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Screening Women in Glasgow: Comparing uptake across cancer screening programmes at an individual patient level

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Introduction

Population-based screening has been shown to reduce cancer specific mortality. Within Scotland, three national screening programmes exist: breast, cervical and bowel. Despite being a common and preventable form of cancer, the uptake for bowel cancer screening among women lags behind that for breast and cervical cancer.

Conclusion/Implications

Uptake of bowel screening was confirmed as lower than uptake of other programmes, although all were similarly impacted by demographic, clinical and socioeconomic factors. Individuals were more likely to complete bowel screening if they participate in another programme, suggesting these may serve as a vehicle for improving bowel screening uptake.

Objectives and Approach

Since the benefits of screening accrue with participation, it is important to understand why differences in screening uptake exist. In this study, data on women aged 24-74 in the Greater Glasgow and Clyde Health Board, invited to take part in one or more screening programme during the period 2009-2013, were linked to demographic and medical data. Uptake was determined based on the presence of a screening attendance or result; the impact of age, deprivation and co-morbidity on uptake was determined using logistic regression for each individual programme, and for the cohort of women invited to participate in all three programmes.

Results

Overall, 430,591 women were invited to take part in one or more screening programme during the study period. The uptake for bowel screening was, at 61.7%, lower than that seen in either the breast (72.6%) or cervical (80.7%) programme. Despite these differences, the same demographic factors were associated with uptake of each individual screening programme: older women and those living in affluent areas were most likely to attend. Medical factors did differentially influence uptake, those with multi-morbid illness being less likely to participate in breast and bowel, but not the cervical programme. For the 68,324 women invited to participate in all programmes, 52.1% took part in all three while 7.2% participated in none.

