Public Health Screening Programmes

Annual Report

1 APRIL 2008
TO
31 MARCH 2009

Extract: Chapter 2 Breast Screening Programme

Public Health Screening Unit

Version 1.0
Published: 16 February 2010
Introduction

This annual report presents information about the following screening programmes offered to residents across NHS Greater Glasgow and Clyde for the period 2008/09:

- Cervical Screening
- Bowel Screening
- Breast Screening
- Communicable Diseases in Pregnancy
- Down’s syndrome and other congenital anomalies
- Newborn Bloodspot
- Universal Newborn Hearing
- Diabetic Retinopathy Screening
- Pre-School Vision Screening

In addition, we have also highlighted plans for:

- the replacement of the existing Pregnancy Screening Programme offered for Down’s syndrome and other congenital anomalies
- the implementation of haemoglobinopathy screening both during pregnancy and for newborn babies
- the extension of the newborn bloodspot screening programme to include screening for Medium Chain Acyl CoA Dehydrogenase Deficiency (MCADD)

Screening is a public health service offered to specific population groups to detect potential health conditions before symptoms appear. Screening has the potential to save lives and improve quality of life through early diagnosis of serious conditions.

In NHS Greater Glasgow and Clyde, the co-ordination of all screening programmes is the responsibility of the Public Health Screening Unit led by a Consultant in Public Health Medicine. Multidisciplinary Steering Groups for the programmes are in place and their remit is to monitor performance, uptake and quality assurance.
Figure A illustrates the reporting and accountability lines.

Figure 1: Accountability arrangements for population screening programmes across NHS Greater Glasgow and Clyde (as at 2009)

Key:
- Direct Reports
- Network Links
In 2008/2009, approximately 247,464 NHS Greater Glasgow and Clyde residents were eligible for screening (see Table A). Table A also shows that 35.1% of the total population live in the most deprived areas of NHS Greater Glasgow and Clyde.

**Table A Total NHS Greater Glasgow and Clyde population and total number and percentage of eligible screening population**

<table>
<thead>
<tr>
<th></th>
<th>SIMD 2006</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Most Deprived</td>
<td>Least Deprived</td>
<td></td>
<td></td>
<td></td>
<td>Total GGC Population</td>
</tr>
<tr>
<td>Target Screening Population</td>
<td>86899</td>
<td>43249</td>
<td>33585</td>
<td>35453</td>
<td>48277</td>
<td>247464</td>
</tr>
<tr>
<td>% of total GGC population</td>
<td>19.5</td>
<td>21.0</td>
<td>21.3</td>
<td>21.5</td>
<td>21.9</td>
<td>20.7</td>
</tr>
<tr>
<td>% of target screening population</td>
<td>35.1</td>
<td>17.5</td>
<td>13.6</td>
<td>14.3</td>
<td>19.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Small Area Population Estimates (SAPE) 2008

SIMD - Scottish Index of Multiple Deprivation

1 Target Screening - Number of people eligible for screening within 1 year

SIMD - Scottish Index of Multiple Deprivation

**Health inequalities**

As part of NHS Greater Glasgow and Clyde’s commitment to tackle inequalities to health, the Public Health Screening Unit engaged with voluntary and statutory services to identify innovative ways to encourage and promote uptake of screening programmes.

We engaged with local CH(C)P health improvement teams and voluntary groups to develop local protocols to encourage and include groups who, for various social and economic circumstances, could potentially be excluded or prevented from taking up any of our public health screening programmes.

Screening programmes stretch across the whole organisation and the successful delivery relies on a large number of individuals working in a co-ordinated manner towards common goals in a quality assured environment. It is essential that good information management systems are in place to monitor and evaluate each component and the overall performance of every screening programme offered to our residents. All the screening programmes, with the exception of Pre-school Vision Screening, have clinical standards set by NHS Quality Improvement Scotland which we strive to meet.

Equality impact assessments for each of the screening programmes are planned starting with cervical screening. The outcome of the assessments will identify any areas of the service that prevent service users from receiving equal access to services or receiving treatment when taking part in any screening programme.
CHAPTER 2: BREAST SCREENING

SUMMARY

- This report represents interim data for the breast screening round May 2006 – May 2009 in NHS Greater Glasgow and Clyde.

- From May 2006 to May 2009, there were 142,829 eligible women across NHS Greater Glasgow and Clyde.

- 102,331 women (72% of eligible women) were invited for breast screening during period reported.

- 72,220 women (71% of those invited) attended breast screening during the reported period.

- There were 495 women who were diagnosed with breast cancer following screening.

- NHS Greater Glasgow and Clyde implemented two view mammography in Clyde in May 2009 and will extend it across Greater Glasgow by March 2010.

- In May 2009, a breast screening protocol for women in specific categories was approved and implemented across NHS Greater Glasgow and Clyde. The protocol aims to ensure that all groups are invited to take part in the breast screening programme and are followed up appropriately.

- A sub group has recently been set up to explore the opportunity of educating women about lifestyle choices and risk factors associated with cancer during their normal screening appointment.
CHAPTER 2: BREAST SCREENING

Background

Breast cancer is the most common cancer in women in Scotland. Incidence rates continue to rise with a significant 11% increase in the last ten years. This is partly due to increased detection by the Scottish Breast Screening Programme and in the context of changes in the prevalence of known risk factors, such as age at birth of first child, and alcohol consumption. (Information Statistics Division 2007)

The Scottish Breast Screening Programme was introduced in February 1987 following the publication of the Forrest Report (1986). Breast screening was implemented in 1988 in North Glasgow, 1991 in South Glasgow and in October 1990 in Argyll & Clyde when women aged 50 to 64 were invited for a mammogram every three years.

This report represents interim data from May 2006 to February 2008 for the breast screening round 2006 – 2009 in NHS Greater Glasgow and Clyde.

Aim of screening programme

The purpose of breast screening by mammography is to detect breast cancers at the earliest possible time so that treatment may be offered promptly. It is believed that very early detection of breast cancers in this way can result in more effective treatment, which may be more likely to reduce deaths from breast cancer.

Eligible population

Women residents of NHS Greater Glasgow and Clyde area who are aged 50-70 years are invited for a routine breast screen once every three years. Screening is also available to women over 70 years on request.

The screening test

The current screening method used consists of all women having both mammographic views at the first screening test (called prevalent screen). Only one mammographic view will be taken at any subsequent screening test (called incident screens). The test is a straightforward procedure involving X-rays being taken of each breast using an X-ray machine (also known as a mammogram).
Screening setting

The West of Scotland Breast Screening Centre screens NHS Greater Glasgow and Clyde residents either in the static centre in Glasgow or in mobile van units that visit pre-established sites across the NHS Greater Glasgow and Clyde area.

Screening pathway

Every woman registered with a GP will receive her first invitation to attend for a mammogram at her local breast screening location sometime between her 50th and 53rd birthday and then three yearly thereafter until her 70th birthday. The West of Scotland Breast Screening Centre also contacts all long-stay institutions to offer screening to eligible residents.

The mammograms taken during the screening visit are examined and the results sent to the woman and her GP. A proportion of women attending for screening will be recalled if the picture was not clear enough or asked to go to an assessment clinic for further tests if a potential abnormality has been detected. The tests include ultrasound and core biopsies.

If a woman is found to have cancer, she is referred to a consultant surgeon to discuss the options available to her. This usually involves surgery: A lumpectomy where just the lump and a small amount of surrounding tissue is removed, or a mastectomy where the whole breast is removed. Surgery is likely to be followed by radiotherapy, chemotherapy or hormone therapy or a mixture of these.

The exact course of treatment will depend on the type of cancer found and the woman's personal preferences.

In NHS Greater Glasgow and Clyde the assessment clinics are carried out in the West of Scotland Breast Screening Centre situated in Glasgow. The surgical treatment is carried out by designated teams in the Western Infirmary and Victoria Infirmary and a small proportion of women with palpable tumours are referred for treatment to local breast teams.
Figure 2.1 Screening pathway

1. Invitation of women
2. Screening by Mammography
3. Film processing: read and analysed
4. Results normal
   - Assessment will include clinical Examination which may also include: Further films, Ultrasound, Core biopsy on rare occasions MRI
5. Results abnormal
   - Benign
     - Patient choice - excise
     - Back to routine recall (invite 3 years later)
   - Malignant
     - Treatment
   - Indeterminate
     - Repeat biopsy or open biopsy
     - Benign
Delivery of screening programme 2008/09

Uptake of breast screening in NHS Greater Glasgow and Clyde

The number of women eligible for breast screening across the area of Greater Glasgow and Clyde from May 2006 to March 2009 was 142,829 (Table 2.1). Eligible women were identified using the Community Health Index and then invited for breast screening using the NHSGGC CH(C)P SAPE system.

Table 2.1 Total number of women eligible for breast screening split by age bands and CH(C)P for period May 2006 to May 2009

<table>
<thead>
<tr>
<th>CH(C)P</th>
<th>50-54</th>
<th>55-59</th>
<th>60-64</th>
<th>65-70</th>
<th>50-70</th>
<th>Screening Population per year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Dunbartonshire</td>
<td>4197</td>
<td>3733</td>
<td>3571</td>
<td>3538</td>
<td>15039</td>
<td>5013</td>
</tr>
<tr>
<td>East Glasgow</td>
<td>4206</td>
<td>3435</td>
<td>3250</td>
<td>3538</td>
<td>14429</td>
<td>4810</td>
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<tr>
<td>East Renfrewshire</td>
<td>3332</td>
<td>2851</td>
<td>2809</td>
<td>2721</td>
<td>11713</td>
<td>3904</td>
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<tr>
<td>Inverclyde</td>
<td>2903</td>
<td>2685</td>
<td>2600</td>
<td>2621</td>
<td>10809</td>
<td>3603</td>
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<tr>
<td>North Glasgow</td>
<td>3031</td>
<td>2554</td>
<td>2348</td>
<td>2966</td>
<td>10629</td>
<td>3543</td>
</tr>
<tr>
<td>North Lanarkshire¹</td>
<td>683</td>
<td>615</td>
<td>603</td>
<td>538</td>
<td>2439</td>
<td>813</td>
</tr>
<tr>
<td>Renfrewshire</td>
<td>6025</td>
<td>5617</td>
<td>5354</td>
<td>5229</td>
<td>22225</td>
<td>7408</td>
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<tr>
<td>South East Glasgow</td>
<td>3164</td>
<td>2600</td>
<td>2164</td>
<td>2275</td>
<td>10203</td>
<td>3401</td>
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<tr>
<td>South Lanarkshire¹</td>
<td>2229</td>
<td>1865</td>
<td>1723</td>
<td>1697</td>
<td>7514</td>
<td>2050</td>
</tr>
<tr>
<td>South West Glasgow</td>
<td>4079</td>
<td>3035</td>
<td>2845</td>
<td>3068</td>
<td>13027</td>
<td>4342</td>
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<tr>
<td>West Dunbartonshire</td>
<td>3430</td>
<td>2893</td>
<td>2830</td>
<td>2738</td>
<td>11891</td>
<td>3964</td>
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<td>West Glasgow</td>
<td>3982</td>
<td>3100</td>
<td>2844</td>
<td>2985</td>
<td>12911</td>
<td>4304</td>
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<tr>
<td>NHSGGC Total</td>
<td>41261</td>
<td>34983</td>
<td>32941</td>
<td>33644</td>
<td>142829</td>
<td>47610</td>
</tr>
</tbody>
</table>

Source: NHS GGC CH(C)P SAPE 2008
SAPE: Small Area Population Statistics

Note:
¹ NHS Greater Glasgow and Clyde residents only
² Screening Population - Total population divided by 3 years

Table 2.2 shows the numbers and the proportion of the eligible population invited; numbers screened; and the interim uptake rate split by Community Health (Care) Partnership (CH(C)P) area for the period May 2006 to May 2009. 102,331 (71.6%) women living in NHS Greater Glasgow and Clyde area were invited to attend breast screening.

72,220 women (71% of those invited) attended breast screening during the reported period. There were 495 women who were diagnosed with breast cancer following screening.
### Table 2.2: Interim progress report of Breast Screening programme by CH(C)P area for the period May 2006 to May 2009

<table>
<thead>
<tr>
<th>CH(C)P</th>
<th>Number invited¹</th>
<th>Number attended¹</th>
<th>Number Cancers Detected¹</th>
<th>% Attend of those invited</th>
<th>% Cancers of those Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Dunbartonshire</td>
<td>7040</td>
<td>5631</td>
<td>33</td>
<td>80.0</td>
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<tr>
<td>East Renfrewshire</td>
<td>4933</td>
<td>3628</td>
<td>23</td>
<td>73.5</td>
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<tr>
<td>Glasgow East</td>
<td>11928</td>
<td>8077</td>
<td>46</td>
<td>67.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Glasgow North</td>
<td>8009</td>
<td>5016</td>
<td>39</td>
<td>62.6</td>
<td>0.8</td>
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<tr>
<td>Glasgow South East</td>
<td>11341</td>
<td>8152</td>
<td>73</td>
<td>71.9</td>
<td>0.9</td>
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<tr>
<td>Glasgow South West</td>
<td>3911</td>
<td>2635</td>
<td>15</td>
<td>67.4</td>
<td>0.6</td>
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<tr>
<td>Glasgow West</td>
<td>9293</td>
<td>6292</td>
<td>43</td>
<td>67.7</td>
<td>0.7</td>
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<tr>
<td>North Lanarkshire²</td>
<td>2240</td>
<td>1718</td>
<td>11</td>
<td>76.7</td>
<td>0.6</td>
</tr>
<tr>
<td>South Lanarkshire²</td>
<td>4934</td>
<td>3666</td>
<td>21</td>
<td>74.3</td>
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<tr>
<td>Inverclyde</td>
<td>10649</td>
<td>7277</td>
<td>43</td>
<td>68.3</td>
<td>0.6</td>
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<tr>
<td>Renfrewshire</td>
<td>21895</td>
<td>15776</td>
<td>117</td>
<td>72.1</td>
<td>0.7</td>
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<tr>
<td>West Dunbartonshire</td>
<td>6158</td>
<td>4352</td>
<td>31</td>
<td>70.7</td>
<td>0.7</td>
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<tr>
<td><strong>NHSGGC Total</strong></td>
<td><strong>102331</strong></td>
<td><strong>72220</strong></td>
<td><strong>495</strong></td>
<td><strong>70.6</strong></td>
<td><strong>0.7</strong></td>
</tr>
</tbody>
</table>

Source: ¹ West of Scotland Breast Screening Data

Notes

² NHS Greater Glasgow and Clyde residents only

Progress/Completion Details:

- Greater Glasgow: data complete to end of March 2009. Current round expected to finish approximately.
- Inverclyde, Renfrewshire, West Dunbartonshire: Round completed - May 2006 to May 2009

### Health inequalities

Work started in May 2009 to carry out an Equality Impact Assessment of the breast screening programme. The work is due to be completed by December 2009.

A sub group was set up to consider how best to identify and engage with hard to reach groups who cannot otherwise be identified by the Community Health Index, for example travellers and the homeless. The group also looked at developing a process for screening women in nursing homes and patients in long stay care establishments.

A breast screening protocol for women groups that could discriminated by the existing screening process was approved and introduced across NHS Greater Glasgow and Clyde in May 2009. The protocol aims to ensure that all groups are invited to take part in the breast screening programme and are followed up appropriately.
Promoting uptake

There have been several initiatives to promote uptake of the breast screening programme. These included inviting women from ethnic minority and learning disability groups who are approaching the eligible age range to visit the centre and familiarise themselves with the equipment. This initiative has proved to be a beneficial exercise.

There has been much in the recent literature looking at the effect of obesity and lack of physical activity as well as alcohol consumption being contributing factors to developing cancer.

A sub group has recently been set up to explore the opportunity of raising the issue with women about lifestyle choices, and risk factors associated with cancer, during their normal screening appointment.

It is planned that a staff training programme will be developed to introduce staff to Health Behaviour Change theories and Brief Intervention skills. Staff will then have the knowledge and skills to advise women who attend screening of risk factors associated with cancer and offer women the opportunity to discuss lifestyle changes, like physical activity, healthy eating, weight management; alcohol consumption and smoking. The training will also enable staff to signpost women to the appropriate services that are available. It is planned that training will be piloted and evaluated with a view to rolling out in 2010.

Two view mammography

In Scotland, women are offered two view mammography at their first screen, and a single oblique view mammogram in subsequent screens.

All Boards received funding to implement two view mammography at every screen. This was introduced in Clyde in May 2009 and is to be rolled out in Greater Glasgow by March 2010.

There had been concerns with waiting times for assessment due to radiology vacancies. However, the West of Scotland Breast Centre has now been able to recruit half of the vacant radiographic retirement posts and will continue with recruiting the remaining vacancies.

Additional mobile van is in place and the Centre has submitted a proposal for an additional mammography unit.
Future developments

Digital Mammography

Following the publication by NHS Quality Improvement Scotland (NHS QIS) of a Health Technology Assessment (HTA) on the introduction of digital mammography into the Scottish Breast Screening Programme (SBSP), work was carried out to assess the requirements for the implementation of digital mammography in the near future.

A business case was submitted to NSD to purchase a digital mammography unit.

Challenges and future priorities

To implement two view mammography in Greater Glasgow by March 2010.

To follow up on the Equality Impact Assessment for breast screening programme.

To continue to promote and encourage uptake of the screening programme through health promotion activities.

To develop and implement staff training programme to promote healthy lifestyles by 2010.
## Members of Breast Screening Steering Group
(As at March 2009)

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Emilia Crighton</td>
<td>Consultant in Public Health Medicine (Chair)</td>
</tr>
<tr>
<td>Mrs Donna Athanasopolous</td>
<td>PERL Resources Co-ordinator</td>
</tr>
<tr>
<td>Mrs Brenda Bellando</td>
<td>Business Manager</td>
</tr>
<tr>
<td>Mr Tom Clackson</td>
<td>GMS Contract Manager</td>
</tr>
<tr>
<td>Dr Hilary Dobson</td>
<td>Clinical Director</td>
</tr>
<tr>
<td>Prof David George</td>
<td>Consultant Breast Surgeon</td>
</tr>
<tr>
<td>Mrs Fiona Gilchrist</td>
<td>Assistant Programmes Manager, Screening Dept</td>
</tr>
<tr>
<td>Dr Susan Langridge</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Mrs Annette Little</td>
<td>Information Analyst</td>
</tr>
<tr>
<td>Miss Denise Lyden</td>
<td>Project Officer</td>
</tr>
<tr>
<td>Ms Janet Mair</td>
<td>Regional Registration Manager</td>
</tr>
<tr>
<td>Mrs Eleanor McColl</td>
<td>H&amp;IT Service Delivery Manager</td>
</tr>
<tr>
<td>Ms Cynthia Mendelsohn</td>
<td>Lay Member</td>
</tr>
<tr>
<td>Dr Alan Mitchell</td>
<td>Clinical Director</td>
</tr>
<tr>
<td>Ms Ann Mumby</td>
<td>Superintendent Radiographer</td>
</tr>
<tr>
<td>Mrs Elaine Murray</td>
<td>Community Liaison Officer</td>
</tr>
<tr>
<td>Mrs Elizabeth Rennie</td>
<td>Programmes Manager, Screening Dept</td>
</tr>
<tr>
<td>Mrs Claire Scott</td>
<td>Senior Health Improvement Officer</td>
</tr>
<tr>
<td>Ms Patricia Weir</td>
<td>Lay Member</td>
</tr>
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</table>
Reporting Structure:
Breast Screening Steering Group

Key:
- - - - - Direct Reports
- - - - - Network Links
Acknowledgments

This annual report was prepared by the Public Health Screening Unit in collaboration with members from the screening programmes steering groups, Public Health Protection Unit, Annette Little from Information Services, Stuart Imrie, Cytogenetics Laboratory, Joan Mackenzie, National Newborn Screening Laboratory and Jenny Crossley, Regional Pregnancy Screening Laboratory.

Many thanks go to all the healthcare professionals, support staff and Screening Department for helping to deliver the screening services across NHS Greater Glasgow and Clyde.

The programmes have also benefited from the close links held with the Child Health Surveillance Programme (CHSP), Maternity Services Strategy Group, Regional Cancer Advisory Group and the Diabetes Managed Care Network.