BreastCheck Women’s Charter

Screening commitment
- All staff will respect your privacy, dignity, religion, race and cultural beliefs
- Services and facilities will be arranged so that everyone, including people with special needs, can use the services
- Your screening records will be treated in the strictest confidence and you will be assured of privacy during your appointment
- Information will be available for relatives and friends relevant to your care in accordance with your wishes
- You will always have the opportunity to make your views known and to have them taken into account
- You will receive your first appointment within two years of becoming known to the programme
- Once you become known to the programme you will be invited for screening every two years while you are in the eligible age range
- You will be screened using high quality modern equipment which complies with Guidelines for Quality Assurance

We aim
- To give you at least seven days notice of your appointment
- To send you information about screening before your appointment
- To see you as promptly as possible to your appointment time
- To keep you informed about any unavoidable delays which occasionally occur
- To provide pleasant, comfortable surroundings during screening
- To ensure that we send results of your mammogram to you within three weeks

If re-call is required
- To ensure that you will be offered an appointment for an Assessment Clinic within two weeks of being notified of an abnormal result
- To ensure that you will be seen by a Consultant doctor who specialises in breast care
- To provide support from a Breast Care Nurse
- To ensure you get your results from the Assessment Clinic within one week
- To keep you informed of any delays regarding your results

Tell us what you think
- Your views are important to us in monitoring the effectiveness of our services and in identifying areas where we can improve
- You have a right to make your opinion known about the care you received
- If you feel we have not met the standards of the Women’s Charter, let us know by telling the people providing your care or in writing to the programme
- We would also like to hear from you if you feel you have received a good service. It helps us to know that we are providing the right kind of service - one that satisfies you
- Finally, if you have any suggestions on how our service can be improved, we would be pleased to see whether we can adopt them to further improve the way we care for you

If breast cancer is diagnosed
- To tell you sensitively and with honesty
- To fully explain the treatment available to you
- To encourage you to share in decision-making about your treatment
- To include your partner, friend or relative in any discussions if you wish
- To give you the right to refuse treatment, obtain a second opinion or choose alternative treatment, without prejudice to your beliefs or chosen treatment
- To arrange for you to be admitted for treatment by specialised trained staff within three weeks of diagnosis
- To provide support from a Breast Care Nurse before and during treatment
- To provide you with information about local and national cancer support groups and self-help groups

We can help by
- Keeping your appointment time
- Giving at least three days notice if you wish to change your appointment
- Reading any information we send you
- Being considerate to others using the service and the staff
- Please try to be well informed about your health

Let us know
- If you change your address
- If you have special needs
- If you already have an appointment
- Tell us what you think - your views are important.
- Freephone 1800 45 45 55
- www.breastcheck.ie
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Introduction from the Head of Screening, National Screening Service

The National Screening Service (NSS), part of the Health Service Executive, has gained significant expertise, as well as a positive national and international reputation in the development, implementation and delivery of successful population-based screening programmes in Ireland.

The NSS manages four screening programmes:

- **BreastCheck** – The National Breast Screening Programme,
- **CervicalCheck** – The National Cervical Screening Programme,
- **Diabetic RetinaScreen** - the National Diabetic Retinal Screening Programme and
- **BowelScreen** - the National Bowel Screening Programme.

Since 2000, BreastCheck has been providing free mammograms to women aged 50 to 64 every two years. The aim of the programme is to reduce deaths from breast cancer by finding and treating the disease at the earliest possible stage. At this point, a detected cancer is usually easier to treat and there are greater treatment options available. Most women screened are found to be perfectly healthy. However, a small number of women will have a breast cancer detected.

Women who have a breast cancer detected are supported throughout their journey by BreastCheck radiographers, radiologists, surgeons, pathologists, breast care nurses and administrative staff, all of whom are experienced and committed to providing care of the highest possible standard.

As we publish this report in 2017, BreastCheck approaches its 19th year in operation, and there is much to celebrate. The programme has provided more than 1.5 million mammograms to over 500,000 women and detected over 9,800 cancers.

This report highlights the successes and challenges for the programme and relate to women invited by BreastCheck between 1 January and 31 December 2015 and screened or treated in 2015 and/or 2016.
One significant achievement outlined in this report is the BreastCheck age-range extension which was launched in late 2015 for women aged 65 years, with the aim of extending screening upward to women aged 69, over time. Given that this report clearly demonstrates the incidence of breast cancer increases with age, this is a most welcome development.

Indeed, despite a national shortage of radiographers, BreastCheck has successfully delivered over 145,000 screens and detected 986 cancers in the period 2015 to 2016. Moreover, these figures are at the highest levels in the history of the programme.

Moving forward, the most important goal for BreastCheck is to ensure that all women who participate in the programme can remain confident in the delivery of the service and reassured by the quality of care they receive. To ensure this, BreastCheck retains a resolute focus on making continual improvements to ensure high quality and effective care is provided to all clients.

Charles O’Hanlon
Head, National Screening Service
Highlights of 2015-2016

It was a significant year for the programme, which surpassed its previous highest records of women screened and cancers detected, as well as delivering on the age extension and maintaining high programme uptake.

The extension of BreastCheck to women aged over 65

It has long been the intention of BreastCheck to extend screening upwards to women aged 69. In the last quarter of 2015, the first women in the older age cohort, women aged 65, received their invitation to screening. The programme was well received among this group, with high uptake and over 950 women screened.

Highest number of women screened

Over 145,000 women responded to their invitation to screening. This is the highest number ever screened by BreastCheck, based on a single year of invitation. This was made possible by the hard work and dedication of the BreastCheck clinical and administrative staff, screening promotion and communications teams.

Highest number of cancers detected

986 cancers were detected. This represents the highest number of both total cases and invasive cases diagnosed in any year since the inception of BreastCheck.

Highest number of small invasive cancers

The aim of breast cancer screening is to detect and treat small cancers before they become life-threatening. In 2015 to 2016, 399 small invasive cancers (<15mm) were detected and treated surgically. This is the highest number in any single year, since BreastCheck began screening.

High programme uptake rate

198,986 women were invited for screening. Of those, 195,145 were eligible and 145,822 women attended for a mammogram. The eligible uptake rate at 74.7 per cent surpassed the programme standard of 70 per cent.
Breast cancer is the most commonly diagnosed cancer in women in Ireland. On average, over 2,800 women are diagnosed with breast cancer in Ireland each year. If detected early, breast cancer is very treatable.

BreastCheck – The National Breast Screening Programme has been providing free mammograms to women aged 50 to 64 every two years. The aim of BreastCheck is to detect breast cancers at the earliest possible stage. At this point, a detected cancer is usually easier to treat and there are greater treatment options available.

Although the mammogram does not detect all breast cancers, international experience demonstrate that breast screening programmes significantly reduce deaths from breast cancer. Less than one per cent of women screened are diagnosed with cancer. These women are offered the best treatment available with the aim of delivering the best possible outcome.

Since its inception, the programme has provided more than 1.5 million mammograms to over 500,000 women and detected over 9,800 cancers.

Screening activity overall

The figures reported relate to women invited by BreastCheck for screening between 1 January and 31 December 2015. Some of these women may have been screened or treated in 2015 and/or 2016, due to differences between the dispatch of invite and the date of screening attendance.

Programme standards, against which performance is measured, are based on the ‘European Guidelines for Quality Assurance in Breast Cancer Screening and Diagnosis’ (4th edition), as well as the BreastCheck ‘Guidelines for Quality Assurance in Mammography Screening’ (4th edition).

During 2015, 198,986 women were invited by BreastCheck for screening (Table 1, Figure 1). Of these, 195,145 were eligible for screening and 145,822 women attended for screening. These figures reflect a screening uptake rate, based on the eligible population, of 74.7 per cent, which is well above the standard of 70 per cent. The uptake rate in the target population was 72.7 per cent, also above the standard of 70 per cent.

However, it is important to note that both the reported eligible and target population uptake rates represent a decrease of 1.8 per cent and 1.5 per cent respectively, in comparison to 2014 results. BreastCheck can only be effective in achieving the goal of reducing the mortality from breast cancer in the population, if at least 70 per cent of eligible women attend screening. Therefore, it is crucial that this decline in the eligible uptake rate does not continue in future years. The programme continues to focus on devising strategies to maintain high uptake levels, some of which include a new television advertising campaign, the introduction of text message reminders and ongoing screening promotion work.
In terms of effectiveness, the standardised detection ratio (SDR) is a useful composite score, by which to measure the overall performance of a screening programme. The overall SDR of BreastCheck in 2015 was 1.33, an increase on the 1.22 reported in 2014 and significantly above the target of 0.75, which reflects continued improvement in programme performance. This means that the programme is effective in detecting breast cancer in the population. The key programme results in 2015 are outlined in the table below (Table 1).

### Table 1: Screening activity overall 2015-2016

<table>
<thead>
<tr>
<th>Performance parameter</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of women invited</td>
<td>198,986</td>
</tr>
<tr>
<td>Number of eligible women invited*</td>
<td>195,145</td>
</tr>
<tr>
<td>Number of women who opted out of the programme</td>
<td>1,624</td>
</tr>
<tr>
<td>Number of women attended for screening</td>
<td>145,822</td>
</tr>
<tr>
<td>Eligible women uptake rate* (includes women who opted out of the programme)</td>
<td>74.7%</td>
</tr>
<tr>
<td>Known target population uptake rate**</td>
<td>72.7%</td>
</tr>
<tr>
<td>Number of women re-called for assessment</td>
<td>5,830</td>
</tr>
<tr>
<td>Number of open benign biopsies</td>
<td>233</td>
</tr>
<tr>
<td>Number of cancers detected</td>
<td>986</td>
</tr>
<tr>
<td>Cancers detected per 1,000 women screened</td>
<td>6.8</td>
</tr>
<tr>
<td>Number of invasive cancers</td>
<td>785</td>
</tr>
<tr>
<td>Number of ductal carcinoma in situ (DCIS)</td>
<td>201</td>
</tr>
<tr>
<td>Number of invasive cancers &lt; 15mm</td>
<td>399</td>
</tr>
<tr>
<td>Standardised detection ratio</td>
<td>1.33</td>
</tr>
</tbody>
</table>

* Eligible refers to the known target population less those women excluded or suspended by the programme based on programme eligibility criteria.

** Known target population refers to all women of screening age that are known to the programme.

Details of the ineligible categories

**Excluded** – women in follow up care for breast cancer, women not contactable by An Post, women who have a physical/mental incapacity (while BreastCheck attempts to screen all eligible women, certain forms of physical or mental incapacity may preclude screening), women with a terminal illness or other.

**Suspended** – women on extended holiday or working abroad, women who had a mammogram within the last year, women who opt to wait until the next round, women who wished to defer appointment, women who did not wish to reschedule or other.
Screening activity by screening invitation type

In 2015, the number of initial women invited increased from the numbers recorded in 2014 (Figure 1). Initial women are those who have been invited to have their first BreastCheck mammogram.

The number of subsequent women invited also increased from the numbers recorded in 2014. These are women who have previously attended BreastCheck and are being invited for the second or subsequent time.

Uptake rates among first invited (or new initial), and subsequent women have both increased in 2015. The terms ‘first invited’ and ‘new initial’ are used interchangeably by the programme and refer to women who have received their first ever BreastCheck invitation for screening.

A number of changes were made in 2015, including refreshed television advertising campaign, the introduction of text message reminders for subsequent women, as well as continued screening promotion work, which will have supported this increase.

The eligible women and known target population uptake rates have increased in those invited for the first time (new initial clients), but the known target population uptake rate remains below the standard of 70 per cent (Table 2). The known target population refers to all women of screening age who are known to the programme. The eligible population is a sub-set of the known target population and does not count women, who are excluded or suspended by the programme based on fixed eligibility criteria.
The uptake rates among those women who have previously attended and are re-invited for subsequent screening remains high at over 87 per cent. This is good news, as it shows that women who have previously attended have sufficient confidence in the service and their care, to attend when next invited. Those who have previously been invited, but did not attend are known as previous non-attenders (PNAs). The uptake rate among PNAs is low and has decreased since 2014, due to persistent non-attendance by some women who neither attend, nor opt out of the programme and therefore, continue to be invited to have their first BreastCheck mammogram.

A table outlining screening activity is shown below.

### Table 2: Screening activity by screening invitation type 2015-2016

<table>
<thead>
<tr>
<th>Performance parameter</th>
<th>First invited population</th>
<th>Previous non-attenders</th>
<th>Subsequent population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of women invited</td>
<td>38,009</td>
<td>27,140</td>
<td>133,837</td>
</tr>
<tr>
<td>Number of eligible women invited</td>
<td>34,477</td>
<td>27,140</td>
<td>133,528</td>
</tr>
<tr>
<td>Number of women who opted out of the programme</td>
<td>30</td>
<td>0</td>
<td>1,594*</td>
</tr>
<tr>
<td>Number of women screened</td>
<td>24,211</td>
<td>3,032</td>
<td>118,579</td>
</tr>
<tr>
<td>Eligible women uptake rate</td>
<td>70.2%</td>
<td>11.2%</td>
<td>88.8%</td>
</tr>
<tr>
<td>(including women who opted out of the programme)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Known target population uptake rate</td>
<td>63.6%</td>
<td>11.2%</td>
<td>87.6%</td>
</tr>
</tbody>
</table>

* Opted out of the programme in a previous round, but remain in the target population.

The uptake rates among those women who have previously attended and are re-invited for subsequent screening remains high at over 87 per cent.
In 2015, the number of subsequent women screened increased, while there was a small decrease in the number of initial women screened (Figure 2).

**Screening activity by age group**

In the last quarter of 2015, BreastCheck age-range extension was launched for women over 65 years. A small number of these women had never been invited before. This may have been because some women immigrated or returned to Ireland, or perhaps they had recently made themselves known to the programme by self-registration. Given that the majority of age extension clients had previously been invited for screening, the advent of the age extension resulted in a higher number of subsequent women and a small number of initial women, aged 65 and over, being invited.

Among women invited for the first time (new initial clients), uptake remains highest in younger women aged 50 to 54, as outlined in table 3. (Note: the small number of women aged 65 and over who have never been screened has a distorting effect on the rate for older age groups).

<table>
<thead>
<tr>
<th>Performance parameter</th>
<th>50-54</th>
<th>55-59</th>
<th>60-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of women invited</td>
<td>32,870</td>
<td>2,922</td>
<td>2,023</td>
<td>78</td>
</tr>
<tr>
<td>Number of eligible women invited</td>
<td>30,905</td>
<td>1,972</td>
<td>1,440</td>
<td>59</td>
</tr>
<tr>
<td>Number of women who opted out of the programme</td>
<td>22</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Number of women screened</td>
<td>23,147</td>
<td>589</td>
<td>374</td>
<td>27</td>
</tr>
<tr>
<td>Eligible women uptake rate (including women who opted out of the programme)</td>
<td>74.9%</td>
<td>29.9%</td>
<td>26.0%</td>
<td>45.8%</td>
</tr>
<tr>
<td>Known target population uptake rate</td>
<td>70.4%</td>
<td>20.2%</td>
<td>18.5%</td>
<td>33.3%</td>
</tr>
</tbody>
</table>
The age gradient marked among previous non-attenders, reflects not only a difference due to age, but also the effect of persistent non-attenders among older women who continue to receive invitations as long as they remain eligible for screening (Table 4).

### Table 4: Previous non-attenders population 2015-2016

<table>
<thead>
<tr>
<th>Performance parameter</th>
<th>50-54</th>
<th>55-59</th>
<th>60-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of previous non-attenders invited</td>
<td>7,632</td>
<td>11,226</td>
<td>7,893</td>
<td>378</td>
</tr>
<tr>
<td>Number of women screened</td>
<td>1,474</td>
<td>1,018</td>
<td>517</td>
<td>19</td>
</tr>
<tr>
<td>Known target population uptake rate</td>
<td>19.3%</td>
<td>9.1%</td>
<td>6.6%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

Among those invited for subsequent screening, there are continuing high uptake rates in all age groups (Table 5).

### Table 5: Subsequent invited population 2015-2016

<table>
<thead>
<tr>
<th>Performance parameter</th>
<th>50-54</th>
<th>55-59</th>
<th>60-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of women invited</td>
<td>31,091</td>
<td>54,779</td>
<td>47,144</td>
<td>820</td>
</tr>
<tr>
<td>Number of eligible women invited</td>
<td>30,916</td>
<td>54,605</td>
<td>47,208</td>
<td>796</td>
</tr>
<tr>
<td>Number of women who opted out of the programme*</td>
<td>234</td>
<td>562</td>
<td>797</td>
<td>1</td>
</tr>
<tr>
<td>Number of women screened</td>
<td>28,108</td>
<td>48,661</td>
<td>40,894</td>
<td>912</td>
</tr>
<tr>
<td>Eligible women uptake rate</td>
<td>90.9%</td>
<td>89.1%</td>
<td>86.6%</td>
<td>n/a**</td>
</tr>
<tr>
<td>(including women who opted not to consent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Known target population uptake rate</td>
<td>89.7%</td>
<td>87.9%</td>
<td>85.3%</td>
<td>n/a**</td>
</tr>
</tbody>
</table>

* Opted out of the programme in a previous round, but remain in the target population.

** Numbers screened exceed invited, as some women were 64 when invited and had turned 65 by time of screening appointment.
Cancers detected

The aim of BreastCheck is to reduce deaths from breast cancer by detecting and treating the disease as early as possible.

In the reporting year, the programme detected the highest number of both total cases and invasive cases of cancer in any year since screening began. In total, 986 women were diagnosed with breast cancer, 785 of which were invasive (Figure 3).

Figure 3: Number of women diagnosed with breast cancer overall and the proportion with an invasive breast cancer 2002-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Total number of women diagnosed</th>
<th>Number of women diagnosed with invasive cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>986</td>
<td>785</td>
</tr>
<tr>
<td>2014</td>
<td>890</td>
<td>692</td>
</tr>
<tr>
<td>2013</td>
<td>916</td>
<td>725</td>
</tr>
<tr>
<td>2012</td>
<td>858</td>
<td>661</td>
</tr>
<tr>
<td>2011</td>
<td>832</td>
<td>652</td>
</tr>
<tr>
<td>2010</td>
<td>814</td>
<td>664</td>
</tr>
<tr>
<td>2009</td>
<td>845</td>
<td>667</td>
</tr>
<tr>
<td>2008</td>
<td>672</td>
<td>527</td>
</tr>
<tr>
<td>2007</td>
<td>396</td>
<td>319</td>
</tr>
<tr>
<td>2006</td>
<td>337</td>
<td>264</td>
</tr>
<tr>
<td>2005</td>
<td>318</td>
<td>270</td>
</tr>
<tr>
<td>2004</td>
<td>309</td>
<td>257</td>
</tr>
<tr>
<td>2003</td>
<td>379</td>
<td>322</td>
</tr>
<tr>
<td>2002</td>
<td>306</td>
<td>242</td>
</tr>
</tbody>
</table>

Legend:
- Orange: Number of women diagnosed with invasive cancer
- Purple: Total number of women diagnosed with breast cancer
**Ductal carcinoma in situ (DCIS)**

DCIS is an early form of breast cancer, whereby cancer cells are inside the milk ducts and have not spread within or outside the breast. DCIS can also be described as pre-cancerous, pre-invasive, non-invasive or intraductal. If DCIS is not treated, the cells may spread from the ducts into the surrounding breast tissue and become an invasive cancer (one that can spread to other parts of the body). DCIS can be low, intermediate or high grade. It is thought that low grade DCIS is less likely to become an invasive cancer than high-grade DCIS.

As DCIS is a predisposing factor for breast cancer, the proportion of screen-detected DCIS is a good parameter for programme performance evaluation. In addition, its detection is an indicator of assessment adequacy and image quality. The achievable standard of pure DCIS detected is between 10 to 20 per cent of cancers detected.

In women screened both for the first time and for a subsequent time, the proportion of low grade DCIS detected (Table 6) represented just 10.4 per cent of all DCIS detected. This corresponds to 2 per cent of total cancers detected, or 1.4 per 10,000 women screened. Evidence has shown that many intermediate and high grade DCIS progress to invasive cancers over time if left untreated; these represent the majority of DCIS detected by BreastCheck.

Not every woman with DCIS will develop invasive cancer, even if left untreated. However, it is not possible to determine which DCIS will develop into invasive cancer and which will not, therefore as a precautionary measure all DCIS cases will receive treatment.

**Screening quality**

Programme standards for screening quality are based on the ‘European Guidelines for Quality Assurance in Breast Cancer Screening and Diagnosis’ (4th edition) and the BreastCheck ‘Guidelines for Quality Assurance in Mammography Screening’ (4th edition) which govern aspects of digital mammography, radiographical guidelines, radiological guidelines, as well as diagnosis, pathology and surgery.

Among women screened for the first time, the re-call rate remains above the standard at 9.2 per cent, and is higher than in 2014 (8.4 per cent). The benign open biopsy rate is also outside the programme standard for women being screened for the first time at 4.7 (standard is less than 3.6). However, the invasive cancer detection rates for age 50 to 51 and 52 to 64 years are well above the required standards (Table 7). Over 45 per cent of all invasive cancers detected in this first screened group are small (less than 15mm), which is above the programme’s minimum standard of greater than or equal to 40 per cent. The prognostic outcome of smaller invasive tumours is favourable and as such, it is a programme aim to detect small breast cancers.

The percentage of DCIS as a proportion of all cancers in women screened for the first time has decreased since 2014, but at 21.2 per cent remains higher than the achievable standard of 10 to 20 per cent of cancers detected.

**Table 6: Grade of DCIS 2015-2016**

<table>
<thead>
<tr>
<th>Tumour Grade</th>
<th>First screen*</th>
<th>Subsequent screen*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>7 (13.0%)</td>
<td>13 (9.4%)</td>
<td>20 (10.4%)</td>
</tr>
<tr>
<td>Intermediate</td>
<td>21 (38.9%)</td>
<td>44 (31.7%)</td>
<td>65 (33.7%)</td>
</tr>
<tr>
<td>High</td>
<td>26 (48.1%)</td>
<td>82 (59.0%)</td>
<td>108 (56.0%)</td>
</tr>
<tr>
<td>Total</td>
<td>54 (100%)</td>
<td>139 (100%)</td>
<td>193 (100%)</td>
</tr>
</tbody>
</table>

* 1 initial and 7 subsequent DCIS cases had grade “not assessable”
The invasive cancer detection rates are well above the required standards.

Cancer detection rate of 9.51 per 1,000 exceeded the standard of ≥7 in initial women.
Among women attending for subsequent screening, the re-call rate is much lower at 2.8 per cent, which is within the programme standard of less than five per cent (Table 8). Over half of invasive cancers detected amongst these women are less than 15mm. The detection rate of DCIS among women attending for subsequent screening was high in 2015 but has decreased since 2014. The rate of benign open biopsy is within the programme standards for women at subsequent screening (standard is less than two). The SDR is above the expected standard for both first screening and subsequent screening.

### Screening outcome by age group

In women screened both for the first time and for a subsequent time, the overall cancer detection rate rises with increasing age, reflecting the fact that increasing age is an important risk factor for breast cancer. However, the small number of women over 65 screened for the first time distorts rates in this age group (Tables 9 & 10).

Benign open biopsy rates are highest among women aged 55 to 59 screened for the first time (Table 9). For women aged 50 to 64 years, the percentage recalled, benign open biopsy rates and cancer detection rates are higher in those attending for their first BreastCheck mammogram.

#### Table 8: Screening quality: Subsequent screen

<table>
<thead>
<tr>
<th>Performance parameter</th>
<th>2015</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of women returning for subsequent screen</td>
<td>118,579</td>
<td></td>
</tr>
<tr>
<td>Number of women re-called for assessment</td>
<td>3,316</td>
<td></td>
</tr>
<tr>
<td>Re-call rate</td>
<td>2.8%</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Number of benign open biopsies</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Benign open biopsy rate per 1,000 women screened</td>
<td>0.89</td>
<td>&lt;2</td>
</tr>
<tr>
<td>Number of women diagnosed with cancer</td>
<td>727</td>
<td></td>
</tr>
<tr>
<td>Cancer detection rate per 1,000 women screened</td>
<td>6.13</td>
<td>≥3.5</td>
</tr>
<tr>
<td>Number of women with ductal carcinoma in situ (DCIS)</td>
<td>146</td>
<td></td>
</tr>
<tr>
<td>Pure DCIS detection rate per 1,000 women screened</td>
<td>1.23</td>
<td></td>
</tr>
<tr>
<td>Number of women diagnosed with DCIS as % of all women diagnosed with cancer*</td>
<td>20.1%</td>
<td>10-20%</td>
</tr>
<tr>
<td>Number of women diagnosed with invasive cancer</td>
<td>581</td>
<td></td>
</tr>
<tr>
<td>Invasive cancer detection rate per 1,000 women screened</td>
<td>4.90</td>
<td></td>
</tr>
<tr>
<td>Number of women with invasive cancers &lt;15mm</td>
<td>306</td>
<td></td>
</tr>
<tr>
<td>Number of women with invasive cancers &lt;15 mm as % of all women with invasive cancers</td>
<td>52.7%</td>
<td>≥40%</td>
</tr>
<tr>
<td>Standardised detection ratio</td>
<td>1.30</td>
<td>&gt;0.75</td>
</tr>
</tbody>
</table>

* See Table 6 for details of DCIS grade
Table 9: Screening outcome: First screen by age group 2015-2016

<table>
<thead>
<tr>
<th>Performance parameter</th>
<th>50-54</th>
<th>55-59</th>
<th>60-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of women screened</td>
<td>24,621</td>
<td>1,607</td>
<td>891</td>
<td>46</td>
</tr>
<tr>
<td>Percentage of women re-called for assessment</td>
<td>9.2%</td>
<td>9.7%</td>
<td>8.8%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Benign open biopsy rate per 1,000 women screened</td>
<td>4.79</td>
<td>5.60</td>
<td>1.12</td>
<td>N/A*</td>
</tr>
<tr>
<td>Overall cancer detection rate per 1,000 women screened</td>
<td>9.18</td>
<td>13.69</td>
<td>12.35</td>
<td>N/A*</td>
</tr>
</tbody>
</table>

* Rate not reliable due to small numbers

Table 10: Screening outcome: Subsequent screen by age group 2015-2016

<table>
<thead>
<tr>
<th>Performance parameter</th>
<th>50-54</th>
<th>55-59</th>
<th>60-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of women screened</td>
<td>28,108</td>
<td>48,661</td>
<td>40,894</td>
<td>912</td>
</tr>
<tr>
<td>Percentage of women re-called for assessment</td>
<td>3.2%</td>
<td>2.7%</td>
<td>2.7%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Benign open biopsy rate per 1,000 women screened</td>
<td>1.03</td>
<td>0.84</td>
<td>0.86</td>
<td>0.0</td>
</tr>
<tr>
<td>Overall cancer detection rate per 1,000 women screened</td>
<td>4.91</td>
<td>5.77</td>
<td>7.34</td>
<td>8.77</td>
</tr>
</tbody>
</table>

Cancers with non-operative diagnosis 2015-2016

Over 93 per cent and over 97 per cent of first screened and subsequently screened women with cancer respectively were diagnosed by core biopsy or fine needle aspiration performed by radiologists at the assessment clinic, prior to any surgery (Figure 4). This is well above the standard of greater than or equal to 70 per cent. A non-operative diagnosis means that a woman will know her diagnosis prior to any surgical intervention and can plan her surgical treatment in advance with the breast cancer surgeon. This has been an important feature of BreastCheck since its inception, highlighting the quality and expertise of both the radiology and pathology functions of the programme.

The overall cancer detection rate rises with increasing age
BreastCheck Women’s Charter

BreastCheck seeks to achieve or surpass all standards outlined in the programme’s Women’s Charter, which is underpinned by the Guidelines for Quality Assurance in Mammography Screening, 4th Edition. The programme performed well against the majority of commitments identified in the charter during 2015.

Most women received seven days’ notice of an appointment and received their mammogram results within three weeks. Over 96 per cent of women re-called for assessment following a screening mammogram were offered an assessment appointment within two weeks of an abnormal mammogram (Table 11). The percentage of women with cancer offered hospital admission within three weeks of diagnosis has risen in recent years and is now above the standard of 90 per cent.

There are some opportunities for improvement, with the percentage of women re-invited within 24 months of invitation at previous rounds at 63.5 per cent, which is below the programme target of 90 per cent. However, the percentage of women re-invited for screening within 27 months of invitation at previous round is 94.4 per cent highlighting that most women are re-invited within or shortly after the 24 month standard. The proportion of eligible women invited for screening within two years of becoming known to the programme is 92.1 per cent, which represents an improvement from 90 per cent in 2014 and is above the programme standard of 90 per cent.

Figure 4: Cancers with non-operative diagnosis 2015-2016
### Table 11: BreastCheck Women’s Charter parameters

<table>
<thead>
<tr>
<th>Performance parameter</th>
<th>2015</th>
<th>Women's Charter Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women who received 7 days’ notice of appointment</td>
<td>98.6%</td>
<td>≥90%</td>
</tr>
<tr>
<td>Women who were sent results of mammogram within 3 weeks</td>
<td>98.5%</td>
<td>≥90%</td>
</tr>
<tr>
<td>Women offered an appointment for Assessment Clinic within 2 weeks of notification of abnormal mammographic result</td>
<td>96.2%</td>
<td>≥90%</td>
</tr>
<tr>
<td>Women given results from Assessment Clinic within 1 week</td>
<td>94.7%</td>
<td>≥90%</td>
</tr>
<tr>
<td>Women offered hospital admission for treatment within 3 weeks of diagnosis of breast cancer</td>
<td>93.1%</td>
<td>≥90%</td>
</tr>
<tr>
<td>Women re-invited for screening within 24 months of invitation at previous round</td>
<td>63.5%</td>
<td>≥90%</td>
</tr>
<tr>
<td>Women re-invited for screening within 27 months of invitation at previous round</td>
<td>94.4%</td>
<td></td>
</tr>
<tr>
<td>Women eligible for screening invited for screening within 2 years of becoming known to the programme</td>
<td>92.1%</td>
<td>≥90%</td>
</tr>
</tbody>
</table>
Conclusion

The publication of this report formally concludes the highlights of BreastCheck’s 16th year in operation. There is much to celebrate with a number of key important outcomes delivered. In summary, from 1 January and 31 December 2015:

- 198,986 women were invited by BreastCheck for screening. Of those, 195,145 were eligible and 145,822 women attended for a mammogram. The eligible uptake rate at 74.7 per cent surpassed the programme standard of 70 per cent.

- Over 145,000 women responded to their invitation to screening. This is the highest number ever screened by BreastCheck based on a single year of invitation.

- 986 cancers were detected. This represents the highest number of both total cases and invasive cases diagnosed in any year since the inception of BreastCheck.

- 399 small invasive cancers (<15mm) were detected and treated surgically. This is the highest number in any single year since BreastCheck began screening.

- The programme was extended to the 65 year old age group for the first time with high uptake and over 950 women screened.

The programme remains focused on ensuring that screening quality is paramount in the delivery of the service and that performance against the Women’s Charter parameters remains high. Looking forward, the Programme teams continue to look forward to the continued roll-out of age extension, as well as increased focus on the importance of screening for the population to ensure continued high uptake levels.
References


BowelScreen Programme Report Round One 2012-2015