie_Robb_Glas