

BreastScreen Aotearoa
INDEPENDENT MONITORING REPORT TO JUNE 2004

Women screened between 1 January and 30 June 2004

September 2005

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Foreword: BSA Monitoring Process

This brief foreword describes the process used to produce these reports, and has a concluding comment that is relevant to this report in particular.

Data are sent monthly from the six BreastScreen Aotearoa lead providers to the New Zealand Health Information Service of the Ministry of Health (NZHIS). The data are checked at NZHIS, amalgamated into a single file, and sent to the National Screening Unit (NSU). The NSU runs further checks and encrypts the National Health Index (NHI) numbers. The data and tabulations of performance indicators for this report were produced within NSU according to their specifications. The draft report was peer reviewed by Public Health Intelligence (PHI) and presented to the BSA Advisory Group. Their comments and tables were sent to Prof. Richard Taylor at the Faculty of Health Sciences, University of Queensland (Australia) and the epidemiologist on the BSA Advisory Group. Prof. Taylor added explanatory text and commentary to the report and calculated confidence intervals (CI) by Lead Provider. This was again reviewed by the BSA Advisory Group on 15 August 2005, circulated for comments to Lead Providers, and checked for factual errors prior to publication.

Executive Summary

This six-month report relates to women screened between 1 January to 30 June 2004, and includes data on assessment carried out for these women following their screening mammograms. Cumulative data are presented for the two-year period (representing a full screening round with two-yearly screening) from 1 July 2002 to 30 June 2004. Treatment data for women diagnosed with breast cancer at screening between 1 October 2001 until 30 September 2003 is also included in this report. Information on treatment is less recent because of the time it takes for treatment to be completed, and for the data to be collected.

In the six months from 1 January to 30 June 2004, 57,808 women were screened in BreastScreen Aotearoa. This represents 18.1% of eligible women, according to the population projections from the 2001 Census. It is an increase by 2% over the coverage of eligible population in the previous reporting period (16.1%), which lifted the biennial rate to 64.6% (compared to 62.3%). This is a commendable performance, and continuation of this biannual rate should lift participation to over 70%. All services have shown increases, but some are performing better than others.

The majority of women (>74%) screened in BreastScreen Aotearoa are now undergoing subsequent (incident) screening, having already been screened at least once previously since the start of the BreastScreen Aotearoa programme. Screens in a mammography screening program are better referred to as initial and subsequent, rather than prevalent and incident, because a first screen in the program may not be a prevalent screen if it is possible to obtain mammography screens elsewhere. As a screening program matures, the initial screens decline as a proportion of total screens. The relative proportion of initial and subsequent screens influences results such as cancer detection rates, since there is higher detection in true prevalent screens. The data are similar to those for the previous period.

The 6-monthly coverage for three BSA eligible age groups (50-54, 55-59 and 60-64) has increased compared to the previous period, and this has resulted in an increase in the biennial rate (to 63.0%, 64.9% and 66.4% accordingly). There is some variation between lead providers.

The biennial rate has increased in each major ethnic group compared to the previous period although the disparity of Maori and Pacific Islander (around 45%) compared to others (67%) is still evident. There are very few women in the un-stated category. Coverage of Maori women has increased slightly since the previous report (both six-monthly data and biennial rates). Coverage of Pacific Island women has declined slightly over the six month period compared to the previous report, yet the biennial rates appear to have increased compared with the previous report. There is a variation between lead providers.

Coverage of other women has increased since the previous report (both six monthly data and biennial rates) with a variation between lead providers.

The target of 85% women to be re-screened within 27 months is being met overall, although the 2-year data shows lower rates presumably because of lower re-screen rates in the early part of this period. This is a very commendable result, with only one lead provider being 5% below target. Both 6-monthly and 2-yearly target of 75% women to be re-screened within 20-24 months is also being met over all, although some lead providers are under target.

In the 6-month period from January to June 2004 the overall percentage of PPV (8.7%) for initial screens was almost at the target value of $\geq 9\%$, but there was variation among lead providers with half the services $<9\%$. For subsequent screens, the overall percentage (14.8%) was higher than the target value of 9% , and this was the case for all lead providers. In the last 2 years the overall BSA PPV (9.1%) for initial screens was at the target value of $\geq 9\%$, but there was variation among lead providers with some of the services $<9\%$. For subsequent screens, the overall BSA positive predictive value (15.1%) and all lead providers PPVs are higher than the target value of 9% .

Specificity of overall BSA screening was 92% for initial screens both in the last 6 months and in the last 2 years, which was close to the target of $>93\%$. Nevertheless, there were variations among lead providers. For subsequent screens, the overall specificity (97.4%) and the specificity for each provider was $>93\%$. Specificities were similar to those reported in the previous period.

Only two services provided Treatment data presented in Section 4. For the 2 services reporting, the proportion of invasive cancers $\leq 10\text{m}$ (23%) is less than the target of $\geq 25\%$ for initial screens and on the target of $\geq 30\%$ for subsequent screens (34%). The proportion of invasive cancers $< 15\text{mm}$ (36%) is also less than the target of $>50\%$ for initial screens and on the target of $>50\%$ for subsequent screens (57%). Treatment data collection needs improvement.

For two indicators of timeliness reported in Section 5, most Lead Providers are below the target: (1) percentage of women receiving a needle biopsy within 5 working days and (2) open biopsy within 15 working days. For the three Lead Providers reporting on the 5th indicator of timeliness, the percentage of women receiving surgical treatment within 20 working days of receiving diagnostic results was 65.7% , which was below the target of 90% . Data collection needs to be improved.

For the last 6 months and last 2 years the percentage of women offered a first assessment appointment within 15 working days was 88% and 90% respectively, which is close to the target of 90% . Some lead providers are below target. However, the results in the current reporting period appear to be better than in the previous period.

The proportion of women notified of screening results within 10 working days (98%) was above the target of 95% both in the last 6 months and last 2 years. One lead provider was below target. Statistical analysis indicates that a few of the differences between providers are significant. These results are similar to the previous reporting period.

Recommendations

1. Some individual Lead Provider performance indicators significantly vary from the targets. These indicators include coverage in two age groups, coverage by ethnicity, referral to assessment rate for initial screens, benign biopsy weight and three indicators of the provision of appropriate and acceptable service (percentage of women receiving needle biopsy within 5 working days, having open biopsy within 15 working days and surgical treatment within 20 working days of receiving diagnostic results). The NSU will follow up with those Lead Providers where deviations from the target are statistically significant and will review Lead Provider responses at the 6-monthly site visits.
2. Statistical analysis of the BSA performance indicators has revealed variations and a few significant differences between Lead Providers in the following indicators: false positive rates, positive predictive value of the screening mammogram, pre-operative diagnosis rate, specificity for initial screens, and early detection of DCIS or invasive cancers. The NSU will monitor over time and perform further statistical analysis of the indicators where continuing variations and significant differences between Lead Providers are observed.
3. The overall BSA percentage of benign open biopsies weighing < 30 g and the values reported for this indicator by individual Lead Providers were lower than the target of >90%. Differences in this indicator between some Lead Providers are significant. This indicator has changed since the last period (80% <20g). Discussion is required on this indicator concerning data validity, derivation of targets and statistical analysis. NSU will review this indicator with the BSA Advisory Group and Independent Monitoring Group.
4. There is insufficient data for interpretation of treatment indicators, as only two Lead Providers submitted treatment data for this report in time. Treatment data collection requires considerable improvement.

Abbreviations

Lead Providers listed in the tables of this document:

BSAN = BreastScreen Auckland and North

BSM = BreastScreen Midland

BSCtoC= BreastScreen Coast to Coast

BSC= BreastScreen Central

BSS = BreastScreen South

BSHC = BreastScreen HealthCare

1. Coverage

1.a. Coverage – overall

Description:

The number and percentage of women 50-64 years who have had a screening mammogram in the programme, based on the estimated eligible population.

Target: > 70%

Table 1a.1. Overall coverage of eligible women.

Lead Provider	Eligible Population*	Last 6 Months				Last 2 Years			
		Jan 2004 to Jun 2004				Jul 2002 to Jun 2004			
		Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI	Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI
BSAN	110410	16790	15.2%	15.00%	15.42%	60532	54.8%	54.53%	55.12%
BSM	49890	8515	17.1%	16.74%	17.40%	31679	63.5%	63.08%	63.92%
BSCtoC	43025	7942	18.5%	18.09%	18.83%	26516	61.6%	61.17%	62.09%
BSC	34830	6472	18.6%	18.17%	18.99%	21578	62.0%	61.44%	62.46%
BSS	57070	13601	23.8%	23.48%	24.18%	48434	84.9%	84.57%	85.16%
BSHC	23400	4488	19.2%	18.68%	19.68%	17054	72.9%	72.31%	73.45%
BSA Total	318625	57808	18.1%	18.01%	18.28%	205793	64.6%	64.42%	64.75%

* Eligible population is based on the 2003 projected population

The overall coverage in the January-June 2004 period increased to 18.1% (compared with 16.1% in previous period), which lifted the 2 year biennial rate to 64.6% (compared to 62.3%). This is a commendable performance, and continuation of this bi-annual rate should lift participation to over 70%. The current period coverage rate is based on the projected 2003 eligible populations (see Appendix A), which remained the same as those used in the previous reporting period July-December 2003. Population numbers are updated for every two 6-monthly reporting periods. The next update will be for the reporting period starting from 1 July 2004. All services have shown increases, but some are performing better than others.

Table 1a.2. The percentage of screens which are Initial (Prevalent) and Subsequent (Incident).

Lead Provider	Jul 2002 to Jun 2004								
	Initial (Prevalent) Screens				Subsequent (Incident) Screens				Total Screens
	Number of Women Screened	Initial (Prevalent) %	Lower 95% CI	Upper 95% CI	Number of Women Screened	Subsequent (Incident) %	Lower 95% CI	Upper 95% CI	
BSAN	16906	27.9%	27.57%	28.29%	43626	72.1%	71.71%	72.43%	60532
BSM	7212	22.8%	22.30%	23.23%	24467	77.2%	76.77%	77.70%	31679
BSCtoC	6592	24.9%	24.34%	25.38%	19924	75.1%	74.62%	75.66%	26516
BSC	5795	26.9%	26.26%	27.45%	15783	73.1%	72.55%	73.74%	21578
BSS	11285	23.3%	22.92%	23.68%	37149	76.7%	76.32%	77.08%	48434
BSHC	3762	22.1%	21.44%	22.68%	13292	77.9%	77.32%	78.56%	17054
BSA Total	51552	25.1%	24.86%	25.24%	154241	74.9%	74.76%	75.14%	205793

Screens in a mammography screening program are better referred to as initial and subsequent, rather than prevalent and incident, because a first screen in the program may not be a prevalent screen if it is possible to obtain mammography screens elsewhere. As a screening program matures the initial screens decline as a proportion of total screens. The relative proportion of initial and subsequent screens influences results, such as cancer detection rates, since there is higher detection in true prevalent screens. The data are similar to those for the previous period.

Table 1a.3. The percentage of Women Screened by Type of Screening Unit.

Lead Provider	Jul 2002 to Jun 2004								Total Screens
	Fixed Site				Mobile Site				
	Number of Women Screened	Fixed %	Lower 95% CI	Upper 95% CI	Number of Women Screened	Mobile %	Lower 95% CI	Upper 95% CI	
BSAN	53086	87.7%	87.44%	87.96%	7446	12.3%	12.04%	12.56%	60532
BSM	23362	73.7%	73.26%	74.23%	8317	26.3%	25.77%	26.74%	31679
BSCtoC	20735	78.2%	77.70%	78.70%	5781	21.8%	21.30%	22.30%	26516
BSC	14641	67.9%	67.23%	68.47%	6937	32.1%	31.53%	32.77%	21578
BSS	41968	86.6%	86.35%	86.95%	6466	13.4%	13.05%	13.65%	48434
BSHC	11518	67.5%	66.84%	68.24%	5536	32.5%	31.76%	33.16%	17054
BSA Total	165310	80.3%	80.16%	80.50%	40483	19.7%	19.50%	19.84%	205793

The proportion of screens performed by mobile units depends on the geography and policies of various services. The proportions are similar to those in for the previous period (20% overall).

Fig. 1a. Overall Number of Screens by Month and Cumulative 24 Month Total.

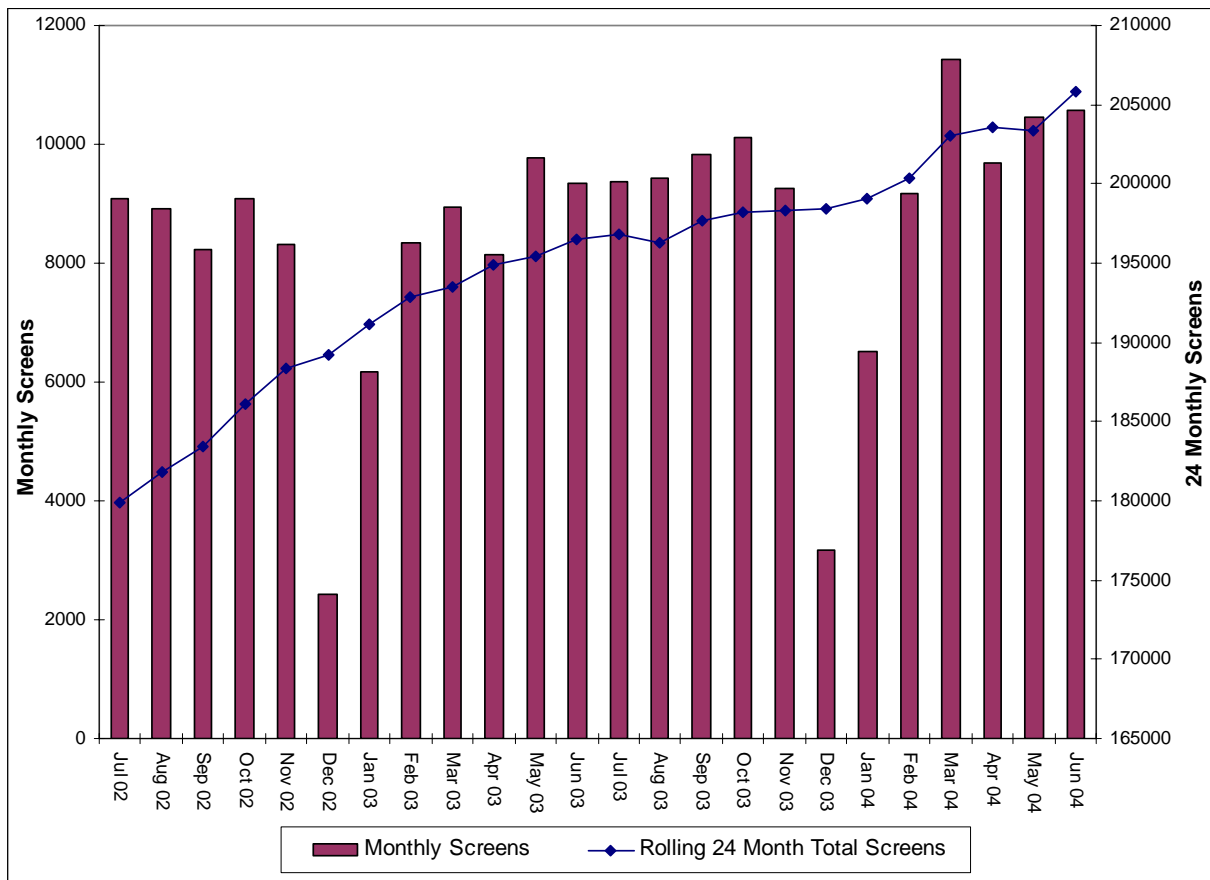


Figure 1a illustrates the distribution of the number of screens undertaken each month in the 24 month period from July 2002 until Jun 2004, with the cumulative (rolling) total superimposed.

The monthly variation in screening numbers shows similar pattern to previous years with lesser numbers in December and January than other months. This is presumably related to service factors (equipment maintenance, staff leave, etc) and client factors (vacation period).

Table 1a.4. Coverage of 50-54 year old eligible women.

Lead Provider	Eligible Population*	Last 6 Months				Last 2 Years			
		Jan 2004 to Jun 2004		Lower 95% CI	Upper 95% CI	Jul 2002 to Jun 2004			
		Number of Women Screened	Coverage %			Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI
BSAN	43810	6086	13.9%	13.57%	14.22%	23033	52.6%	52.11%	53.04%
BSM	18900	2867	15.2%	14.66%	15.68%	11336	60.0%	59.28%	60.68%
BSCtoC	16525	2853	17.3%	16.69%	17.84%	9656	58.4%	57.68%	59.18%
BSC	13690	2465	18.0%	17.36%	18.65%	8056	58.8%	58.02%	59.67%
BSS	22240	5213	23.4%	22.88%	24.00%	19534	87.8%	87.40%	88.26%
BSHC	8950	1551	17.3%	16.55%	18.11%	6603	73.8%	72.87%	74.69%
BSA Total	124115	21035	16.9%	16.74%	17.16%	78218	63.0%	62.75%	63.29%

* Eligible population is based on the 2003 projected population

The six monthly coverage (16.9%) has increased compared to the previous period, and this has resulted in an increase in the biennial rate (to 63.0%). However, denominators are the same as the previous report.

Table 1a.5. Coverage of 55-59 year old eligible women.

Lead Provider	Eligible Population*	Last 6 Months				Last 2 Years			
		Jan 2004 to Jun 2004				Jul 2002 to Jun 2004			
		Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI	Number of Women Screened	Lower 95% CI	Upper 95% CI	Coverage % Upper 95% CI
BSAN	37640	6111	16.2%	15.86%	16.61%	21004	55.8%	55.30%	56.30%
BSM	16800	2923	17.4%	16.83%	17.97%	10517	62.6%	61.87%	63.33%
BSCtoC	14365	2833	19.7%	19.07%	20.37%	9157	63.7%	62.96%	64.53%
BSC	11820	2268	19.2%	18.48%	19.90%	7514	63.6%	62.70%	64.44%
BSS	19300	4780	24.8%	24.16%	25.38%	16169	83.8%	83.26%	84.30%
BSHC	7850	1576	20.1%	19.19%	20.96%	5585	71.1%	70.14%	72.15%
BSA Total	107775	20491	19.0%	18.78%	19.25%	69946	64.9%	64.62%	65.18%

* Eligible population is based on the 2003 projected population

The six monthly coverage (19.0%) has increased compared to the previous period, and this has resulted in an increase in the biennial rate (to 64.9%). There is some variation between lead providers. However, denominators are the same as the previous report.

Table 1a.6. Coverage of 60-64 year old eligible women.

Lead Provider	Eligible Population*	Last 6 Months				Last 2 Years			
		Jan 2004 to Jun 2004				Jul 2002 to Jun 2004			
		Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI	Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI
BSAN	28960	4593	15.9%	15.44%	16.28%	16495	57.0%	56.39%	57.53%
BSM	14190	2725	19.2%	18.56%	19.85%	9826	69.2%	68.49%	70.01%
BSCtoC	12135	2256	18.6%	17.90%	19.28%	7703	63.5%	62.62%	64.33%
BSC	9320	1739	18.7%	17.87%	19.45%	6008	64.5%	63.49%	65.44%
BSS	15530	3608	23.2%	22.57%	23.90%	12731	82.0%	81.37%	82.58%
BSHC	6600	1361	20.6%	19.65%	21.60%	4866	73.7%	72.67%	74.79%
BSA Total	86735	16282	18.8%	18.51%	19.03%	57629	66.4%	66.13%	66.76%

* Eligible population is based on the 2003 projected population

The six monthly coverage (18.8%) has increased compared to the previous period, and this has resulted in an increase in the biennial rate (to 66.4%). There is some variation between lead providers. However, denominators are the same as the previous report.

The biennial rate has increased in each major ethnic group compared to the previous period although the disparity of Maori and Pacific Islander (around 45%) compared to others (67%) is still evident. There are very few women in the un-stated category (see Table 1a.7 on the next page).

Table 1a.7. Coverage by Ethnicity, Summary for last 2 years.

Lead Provider	Jul 2002 to Jun 2004												
	Maori				Pacific				Other				Not Stated (% of Women Screened)
	Number of Women Screened	Coverage %	Coverage % lower 95% CI	Coverage % Upper 95% CI	Number of Women Screened	Coverage %	Coverage % Upper 95% CI	Coverage % Upper 95% CI %	Number of Women Screened	Coverage %	Coverage % lower 95% CI	Coverage % Upper 95% CI	
BSAN	4772	50.9%	49.92%	51.94%	3699	45.4%	44.36%	46.52%	51572	55.5%	55.20%	55.84%	1%
BSM	2977	40.8%	39.65%	41.91%	258	48.7%	44.42%	52.93%	28429	67.5%	67.10%	67.99%	0%
BSCtoC	2116	37.0%	35.71%	38.21%	145	35.8%	31.13%	40.47%	23918	64.8%	64.33%	65.31%	1%
BSC	1135	45.5%	43.54%	47.44%	558	33.4%	31.15%	35.68%	19853	64.8%	64.28%	65.35%	0%
BSS	1450	72.1%	70.18%	74.10%	265	69.7%	65.12%	74.36%	46407	84.9%	84.57%	85.17%	1%
BSHC	474	53.9%	50.57%	57.16%	57	49.6%	40.43%	58.70%	16334	73.0%	72.37%	73.53%	1%
BSA Total	12924	46.5%	45.94%	47.11%	4982	44.3%	43.41%	45.24%	186513	66.7%	66.54%	66.89%	1%

Table 1a.8. Coverage of Maori women.

Lead Provider	Eligible Population*	Last 6 Months				Last 2 Years			
		Jan 2004 to Jun 2004				Jul 2002 to Jun 2004			
		Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI	Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI
BSAN	9370	1455	15.5%	14.79%	16.26%	4772	50.9%	49.92%	51.94%
BSM	7300	861	11.8%	11.05%	12.53%	2977	40.8%	39.65%	41.91%
BSCtoC	5725	676	11.8%	10.97%	12.64%	2116	37.0%	35.71%	38.21%
BSC	2495	357	14.3%	12.93%	15.68%	1135	45.5%	43.54%	47.44%
BSS	2010	383	19.1%	17.34%	20.77%	1450	72.1%	70.18%	74.10%
BSHC	880	145	16.5%	14.03%	18.93%	474	53.9%	50.57%	57.16%
BSA Total	27780	3877	14.0%	13.55%	14.36%	12924	46.5%	45.94%	47.11%

* Eligible population is based on the 2003 projected population

Coverage of Maori women has increased slightly since the previous report (both six monthly data and biennial rates) with a variation between lead providers. However, denominators are unchanged compared with the previous report.

Table 1a.9. Coverage of Pacific women.

Lead Provider	Eligible Population*	Last 6 Months				Last 2 Years			
		Jan 2004 to Jun 2004				Jul 2002 to Jun 2004			
		Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI	Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI
BSAN	8140	938	11.5%	10.83%	12.22%	3699	45.4%	44.36%	46.52%
BSM	530	49	9.2%	6.78%	11.71%	258	48.7%	44.42%	52.93%
BSCtoC	405	51	12.6%	9.36%	15.82%	145	35.8%	31.13%	40.47%
BSC	1670	109	6.5%	5.34%	7.71%	558	33.4%	31.15%	35.68%
BSS	380	80	21.1%	16.95%	25.15%	265	69.7%	65.12%	74.36%
BSHC	115	20	17.4%	10.46%	24.32%	57	49.6%	40.43%	58.70%
BSA Total	11240	1247	11.1%	10.51%	11.67%	4982	44.3%	43.41%	45.24%

Coverage of Pacific Island women has declined slightly over the six month period compared to the previous report yet the biennial rates appear to have increased compared with the previous report. This could occur but requires checking. However, denominators are unchanged compared with the previous report. There is a variation between lead providers.

Table 1a.10. Coverage of Other women.

Lead Provider	Eligible Population*	Last 6 Months				Last 2 Years			
		Jan 2004 to Jun 2004				Jul 2002 to Jun 2004			
		Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI	Number of Women Screened	Coverage %	Lower 95% CI	Upper 95% CI
BSAN	92890	14251	15.3%	15.11%	15.57%	51572	55.5%	55.20%	55.84%
BSM	42090	7600	18.1%	17.69%	18.42%	28429	67.5%	67.10%	67.99%
BSCtoC	36900	7038	19.1%	18.67%	19.47%	23918	64.8%	64.33%	65.31%
BSC	30630	6001	19.6%	19.15%	20.04%	19853	64.8%	64.28%	65.35%
BSS	54680	13037	23.8%	23.49%	24.20%	46407	84.9%	84.57%	85.17%
BSHC	22390	4289	19.2%	18.64%	19.67%	16334	73.0%	72.37%	73.53%
BSA Total	279580	52216	18.7%	18.53%	18.82%	186513	66.7%	66.54%	66.89%

Coverage of other women has increased since the previous report (both six monthly data and biennial rates) with a variation between lead providers. However, denominators are unchanged compared with the previous report.

1b. Routine Re-Screening

Description:

The proportion of enrolled eligible women who are re-screened, this measures the acceptability of the programme.

Target:

- > 85% of women who are eligible for rescreen are re-screened, within 27 months;
- > 75% of women who return for a screen are re-screened between 20 to 24 months of their previous screen.

Table 1b.1. Percentage of women eligible for re-screen, who are re-screened within 27 months.

Lead Provider	Last 6 Months					Last 2 Years				
	Jan 2004 to Jun 2004					Jul 2002 to Jun 2004				
	Women re-screened within 27 months	Women eligible for rescreen	Proportion of women re-screened	Lower 95% CI	Upper 95% CI	Women re-screened within 27 months	Women eligible for rescreen	Proportion of women re-screened	Lower 95% CI	Upper 95% CI
BSAN	10956	12898	84.9%	84.33%	85.56%	36868	55427	66.5%	66.12%	66.91%
BSM	4376	5451	80.3%	79.22%	81.34%	20926	34432	60.8%	60.26%	61.29%
BSCtoC	4691	5446	86.1%	85.22%	87.05%	17316	24427	70.9%	70.32%	71.46%
BSC	4013	4770	84.1%	83.09%	85.17%	14491	21579	67.2%	66.53%	67.78%
BSS	7536	8253	91.3%	90.70%	91.92%	33043	49075	67.3%	66.92%	67.75%
BSHC	2696	3058	88.2%	87.02%	89.31%	11475	16491	69.6%	68.88%	70.29%
BSA Total	34268	39876	85.9%	85.60%	86.28%	134119	201431	66.6%	66.38%	66.79%

The last six months data shows that the target of 85% is being met overall; although the 2 year data show lower rates presumably because of lower re-screen rates in the early part of this

period. This is a very commendable result, if the data are correct, with only one lead provider 5% below target.

Table 1b.2. Percentage of women returning for a screen, who are re-screened within 20-24 months.

Lead Provider	Last 6 Months					Last 2 Years				
	Jan 2004 to Jun 2004					Jul 2002 to Jun 2004				
	Number of rescreens within 20-24 months of previous screen	Women re-screened within 27 months	Proportion of women re-screened within 20-24 months	Lower 95% CI	Upper 95% CI	Number of rescreens within 20-24 months of previous screen	Women re-screened within 27 months	Proportion of women re-screened within 20-24 months	Lower 95% CI	Upper 95% CI
BSAN	9027	10956	82.4%	81.68%	83.11%	30415	36868	82.5%	82.11%	82.88%
BSM	3339	4376	76.3%	75.04%	77.56%	14915	20926	71.3%	70.66%	71.89%
BSCtoC	2455	4691	52.3%	50.90%	53.76%	11200	17316	64.7%	63.97%	65.39%
BSC	3346	4013	83.4%	82.23%	84.53%	12671	14491	87.4%	86.90%	87.98%
BSS	6796	7536	90.2%	89.51%	90.85%	28090	33043	85.0%	84.63%	85.40%
BSHC	1565	2696	58.0%	56.19%	59.91%	8256	11475	71.9%	71.13%	72.77%
BSA Total	26528	34268	77.4%	76.97%	77.86%	105547	134119	78.7%	78.48%	78.92%

Both six monthly and 2 yearly data show that the target of 75% is being met over all, although some lead providers are under target.

2. Provision of high quality screening and assessment

2a. Screened women who have no more than four films taken

Description:

The percentage of women who have no more than four films taken, expressed as a percentage of women screened

Target:

>80% of women screened have four or less films taken.

Table 2a.1. Percentage of women having 4 films or fewer by Lead Provider, last 6 months.

Lead Provider	Jan 2004 to Jun 2004									
	Fixed					Mobile				
	Women having 4 films or fewer	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI	Women having 4 films or fewer	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI
BSAN	11598	14403	80.5%	79.88%	81.17%	1821	2387	76.3%	74.58%	77.99%
BSM	6001	6626	90.6%	89.86%	91.27%	1571	1889	83.2%	81.48%	84.85%
BSCtoC	5657	6444	87.8%	86.99%	88.59%	1165	1498	77.8%	75.66%	79.88%
BSC	3514	4440	79.1%	77.95%	80.34%	1639	2032	80.7%	78.94%	82.38%
BSS	9948	11795	84.3%	83.68%	85.00%	1596	1806	88.4%	86.89%	89.85%
BSHC	2343	2823	83.0%	81.61%	84.38%	1514	1665	90.9%	89.55%	92.31%
BSA Total	39061	46531	83.9%	83.61%	84.28%	9306	11277	82.5%	81.82%	83.22%

The overall percentage and all lead providers reached target of 80% for fixed sites, but for some lead providers the percentage for mobile sites was slightly below target, although the overall result reached target. These results are similar to the previous period.

Table 2a.2. Percentage of women having 4 films or less by Lead Provider, last 2 years.

Lead Provider	Jul 2002 to Jun 2004									
	Fixed					Mobile				
	Women having 4 films or fewer	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI	Women having 4 films or fewer	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI
BSAN	44072	53086	83.0%	82.70%	83.34%	5761	7446	77.4%	76.42%	78.32%
BSM	20869	23362	89.3%	88.93%	89.72%	6820	8317	82.0%	81.18%	82.83%
BSCtoC	18088	20735	87.2%	86.78%	87.69%	4640	5781	80.3%	79.24%	81.29%
BSC	11208	14641	76.6%	75.87%	77.24%	5432	6937	78.3%	77.33%	79.27%
BSS	35258	41968	84.0%	83.66%	84.36%	5516	6466	85.3%	84.44%	86.17%
BSHC	9608	11518	83.4%	82.74%	84.10%	5015	5536	90.6%	89.82%	91.36%
BSA Total	139103	165310	84.1%	83.97%	84.32%	33184	40483	82.0%	81.60%	82.34%

The overall percentage and all lead providers reached target of 80% for fixed sites, but for some lead providers the percentage for mobile sites was slightly below target, although the overall result reached target. These results are similar to the previous period.

2b. Technical Recall Rate

Description:

The number of women who are recalled to a screening unit (either fixed or mobile) for further films to complete their screening episode, expressed as a percentage of all women screened.

Target:

Mobile <3%

Fixed <0.5%

Table 2b.1. Women having technical recall as a percentage of women screened, last 6 months.

Lead Provider	Jan 2004 to Jun 2004									
	Fixed					Mobile				
	Women having Technical Recall	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI	Women having Technical Recall	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI
BSAN	29	14403	0.20%	0.14%	0.26%	133	2387	5.57%	4.82%	6.37%
BSM	10	6626	0.15%	0.08%	0.23%	61	1889	3.23%	2.59%	3.92%
BSCtoC	7	6444	0.11%	0.05%	0.19%	50	1498	3.34%	2.60%	4.14%
BSC	18	4440	0.41%	0.25%	0.56%	59	2032	2.90%	2.31%	3.54%
BSS	40	11795	0.34%	0.25%	0.43%	31	1806	1.72%	1.22%	2.21%
BSHC	4	2823	0.14%	0.04%	0.28%	66	1665	3.96%	3.18%	4.74%
BSA Total	108	46531	0.23%	0.19%	0.27%	400	11277	3.55%	3.26%	3.84%

The overall percentage, and all lead providers reached target of <0.5% for fixed sites, but for mobile sites the overall percentage was over target of <3% at 3.5%, with some lead providers over 4%. These results are similar to the previous period. Statistical analysis would be required to determine where differences between providers and over time were significant.

Table 2b.2. Women having technical recall as a percentage of Women screened, last 2 years.

Lead Provider	Jul 2002 to Jun 2004									
	Fixed					Mobile				
	Women having Technical Recall	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI	Women having Technical Recall	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI
BSAN	106	53086	0.20%	0.17%	0.23%	377	7446	5.06%	4.65%	5.48%
BSM	29	23362	0.12%	0.09%	0.16%	280	8317	3.37%	3.04%	3.69%
BSCtoC	29	20735	0.14%	0.10%	0.18%	325	5781	5.62%	5.12%	6.12%
BSC	103	14641	0.70%	0.59%	0.82%	265	6937	3.82%	3.45%	4.21%
BSS	170	41968	0.41%	0.36%	0.46%	150	6466	2.32%	2.01%	2.63%
BSHC	36	11518	0.31%	0.23%	0.40%	127	5536	2.29%	1.97%	2.64%
BSA Total	473	165310	0.29%	0.26%	0.31%	1524	40483	3.76%	3.61%	3.92%

The overall percentage, and all lead providers (but one) reached the target of <0.5% for fixed sites, but for mobile sites the overall percentage was over target of <3% at 3.8%, with some lead

providers over 4%. These results are similar to the previous period. Statistical analysis indicates that some of the differences between providers are significant.

2c. Technical Reject Rate

Description:

The number of films rejected as a percentage of the number of films taken, calculated separately for women who are screened in a fixed unit or a mobile site

Target: <3%

Table 2c.1. Rejected films as a percentage of total films taken, last 6 months.

Lead Provider	Jan 2004 to Jun 2004									
	Fixed					Mobile				
	Total Films Rejected	Total Films Taken	% of Total Films	Lower 95% CI	Upper 95% CI	Total Films Rejected	Total Films Taken	% of Total Films	Lower 95% CI	Upper 95% CI
BSAN	695	62099	1.12%	1.05%	1.19%	111	10490	1.06%	0.90%	1.23%
BSM	220	27593	0.80%	0.71%	0.89%	46	8066	0.57%	0.43%	0.71%
BSCtoC	296	26910	1.10%	1.00%	1.20%	64	6569	0.97%	0.78%	1.17%
BSC	257	19284	1.33%	1.20%	1.47%	7	8714	0.08%	0.03%	0.14%
BSS	833	49859	1.67%	1.58%	1.76%	39	7613	0.51%	0.38%	0.66%
BSHC	155	12051	1.29%	1.12%	1.46%	3	6917	0.04%	0.01%	0.09%
BSA Total	2456	197796	1.24%	1.20%	1.28%	270	48369	0.56%	0.50%	0.61%

The overall percentage, and all lead providers reached the target of <3% for fixed and mobile sites. These results are similar to the previous period.

Table 2c.2. Rejected films as a percentage of total films taken, last 2 years.

Lead Provider	Jul 2002 to Jun 2004									
	Fixed					Mobile				
	Total Films Rejected	Total Films Taken	% of Total Films	Lower 95% CI	Upper 95% CI	Total Films Rejected	Total Films Taken	% of Total Films	Lower 95% CI	Upper 95% CI
BSAN	2581	225906	1.1%	1.11%	1.18%	246	32474	0.8%	0.68%	0.84%
BSM	672	97873	0.7%	0.64%	0.73%	193	35877	0.5%	0.47%	0.60%
BSCtoC	1028	86771	1.2%	1.12%	1.25%	430	25064	1.7%	1.58%	1.85%
BSC	763	64148	1.2%	1.12%	1.26%	19	30171	0.1%	0.04%	0.09%
BSS	2180	178090	1.2%	1.18%	1.27%	193	27631	0.7%	0.62%	0.78%
BSHC	658	49293	1.3%	1.25%	1.42%	17	22995	0.1%	0.05%	0.10%
BSA Total	7882	702081	1.1%	1.10%	1.14%	1098	174212	0.6%	0.60%	0.66%

The overall percentage, and all lead providers reached the target of <3% for fixed and mobile sites. These results are similar to the previous period.

2d. Assessment Rate

Description:

Number of women referred to assessment as a percentage of the number screened.

Target:

Initial (Prevalent) screens: expected value <10% and desired value is <7%.

Subsequent (Incident) screens: expected value <5% and desired value is <4%.

Table 2d.1. Referral to Assessment as a percentage of women screened, last 6 months.

Lead Provider	Jan 2004 to Jun 2004									
	Initial (Prevalent)					Subsequent (Incident)				
	Referral to Assessment	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI	Referral to Assessment	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI
BSAN	268	3811	7.0%	6.4%	7.7%	360	12979	2.8%	2.5%	3.0%
BSM	180	1832	9.8%	8.7%	11.0%	295	6683	4.4%	4.0%	4.8%
BSCtoC	130	1661	7.8%	6.7%	8.9%	150	6281	2.4%	2.1%	2.7%
BSC	174	1522	11.4%	10.1%	12.8%	176	4950	3.6%	3.1%	4.0%
BSS	281	2776	10.1%	9.2%	11.1%	367	10825	3.4%	3.1%	3.7%
BSHC	71	775	9.2%	7.5%	10.8%	81	3713	2.2%	1.8%	2.6%
BSA Total	1104	12377	8.9%	8.5%	9.3%	1429	45431	3.1%	3.0%	3.3%

For initial screens the overall percentage was less than the expected value of <10%, but more than the desired value of <7%. There was variation among lead providers with only one service definitely above 10%. The percentages for initial screens reflect the proportion of true prevalent screens in each service, as well as other factors. For subsequent screens, the overall percentage was less than the desired value of <4%, which was the case for all lead providers, except one (which was less than the expected value of <5%). Percentages are similar to the previous period. Statistical analysis indicates that some of the differences between providers are significant.

Table 2d.2. Referral to Assessment as a percentage of Women screened, last 2 years.

Lead Provider	Jul 2002 to Jun 2004									
	Initial (Prevalent)					Subsequent (Incident)				
	Referral to Assessment	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI	Referral to Assessment	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI
BSAN	1387	16906	8.2%	7.9%	8.6%	1484	43626	3.4%	3.3%	3.5%
BSM	607	7212	8.4%	7.9%	9.0%	959	24467	3.9%	3.7%	4.1%
BSCtoC	464	6592	7.0%	6.5%	7.6%	523	19924	2.6%	2.4%	2.8%
BSC	699	5795	12.1%	11.4%	12.8%	609	15783	3.9%	3.6%	4.1%
BSS	1106	11285	9.8%	9.3%	10.3%	1437	37149	3.9%	3.7%	4.0%
BSHC	294	3762	7.8%	7.1%	8.5%	250	13292	1.9%	1.7%	2.1%
BSA Total	4557	51552	8.8%	8.6%	9.0%	5262	154241	3.4%	3.3%	3.5%

For initial screens the overall percentage was less than the expected value of <10%, but more than the desired value of <7%. There was variation among lead providers with only one service y

above 10%. The percentages for initial screens reflect the proportion of true prevalent screens in each service, as well as other factors. For subsequent screens, the overall percentage was less than the desired value of <4%, which was also the case for all lead providers. Percentages are similar to the previous period. Statistical analysis indicates that some of the differences between providers are significant.

2e. False Positive Rate

Description:

The number of false positive screening results as a percentage of the number of women screened.

Target:

Initial (Prevalent) screens: expected value <9%, desired target <6%.

Subsequent (Incident) screens: expected value <4%, desired target <3%.

Table 2e.1. False positive rate as a percentage of women screened, last 6 months.

Lead Provider	Jan 2004 to Jun 2004									
	Initial (Prevalent)					Subsequent (Incident)				
	Number of False Positives	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI	Number of False Positives	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI
BSAN	228	3811	5.98%	5.35%	6.61%	291	12979	2.24%	2.03%	2.46%
BSM	160	1832	8.73%	7.64%	9.83%	247	6683	3.70%	3.32%	4.08%
BSCtoC	117	1661	7.04%	6.02%	8.07%	120	6281	1.91%	1.62%	2.20%
BSC	161	1522	10.58%	9.26%	11.89%	145	4950	2.93%	2.55%	3.33%
BSS	251	2776	9.04%	8.14%	9.94%	325	10825	3.00%	2.73%	3.27%
BSHC	62	775	8.00%	6.45%	9.68%	60	3713	1.62%	1.29%	1.97%
BSA Total	979	12377	7.91%	7.51%	8.31%	1188	45431	2.61%	2.49%	2.74%

For initial screens the overall percentage was less than the expected value of <9%, but more than the desired value of <6%. There was variation among lead providers with only one service above 9%. For subsequent screens, the overall percentage was less than the desired value of <3%, which was also the case for all but one lead providers. All were below the expected value of <4%. Percentages are similar to the previous period. Statistical analysis would be required to determine whether small differences between providers and over time were significant.

Table 2e.2. False positive rate as a percentage of women screened, last 2 years.

Lead Provider	Jul 2002 to Jun 2004									
	Initial (Prevalent)					Subsequent (Incident)				
	Number of False Positives	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI	Number of False Positives	Number of Women Screened	% of Women Screened	Lower 95% CI	Upper 95% CI
BSAN	1147	16906	6.78%	6.47%	7.10%	1198	43626	2.75%	2.62%	2.87%
BSM	544	7212	7.54%	7.03%	8.06%	817	24467	3.34%	3.15%	3.53%
BSCtoC	413	6592	6.27%	5.78%	6.77%	418	19924	2.10%	1.93%	2.27%
BSC	641	5795	11.06%	10.39%	11.73%	519	15783	3.29%	3.05%	3.52%
BSS	998	11285	8.84%	8.41%	9.29%	1241	37149	3.34%	3.19%	3.49%
BSHC	265	3762	7.04%	6.35%	7.74%	182	13292	1.37%	1.20%	1.53%
BSA Total	4008	51552	7.77%	7.58%	7.97%	4375	154241	2.84%	2.77%	2.91%

For initial screens the overall percentage was less than the expected value of <9%, but more than the desired value of <6%. There was variation among lead providers with only one service above

9%. For subsequent screens, the overall percentage was less than the desired value of <3%, although half of the services registered values above 3%. All were below the expected value of <4%. Percentages are similar to the previous period. Statistical analysis would be required to determine whether small differences between providers and over time were significant.

2f. Positive Predictive Value

Description:

The proportion of women screened positive who are ultimately diagnosed as having cancer (expressed as a percentage of women referred to assessment).

Target: => 9%

Table 2f.1. Cancers as a percentage of Referrals to Assessment, last 6 months.

Lead Provider	Jan 2004 to Jun 2004									
	Initial (Prevalent)					Subsequent (Incident)				
	Number of Cancers	Number of Referrals	% of Referrals	Lower 95% CI	Upper 95% CI	Number of Cancers	Number of Referrals	% of Referrals	Lower 95% CI	Upper 95% CI
BSAN	27	268	10.1%	7.09%	13.06%	53	360	14.7%	11.67%	17.78%
BSM	16	180	8.9%	5.56%	12.22%	46	295	15.6%	12.20%	18.98%
BSCtoC	11	130	8.5%	4.62%	12.31%	24	150	16.0%	11.33%	21.33%
BSC	8	174	4.6%	2.30%	7.47%	29	176	16.5%	11.93%	21.02%
BSS	26	281	9.3%	6.41%	12.10%	41	367	11.2%	8.45%	13.90%
BSHC	8	71	11.3%	5.63%	18.31%	19	81	23.5%	16.05%	30.86%
BSA Total	96	1104	8.7%	7.34%	10.14%	212	1429	14.8%	13.30%	16.38%

For initial screens the overall percentage (8.7%) was almost at the target value of $\geq 9\%$, but there was variation among lead providers with half the services $<9\%$. For subsequent screens, the overall percentage (14.8%) was higher than the target value of 9%, and this was the case for all lead providers. Percentages are similar to the previous period. Statistical analysis indicates that some of the differences between providers are significant.

Table 2f.2. Cancers as a percentage of Referrals to Assessment, last 2 years.

Lead Provider	Jul 2002 to Jun 2004									
	Initial (Prevalent)					Subsequent (Incident)				
	Number of Cancers	Number of Referrals	% of Referrals	Lower 95% CI	Upper 95% CI	Number of Cancers	Number of Referrals	% of Referrals	Lower 95% CI	Upper 95% CI
BSAN	153	1387	11.0%	9.66%	12.40%	228	1484	15.4%	13.81%	16.91%
BSM	54	607	8.9%	7.08%	10.87%	134	959	14.0%	12.20%	15.85%
BSCtoC	39	464	8.4%	6.25%	10.56%	93	523	17.8%	15.11%	20.65%
BSC	47	699	6.7%	5.15%	8.30%	85	609	14.0%	11.66%	16.26%
BSS	99	1106	9.0%	7.59%	10.40%	190	1437	13.2%	11.76%	14.68%
BSHC	23	294	7.8%	5.44%	10.54%	63	250	25.2%	20.80%	29.60%
BSA Total	415	4557	9.1%	8.40%	9.81%	793	5262	15.1%	14.27%	15.89%

For initial screens the overall percentage (9.1%) was at the target value of $\geq 9\%$, but there was variation among lead providers with some of the services $<9\%$. For subsequent screens, the overall percentage (15.1%) was higher than the target value of 9%, and this was the case for all lead providers. Percentages are similar to the previous period. Statistical analysis indicates that a few of the differences between providers are significant.

2g. Benign biopsy weight

Description:

Number with benign open biopsy, where the weight of benign lesion is less than 30 grams (expressed as a percentage of the number with benign open biopsies).

Target:

>= 90% or more of open biopsies, which prove to be benign, should weigh < 30g.

Table 2g. Number and percentage of benign open biopsies weighing <30 g, by Lead Provider.

Lead Provider	Last 2 Years				
	Jul 2002 to Jun 2004			Lower 95% CI	Upper 95% CI
	Benign Open Biopsies < 30g	Total Benign Open Biopsies	% of Benign Open Biopsies		
BSAN	*	*	*	*	*
BSM	25	37	67.6%	54.05%	81.08%
BSCtoC	**	**	**	**	**
BSC	18	27	66.7%	51.85%	81.48%
BSS	20	51	39.2%	27.45%	50.98%
BSHC	15	25	60.0%	44.00%	76.00%
BSA Total	135	219	61.6%	56.16%	67.12%

* BSAN indicated that due to software error this data was not 90% complete. Therefore it has been excluded from this report.

** 50% of the benign open biopsies had a default weight recorded within the national monitoring data set. So results of BreastScreen Coast to Coast have not been reported.

The overall percentage and all of the lead providers registered values less than the target of >90%. Statistical analysis indicates that a few of the differences between providers are significant. This indicator has changed since the last period (80% <20g). Discussion is required on this indicator concerning data validity, derivation of targets, and statistical analysis.

2h. Pre-operative Diagnosis Rate

Description:

Proportion of women for whom a needle biopsy has provided the definitive diagnosis - pre-operative diagnosis, expressed as a percentage of all women diagnosed with breast cancer in the programme.

Target:

- > 90% desired
- > 70% expected

Table 2h. Percentage of women with a preoperative diagnosis of cancer.

Lead Provider	Last 6 Months					Last 2 Years				
	Jan 2004 to Jun 2004					Jul 2002 to Jun 2004				
	Preoperative diagnosis of cancer	Number of cancers	Percentage of cancers with a preoperative diagnosis	Lower 95% CI	Upper 95% CI	Preoperative diagnosis of cancer	Number of cancers	Percentage of cancers with a preoperative diagnosis	Lower 95% CI	Upper 95% CI
BSAN	71	80	88.8%	82.50%	93.75%	346	381	90.8%	88.45%	93.18%
BSM	58	62	93.5%	88.71%	98.39%	178	188	94.7%	92.02%	97.34%
BSCtoC	32	35	91.4%	82.86%	97.14%	123	132	93.2%	89.39%	96.21%
BSC	27	37	73.0%	59.46%	83.78%	110	132	83.3%	78.03%	88.64%
BSS	63	67	94.0%	89.55%	98.51%	277	289	95.8%	93.77%	97.58%
BSHC	24	27	88.9%	77.78%	96.30%	65	86	75.6%	67.44%	82.56%
BSA Total	275	308	89.3%	86.36%	92.21%	1099	1208	91.0%	89.57%	92.30%

For both the last 6 months and the last 2 years the needle biopsy gave the diagnosis above the expected percentage of >70% overall and for all services. For the last 6 months and last 2 years the percentage overall was very close to 90%. Some services had rates below 80%. Statistical analysis indicates that a few of the differences between providers are significant.

21. Specificity

Description:

Proportion of women with negative screening results as a percentage of all women screened excluding the women screened positive with cancer.

Target: > 93%

Interval cancers not included in calculations.

Table 21.1. Specificity of the BSA Programme by lead provider, last 6 months.

Lead Provider	Jan 2004 to Jun 2004										
	Initial (Prevalent)					Subsequent (Incident)					Total
	Negative Screens (RRS from Screen)	Negative Screens plus False Positives	Estimated Specificity (%)	Lower 95% CI	Upper 95% CI	Negative Screens (RRS from Screen)	Negative Screens plus False Positives	Estimated Specificity (%)	Lower 95% CI	Upper 95% CI	Estimated Specificity (%)
BSAN	3543	3771	94.0%	93.19%	94.71%	12619	12910	97.7%	97.49%	98.00%	96.9%
BSM	1652	1812	91.2%	89.86%	92.48%	6388	6635	96.3%	95.82%	96.73%	95.2%
BSCtoC	1531	1648	92.9%	91.66%	94.14%	6131	6251	98.1%	97.74%	98.42%	97.0%
BSC	1348	1509	89.3%	87.77%	90.89%	4774	4919	97.1%	96.58%	97.52%	95.2%
BSS	2495	2746	90.9%	89.78%	91.94%	10458	10783	97.0%	96.66%	97.31%	95.7%
BSHC	704	766	91.9%	89.97%	93.84%	3632	3692	98.4%	97.97%	98.78%	97.3%
BSA Total	11273	12252	92.0%	91.53%	92.49%	44002	45190	97.4%	97.22%	97.52%	96.2%

For initial screens, overall specificity of 92% was close to the target of >93%, but with variation among lead providers. For subsequent screens the overall specificity (97.4%), and the specificity for each provider, was >93%. Statistical analysis indicates that a few of the differences between providers are significant. Specificities are similar to the previous period.

Table 21.2. Specificity of the BSA Programme by lead provider, last 2 years.

Lead Provider	Jul 2002 to Jun 2004										
	Initial (Prevalent)					Subsequent (Incident)					Total
	Negative Screens (RRS from Screen)	Negative Screens plus False Positives	Estimated Specificity (%)	Lower 95% CI	Upper 95% CI	Negative Screens (RRS from Screen)	Negative Screens plus False Positives	Estimated Specificity (%)	Lower 95% CI	Upper 95% CI	Estimated Specificity (%)
BSAN	15519	16666	93.1%	92.7%	93.5%	42142	43340	97.2%	97.1%	97.4%	96.1%
BSM	6605	7149	92.4%	91.8%	93.0%	23508	24325	96.6%	96.4%	96.9%	95.7%
BSCtoC	6128	6541	93.7%	93.1%	94.3%	19401	19819	97.9%	97.7%	98.1%	96.8%
BSC	5096	5737	88.8%	88.0%	89.6%	15174	15693	96.7%	96.4%	97.0%	94.6%
BSS	10179	11177	91.1%	90.5%	91.6%	35712	36953	96.6%	96.5%	96.8%	95.3%
BSHC	3468	3733	92.9%	92.1%	93.7%	13042	13224	98.6%	98.4%	98.8%	97.4%
BSA Total	46995	51003	92.1%	91.9%	92.4%	148979	153354	97.1%	97.1%	97.2%	95.9%

For initial screens, overall specificity of 92.1% was close to the target of >93%, but with variation among lead providers. For subsequent screens the overall specificity (97.1%), and the specificity for each provider, was >93%. Statistical analysis indicates that a few of the differences between providers are significant. Specificities are similar to the previous period.

2m. Benign Biopsy Rate

Description:

The number of open biopsies that turn out to be benign lesions, expressed as a proportion of women screened.

Target:

Initial (Prevalent) screen: ≤ 3.5 per 1000 women screened

Subsequent (Incident) screen: ≤ 1.6 per 1000 women screened

Benign Biopsy Rate is not calculated for 6-month periods, as the figures are too small.

Table 2m.2. Benign Open Biopsies as a proportion of women screened, Last 2 Years.

Lead Provider	Jul 2002 to Jun 2004									
	Initial (Prevalent)					Subsequent (Incident)				
	Benign Open Biopsies	Number of screens	Benign Biopsies per 1000 screens	Lower 95% CI	Upper 95% CI	Benign Open Biopsies	Number of screens	Benign Biopsies per 1000 screens	Lower 95% CI	Upper 95% CI
BSAN	36	16906	2.1	1.54	2.72	43	43626	1.0	0.76	1.24
BSM	12	7212	1.7	0.97	2.50	25	24467	1.0	0.69	1.35
BSCtoC	7	6592	1.1	0.46	1.82	8	19924	0.4	0.20	0.65
BSC	13	5795	2.2	1.21	3.28	14	15783	0.9	0.51	1.27
BSS	19	11285	1.7	1.06	2.30	32	37149	0.9	0.62	1.13
BSHC	14	3762	3.7	2.13	5.32	11	13292	0.8	0.45	1.28
BSA Total	101	51552	2.0	1.65	2.29	133	154241	0.9	0.74	0.99

For initial screens the overall benign open biopsy rate was 2.0/1000 less than the target of $\leq 3.5/1000$ women screened; there was variation among services but all lower 95% CIs were on target. For subsequent screens the overall benign open biopsy rate was 0.9% less than the target of $\leq 1.6/1000$ women screened; there was variation among services but all upper 95% CIs were on target. Statistical analysis indicates that a few of the differences between providers are significant.

3. Early detection of DCIS or Invasive Breast Cancer

3a. Detection of DCIS or Invasive Breast Cancer

Description:

Number of women diagnosed with DCIS or breast cancer per 1000 women screened.

Target:

Initial (Prevalent) screens >=6.9 per 1000 women screened
 Subsequent (Incident) screens >=3.45 per 1000 women screened

Table 3a.1. Detection rates of DCIS and invasive breast cancer per 1000 women screened, last 6 months.

Lead Provider	Last 6 Months							
	Jan 2004 to Jun 2004							
	Initial (Prevalent)				Subsequent (Incident)			
	Number	Rate per 1000	Lower 95% CI	Upper 95% CI	Number	Rate per 1000	Lower 95% CI	Upper 95% CI
BSAN	27	7.1	4.99	9.45	53	4.1	3.16	5.01
BSM	16	8.7	5.46	12.55	46	6.9	5.24	8.53
BSCtoC	11	6.6	3.61	10.23	24	3.8	2.55	5.09
BSC	8	5.3	2.63	8.54	29	5.9	4.04	7.68
BSS	26	9.4	6.48	12.61	41	3.8	2.86	4.80
BSHC	8	10.3	5.16	16.77	19	5.1	3.23	7.00
BSA Total	96	7.8	6.46	9.05	212	4.7	4.14	5.19

For initial screens the overall detection rate at 7.8/1000 is on target ($\geq 6.9/1000$), and the upper 95% CIs for all services are in the target range. For subsequent screens the overall detection rate at 4.7/1000 is on target ($\geq 3.45/1000$), and the upper 95% CIs for all services are in the target range. Detection rates are similar to the previous period. Statistical analysis indicates that a few of the differences between providers are significant.

Table 3a.2. Detection rates of DCIS and invasive breast cancer per 1000 women screened, last 2 years.

Lead Provider	Last 2 Years							
	Jul 2002 to Jun 2004							
	Initial (Prevalent)				Subsequent (Incident)			
	Number	Rate per 1000	Lower 95% CI	Upper 95% CI	Number	Rate per 1000	Lower 95% CI	Upper 95% CI
BSAN	153	9.1	7.87	10.29	228	5.2	4.68	5.80
BSM	54	7.5	5.82	9.15	134	5.5	4.70	6.25
BSCtoC	39	5.9	4.40	7.58	93	4.7	3.86	5.47
BSC	47	8.1	6.21	10.01	85	5.4	4.44	6.34
BSS	99	8.8	7.35	10.28	190	5.1	4.52	5.73
BSHC	23	6.1	3.99	8.24	63	4.7	3.76	5.72
BSA Total	415	8.1	7.41	8.71	793	5.1	4.84	5.44

For initial screens the overall detection rate at 8.1/1000 is on target ($\geq 6.9/1000$), and the upper 95% CIs for all services are in the target range. For subsequent screens the overall detection rate at 5.1/1000 is on target ($\geq 3.45/1000$), and the point estimates for all services are on target. All 95% CI are above target. Detection rates are similar to the previous period. Statistical analysis indicates that a few of the differences between providers are significant.

3.1. Summary Tables

Description:

Summary of Referral to Assessment, Specificity, False Positives and Detection Rate of DCIS and Invasive Cancer

The two tables below provide a summary of the percentage of women referred to assessment, the estimated specificity, the estimated percentage of false positives and the cancer detection rate per 1000 women screened for initial (prevalent) and subsequent (incident) screening.

Table 3.1.1. Summary for initial (prevalent) screening by lead provider.

Lead Provider	Last 6 Months				Last 2 Years			
	Jan 2004 to Jun 2004				Jul 2002 to Jun 2004			
	Referral to Assessment as % of women screened	Estimated Specificity	Positive Predictive Value	Detection rate per 1000 women screened	Referral to Assessment as % of women screened	Estimated Specificity	Positive Predictive Value	Detection rate per 1000 women screened
BSAN	7.0%	94.0%	10.1%	7.1	8.2%	93.1%	11.0%	9.1
BSM	9.8%	91.2%	8.9%	8.7	8.4%	92.4%	8.9%	7.5
BSCtoC	7.8%	92.9%	8.5%	6.6	7.0%	93.7%	8.4%	5.9
BSC	11.4%	89.3%	4.6%	5.3	12.1%	88.8%	6.7%	8.1
BSS	10.1%	90.9%	9.3%	9.4	9.8%	91.1%	9.0%	8.8
BSHC	9.2%	91.9%	11.3%	10.3	7.8%	92.9%	7.8%	6.1
BSA Total	8.9%	92.0%	8.7%	7.8	8.8%	92.1%	9.1%	8.1

This table summarises statistics already considered individually.

Table 3.1.2. Summary for subsequent (incident) screening by lead provider.

Lead Provider	Last 6 Months				Last 2 Years			
	Jan 2004 to Jun 2004				Jul 2002 to Jun 2004			
	Referral to Assessment as % of women screened	Estimated Specificity	Positive Predictive Value	Detection rate per 1000 women screened	Referral to Assessment as % of women screened	Estimated Specificity	Positive Predictive Value	Detection rate per 1000 women screened
BSAN	2.8%	97.7%	14.7%	4.1	3.4%	97.2%	15.4%	5.2
BSM	4.4%	96.3%	15.6%	6.9	3.9%	96.6%	14.0%	5.5
BSCtoC	2.4%	98.1%	16.0%	3.8	2.6%	97.9%	17.8%	4.7
BSC	3.6%	97.1%	16.5%	5.9	3.9%	96.7%	14.0%	5.4
BSS	3.4%	97.0%	11.2%	3.8	3.9%	96.6%	13.2%	5.1
BSHC	2.2%	98.4%	23.5%	5.1	1.9%	98.6%	25.2%	4.7
BSA Total	3.1%	97.4%	14.8%	4.7	3.4%	97.1%	15.1%	5.1

This table summarises statistics already considered individually.

3b. Invasive Cancers Less than or Equal to 10 mm in Size

Description:

Rate and proportion of primary invasive breast cancer of diameter ≤ 10 mm.

Target:

Initial (Prevalent) round: $\geq 25\%$, which gives a rate of ≥ 17.3 per 10,000 screens

Subsequent (Incident) round: $\geq 30\%$, which gives a rate of ≥ 10.45 per 10,000 screens

There is insufficient data from services for interpretation and 95% CIs are wide. Data collection needs to be improved.

Table 3b.1. Proportion of Invasive Cancers less than or equal to 10 mm.

Lead Provider	Initial (Prevalent)					Incident				
	Oct 2001 to Sep 2003					Oct 2001 to Sep 2003				
	Initial (prevalent) invasive cancers ≤ 10 mm	Total initial (prevalent) invasive cancers	Proportion of invasive cancers ≤ 10 mm	Lower 95% CI	Upper 95% CI	Incident invasive cancers ≤ 10 mm	Total incident invasive cancers	Proportion of incident invasive cancers ≤ 10 mm	Lower 95% CI	Upper 95% CI
BSAN	*	*	*	*	*	*	*	*	*	*
BSM	9	38	24%	13.16%	34.21%	30	89	34%	25.84%	41.57%
BSCtoC	12	52	23%	13.46%	32.69%	33	96	34%	26.04%	42.71%
BSC	*	*	*	*	*	*	*	*	*	*
BSS	*	*	*	*	*	*	*	*	*	*
BSHC	*	*	*	*	*	*	*	*	*	*
BSA Total	21	90	23%	16.67%	31.11%	63	185	34%	28.11%	40.00%

For the 2 services reporting, the proportion (23%) is less than the target of $\geq 25\%$ for initial screens and on the target of $\geq 30\%$ for subsequent screens (34%). 95% CI encompass targets.

Table 3b.2. Invasive Cancers less than or equal to 10mm per 10,000 women screened.

Lead Provider	Initial (Prevalent) Screens					Subsequent (Incident) Screens				
	Oct 2001 to Sep 2003					Oct 2001 to Sep 2003				
	Initial (prevalent) invasive cancers ≤ 10 mm	Total initial (prevalent) screens	Prevalent invasive cancers ≤ 10 mm, per 10,000 screens	Lower 95% CI	Upper 95% CI	Incident invasive cancers ≤ 10 mm	Total incident screens	Incident invasive cancers ≤ 10 mm, per 10,000 screens	Lower 95% CI	Upper 95% CI
BSAN	*	*	*	*	*	*	*	*	*	*
BSM	9	7512	12.0	9.98	14.11	30	22475	13.3	12.10	14.64
BSCtoC	12	6966	17.2	14.64	19.81	33	18014	18.3	16.71	19.98
BSC	*	*	*	*	*	*	*	*	*	*
BSS	*	*	*	*	*	*	*	*	*	*
BSHC	*	*	*	*	*	*	*	*	*	*
BSA Total	21	14478	14.5	16.16	14.55	63	40489	15.6	14.55	16.57

For the 2 services reporting, the rate (14.5/10000) is less than the target of $\geq 17.3/10000$ for initial screens and on the target of $\geq 10.5/10000$ for subsequent screens (15.5/10000). 95% CIs are above targets.

3c. Proportion of Invasive Cancers less than 15mm in Size

Description:

Rate and proportion of primary invasive breast cancer of diameter <15mm.

Target:

Initial (prevalent) screens: > 50%, which gives a rate of > 34.5 per 10,000 screens.
 Subsequent (incident) screens: > 50%, which gives a rate of > 17.3 per 10,000 screens.

There is insufficient data from services for interpretation and 95% CIs are wide. Data collection needs to be improved.

Table 3c.1. Proportion of Invasive Cancers less than 15mm.

Lead Provider	Initial (Prevalent)					Subsequent (Incident)				
	Oct 2001 to Sep 2003					Oct 2001 to Sep 2003				
	Initial (prevalent) Invasive Cancers <15mm	Total Initial (prevalent) Invasive Cancers	% of Invasive Cancers <15mm	Lower 95% CI	Upper 95% CI	Incident Invasive Cancers <15mm	Total Incident Invasive Cancers	% of Incident Invasive Cancers <15mm	Lower 95% CI	Upper 95% CI
BSAN	*	*	*	*	*	*	*	*	*	*
BSM	13	38	34%	21.05%	47.37%	54	89	61%	51.69%	69.66%
BSCtoC	19	52	37%	25.00%	48.08%	52	96	54%	45.83%	62.50%
BSC	*	*	*	*	*	*	*	*	*	*
BSS	*	*	*	*	*	*	*	*	*	*
BSHC	*	*	*	*	*	*	*	*	*	*
BSA Total	32	90	36%	27.78%	44.44%	106	185	57%	51.35%	63.24%

For the 2 services reporting the proportion (36%) is less than the target of >50% for initial screens and on the target of >50% for subsequent screens (57%). 95% CI encompass targets.

Table 3c.2. Invasive Cancers, less than 15mm, per 10,000 screens.

Lead Provider	Initial (Prevalent)					Subsequent (Incident)				
	Oct 2001 to Sep 2003					Oct 2001 to Sep 2003				
	Initial (prevalent) Invasive Cancers <15mm	Total Initial (prevalent) screens	Invasive Cancers <15mm, per 10,000 screens	Lower 95% CI	Upper 95% CI	Incident Invasive Cancers <15mm	Total Incident Screens	Incident Invasive Cancers <15mm, per 10,000 screens	Lower 95% CI	Upper 95% CI
BSAN	*	*	*	*	*	*	*	*	*	*
BSM	13	7512	17.3	14.91	19.83	54	22475	24.0	22.38	25.72
BSCtoC	19	6966	27.3	24.12	30.58	52	18014	28.9	26.81	30.92
BSC	*	*	*	*	*	*	*	*	*	*
BSS	*	*	*	*	*	*	*	*	*	*
BSHC	*	*	*	*	*	*	*	*	*	*
BSA Total	32	14478	22.1	20.10	24.11	106	40489	26.2	24.87	27.49

For the 2 services reporting the rate (22.1/10000) is less than the target of $\geq 34.5/10000$ for initial screens, and on the target of $\geq 17.3/10000$ for subsequent screens (26.2/10000). 95% CI encompass targets.

3d. Nodal Involvement

Description:

The proportion of women with invasive screen detected breast cancer without nodal involvement (expressed as a percentage of the total number with invasive cancer).

Note: This is calculated as 1 minus the proportion of women with invasive screen detected breast cancer with nodal involvement.

Target:

Initial (prevalent) screening: > 70%

Subsequent (incident) screening: > 75%

Table 3d. Invasive Cancers without nodal involvement.

Lead Provider	Initial (Prevalent)					Subsequent (Incident)				
	Oct 2001 to Sep 2003					Oct 2001 to Sep 2003				
	Initial (prevalent) women with node-positive Invasive Cancer	Total Initial (prevalent) Invasive Cancers	% of Initial (prevalent) Invasive Cancers without nodal involvement	Lower 95% CI	Upper 95% CI	Subsequent (incident) women with node-positive Invasive Cancer	Total Incident Invasive Cancers	% of Incident Invasive Cancers without nodal involvement	Lower 95% CI	Upper 95% CI
BSAN	*	*	*	*	*	*	*	*	*	*
BSM	13	38	66%	52.63%	78.95%	22	89	75%	67.42%	83.15%
BSCtoC	8	52	85%	76.92%	92.31%	21	96	78%	70.83%	84.38%
BSC	*	*	*	*	*	*	*	*	*	*
BSS	*	*	*	*	*	*	*	*	*	*
BSHC	*	*	*	*	*	*	*	*	*	*
BSA Total	21	90	77%	68.89%	83.33%	43	185	77%	71.35%	81.62%

For the 2 services reporting the proportion (77%) is on the target of >70% for initial screens and on the target of >75% for subsequent screens (77%). 95% CI encompass targets. There is insufficient data from services for interpretation. Data collection needs to be improved.

3e. Ductal Carcinoma In Situ (DCIS)

Description:

Proportion of women with DCIS who are diagnosed as having Ductal Carcinoma in Situ (DCIS) as their primary lesion (expressed as a percentage of all women diagnosed with cancer in the screening programme).

Target:

10-25% of all cancers detected by the programme are DCIS

Table 3e. Proportion of DCIS in all screen detected cancers.

Lead Provider	Oct 2001 to Sep 2003				
	DCIS	Total Cancers	% of Total Cancers	Lower 95% CI	Upper 95% CI
BSAN	*	*	*	*	*
BSM	41	168	24.4%	19.05%	29.76%
BSCtoC	16	164	9.8%	6.10%	13.41%
BSC	*	*	*	*	*
BSS	*	*	*	*	*
BSHC	*	*	*	*	*
BSA Total	57	332	17.2%	13.86%	20.48%

For the 2 services reporting, the proportion of DCIS of all screen detected cancers (17.2%) is in the target range of 10-25%. 95% CIs encompass targets. There is insufficient data from services for interpretation. Data collection needs to be improved.

4. Treatment

4a. Invasive cancers >1mm having a surgical axillary procedure

Description:

Percentage of all women operated on for a screen detected invasive cancer over 1mm in size, who have a surgical axillary procedure.

Target:

95% of women operated on for invasive cancer over 1mm in size, should normally have a surgical axillary procedure

Table 4a. Percentage of operated women with Invasive Cancer having a surgical axillary procedure.

Lead Provider	Oct 2001 to Sep 2003				
	Number having a surgical axillary procedure for invasive cancers >1mm	Number having an operation for invasive cancers >1mm	% of Invasive Cancers >1mm, having a surgical axillary procedure	Lower 95% CI	Upper 95% CI
BSAN	*			*	*
BSM	92	103	89.3%	84.47%	94.17%
BSCtoC	109	113	96.5%	93.81%	99.12%
BSC	*	*	*	*	*
BSS	*	*	*	*	*
BSHC	*	*	*	*	*
BSA Total	201	216	93.1%	90.28%	95.83%

For the 2 services reporting, the proportion of women with invasive cancers >1mm having a surgical axillary procedure was 93% which was lower than the target of 95%. 95% CIs encompass targets.

There is insufficient data from services for interpretation. Data collection needs to be improved.

4b. Invasive Cancers having a single excisional procedure

Description:

The proportion of women with invasive cancer who have a single excisional breast treatment procedure.

Target:

There is no target for this indicator.

Table 4b. Percentage women with Invasive Cancer having a single excisional breast treatment procedure.

Lead Provider	Oct 2001 to Sep 2003				
	Number having a single excisional procedure for invasive cancer	Number of invasive cancers having surgical breast procedure	Proportion of Invasive Cancers having a single excisional breast treatment procedure	Lower 95% CI	Upper 95% CI
BSAN	*	*	*	*	*
BSM	105	126	83.3%	77.78%	88.89%
BSCtoC	114	147	77.6%	72.11%	82.99%
BSC	*	*	*	*	*
BSS	*	*	*	*	*
BSHC	*	*	*	*	*
BSA Total	219	273	80.2%	76.19%	84.25%

For the 2 services reporting, the proportion of invasive cancers having a single excision was 80.2%. There is insufficient data from services for interpretation. Data collection needs to be improved.

4c. DCIS with no axillary dissection

Description:

The proportion of women who have surgery for DCIS who do not have an axillary dissection.

Target: > 95%

Table 4c. Percentage of operated women with DCIS not having axillary dissection.

Lead Provider	Oct 2001 to Sep 2003				
	Number having surgery for DCIS who do not have an axillary dissection	Number having surgery for DCIS	Proportion of DCIS women not having axillary dissection	Lower 95% CI	Upper 95% CI
BSAN	*	*	*	*	*
BSM	33	40	82.5%	72.50%	92.50%
BSCtoC	12	16	75.0%	56.25%	93.75%
BSC	*	*	*	*	*
BSS	*	*	*	*	*
BSHC	*	*	*	*	*
BSA Total	45	56	80.4%	71.43%	89.29%

For the 2 services reporting, the proportion of DCIS not having an axillary dissection was 80.4%. There is insufficient data from services for interpretation. Data collection needs to be improved.

4e. Breast Conserving Surgery for DCIS \leq 20 mm

Description:

The proportion of women diagnosed with DCIS of pathological diameter \leq 20mm who have Breast Conserving Surgery (BCS).

Target:

The majority of screen-detected DCIS \leq 20 mm are treated by BCS.

Table 4e. Percentage of women with DCIS having BCS.

Lead Provider	Oct 2001 to Sep 2003				
	Number of DCIS \leq 20mm having BCS	Number of DCIS \leq 20mm who are operated on	Proportion of DCIS, \leq 20mm, who have BCS	Lower 95% CI	Upper 95% CI
BSAN	*	*	*	*	*
BSM	18	24	75.0%	58.33%	87.50%
BSCtoC	6	10	60.0%	30.00%	80.00%
BSC	*	*	*	*	*
BSS	*	*	*	*	*
BSHC	*	*	*	*	*
BSA Total	24	34	70.6%	58.82%	82.35%

For the 2 services reporting, the proportion of DCIS having breast conserving surgery was 70.6%. There is insufficient data from services for interpretation. Data collection needs to be improved.

4f. Breast Conserving for Invasive Cancers ≤ 20 mm

Description:

The proportion of women diagnosed with Invasive Cancer, without a DCIS component, of pathological diameter ≤ 20 mm who have Breast Conserving Surgery (BCS)

Target:

The majority of screen-detected cancers ≤ 20 mm are treated with BCS.

Table 4f. Percentage of women with Invasive Cancer having BCS.

Lead Provider	Oct 2001 to Sep 2003				
	Number of Invasive Cancers, without DCIS, ≤ 20 mm having BCS	Number of Invasive Cancers, without DCIS, ≤ 20 mm who are operated on	Proportion of Invasive Cancers, without DCIS, ≤ 20 mm who have BCS	Lower 95% CI	Upper 95% CI
BSAN	*	*	*	*	*
BSM	25	32	78.1%	65.63%	90.63%
BSCtoC	21	39	53.8%	41.03%	66.67%
BSC	*	*	*	*	*
BSS	*	*	*	*	*
BSHC	*	*	*	*	*
BSA Total	46	71	64.8%	54.93%	74.65%

For the 2 services reporting, the proportion of invasive cancers ≥ 20 mm having breast conserving surgery was 64.8%. There is insufficient data from services for interpretation. Data collection needs to be improved.

5. Provision of an appropriate and acceptable service

5a. Time taken for provision of screening results

Description:

The time (in working days) between date of final screening visit and providing screening results to women.

Target:

90-95% of women are notified within 10 working days

Table 5a. Percentage of women notified of screening results within 10 working days.

Lead Provider	Last 6 Months					Last 2 Years				
	Jan 2004 to Jun 2004					Jul 2002 to Jun 2004				
	Number notified within 10 working days	Number of women screened	% notified within 10 working days	Lower 95% CI	Upper 95% CI	Number notified within 10 working days	Number of women screened	% notified within 10 working days	Lower 95% CI	Upper 95% CI
BSAN	16545	16790	98.5%	98.36%	98.72%	58757	60532	97.1%	96.93%	97.20%
BSM	8281	8515	97.3%	96.90%	97.60%	31137	31679	98.3%	98.15%	98.43%
BSCtoC	7909	7942	99.6%	99.44%	99.73%	26362	26516	99.4%	99.33%	99.51%
BSC	6207	6472	95.9%	95.42%	96.39%	20803	21578	96.4%	96.16%	96.66%
BSS	13537	13601	99.5%	99.41%	99.64%	48147	48434	99.4%	99.34%	99.48%
BSHC	4043	4488	90.1%	89.21%	90.96%	16048	17054	94.1%	93.75%	94.45%
BSA Total	56522	57808	97.8%	97.66%	97.90%	201254	205793	97.8%	97.73%	97.86%

For the last 6 months and last 2 years the proportion of women notified of screening results within 10 working days (98%) was above the target of 95%. One lead provider was below target. Statistical analysis indicates that a few of the differences between providers are significant. These results are similar to the previous period.

5b. Time taken from screening visit to first assessment appointment

Description:

The time (in working days) between the date of final screening visit and date of first available appointment offered for assessment.

Note: In some cases this date may not coincide with the actual date of assessment due to the fact that many women arrange for a time that suits them better.

Target:

90% of women are offered an assessment appointment within 15 working days of their final screening mammogram.

Table 5b. Percentage of women offered 1st assessment appointment within 15 working days.

Lead Provider	Last 6 Months					Last 2 Years				
	Jan 2004 to Jun 2004					Jul 2002 to Jun 2004				
	Number offered assessment within 15 working days	Number referred to assessment	% offered appointment within 15 working days	Lower 95% CI	Upper 95% CI	Number offered assessment within 15 working days	Number referred to assessment	% offered appointment within 15 working days	Lower 95% CI	Upper 95% CI
BSAN	594	628	94.6%	92.82%	96.36%	2544	2871	88.6%	87.45%	89.77%
BSM	363	475	76.4%	72.60%	80.24%	1415	1566	90.4%	88.90%	91.82%
BSCtoC	242	280	86.4%	82.42%	90.44%	868	987	87.9%	85.91%	89.97%
BSC	320	350	91.4%	88.50%	94.36%	1186	1308	90.7%	89.10%	92.25%
BSS	616	648	95.1%	93.39%	96.73%	2408	2543	94.7%	93.82%	95.56%
BSHC	100	152	65.8%	58.25%	73.33%	397	544	73.0%	69.25%	76.71%
BSA Total	2235	2533	88.2%	86.98%	89.49%	8818	9819	89.8%	89.21%	90.40%

For the last 6 months and last 2 years the percentage of women offered a first assessment appointment within 15 working days was 88% and 90% respectively which is close to the target of 90%. Some lead providers are below target. Statistical analysis indicates that a few of the differences between providers are significant. These results appear to be better than in the previous period.

5c. Time taken from assessment to final diagnostic biopsy

Description:

The time (in working days) between first level assessment and the final assessment procedure producing a diagnosis.

Target:

90% of women requiring needle biopsy have that procedure completed within 5 working days of their assessment;

90% of women requiring open biopsy are offered this procedure within 15 working days of their assessment.

Table 5c.1. Percentage of women having Needle Biopsy within 5 working days of assessment.

Lead Provider	Last 6 Months					Last 2 Years				
	Jan 2004 to Jun 2004					Jul 2002 to Jun 2004				
	Women having Needle Biopsy within 5 working days of assessment	All women having Needle Biopsy	% having Needle Biopsy within 5 working days	Lower 95% CI	Upper 95% CI	Women having Needle Biopsy within 5 working days of assessment	All women having Needle Biopsy	% having Needle Biopsy within 5 working days	Lower 95% CI	Upper 95% CI
BSAN	257	288	89.2%	86.11%	92.01%	1079	1308	82.5%	80.73%	84.17%
BSM	144	166	86.7%	82.53%	90.96%	437	535	81.7%	78.88%	84.49%
BSCtoC	66	81	81.5%	74.07%	88.89%	279	331	84.3%	80.97%	87.61%
BSC	109	114	95.6%	92.11%	98.25%	372	398	93.5%	91.46%	95.48%
BSS	188	241	78.0%	73.44%	82.16%	776	965	80.4%	78.34%	82.49%
BSHC	52	58	89.7%	82.76%	96.55%	166	178	93.3%	89.89%	96.07%
BSA Total	816	948	86.1%	84.18%	87.87%	3109	3715	83.7%	82.69%	84.68%

For the last 6 months and last 2 years the percentage of women receiving a needle biopsy within 5 working days (of all those who receive a needle biopsy) was 86.1% and 83.7% respectively; these are below the target of 90%. Most lead providers are below target. These results appear slightly better than the previous period; however, the target has changed (from 7 days). Statistical analysis indicates that a few of the differences between providers are significant.

Table 5c.2. Women having Open Biopsy within 15 working days of assessment.

Lead Provider	Last 6 Months					Last 2 Years				
	Jan 2004 to Jun 2004					Jul 2002 to Jun 2004				
	Women having Open Biopsy within 15 working days of notification	All women having Open Biopsy	% having Open Biopsy within 15 working days	Lower 95% CI	Upper 95% CI	Women having Open Biopsy within 15 working days of notification	All women having Open Biopsy	% having Open Biopsy within 15 working days	Lower 95% CI	Upper 95% CI
BSAN	17	18	94.4%	83.33%	100.00%	94	113	83.2%	76.99%	88.50%
BSM	6	13	46.2%	23.08%	69.23%	27	47	57.4%	44.68%	70.21%
BSCtoC	3	7	42.9%	14.29%	71.43%	11	21	52.4%	33.33%	71.43%
BSC	11	13	84.6%	69.23%	100.00%	37	49	75.5%	65.31%	85.71%
BSS	17	19	89.5%	78.95%	100.00%	56	64	87.5%	79.69%	93.75%
BSHC	3	10	30.0%	10.00%	50.00%	27	46	58.7%	45.65%	69.57%
BSA Total	57	80	71.3%	62.50%	80.00%	252	340	74.1%	70.29%	77.94%

For the last 6 months and last 2 years the percentage of women having an open biopsy within 15 working days (of all those having an open biopsy) was 71.3% and 74.1% respectively; these are below the target of 90%. Almost all lead providers are below target. These results appear better than the previous period, however, the target has changed (from offered an open biopsy within 3 weeks). Statistical analysis indicates that a few of the differences between providers are significant.

5d. Time taken from final diagnostic biopsy to reporting assessment results

Description:

The time (in working days) between date of final diagnostic biopsy and date of reporting final biopsy results to women.

Target:

Results reported to 90% of women within 5 working days of their final diagnostic biopsy.

Table 5d. Percentage of women receiving final diagnostic biopsy results within 5 working days.

Lead Provider	Last 6 Months					Last 2 Years				
	Jan 2004 to Jun 2004					Jul 2002 to Jun 2004				
	Number with results reported within 5 working days of final biopsy	Number with final diagnostic biopsy	% receiving final biopsy results within 5 working days	Lower 95% CI	Upper 95% CI	Number with results reported within 5 working days of final biopsy	Number with final diagnostic biopsy	% receiving final biopsy results within 5 working days	Lower 95% CI	Upper 95% CI
BSAN	264	288	91.7%	88.89%	94.10%	1151	1339	86.0%	84.4%	87.5%
BSM	133	166	80.1%	74.70%	84.94%	427	539	79.2%	76.3%	82.0%
BSCtoC	72	85	84.7%	77.65%	90.59%	304	342	88.9%	86.0%	91.5%
BSC	105	114	92.1%	87.72%	95.61%	367	400	91.8%	89.5%	94.0%
BSS	237	241	98.3%	97.10%	99.59%	940	966	97.3%	96.4%	98.1%
BSHC	57	61	93.4%	88.52%	98.36%	178	190	93.7%	90.5%	96.3%
BSA Total	868	955	90.9%	89.32%	92.36%	3367	3776	89.2%	88.3%	90.0%

For the last 6 months and last 2 years the percentage of women receiving final diagnostic biopsy results within 5 working days (of all those receiving final diagnostic results) was 90.9% and 89.2% respectively; these are on target or very close to the target of 90%. Some lead providers are below target. These results are similar to the previous period; however, the target has changed (from 7 days). Statistical analysis indicates that a few of the differences between providers are significant.

5e. Time from reporting final diagnosis to the date of the first surgical treatment.

Description:

Time (in working days) from when a woman receives her final diagnostic results to the date of her first surgical treatment.

Target:

90% of women should normally receive their first surgical treatment within 20 working days of receiving their final diagnostic results.

Table 5e. Percentage of women receiving their first surgical treatment within 20 working days of diagnosis.

Lead Provider	For Women Screened from October 2001 to September 2003				
	First surgical treatment within 20 working days	Number having surgery	% receiving surgical treatment within 20 working days	Lower 95% CI	Upper 95% CI
BSAN	147	271	54.2%	49.08%	59.04%
BSM	120	166	72.3%	66.27%	77.71%
BSCtoC	127	163	77.9%	72.39%	83.44%
BSC	*	*	*	*	*
BSS	*	*	*	*	*
BSHC	*	*	*	*	*
BSA Total	394	600	65.7%	62.50%	68.83%

For the 3 services reporting, the percentage of women receiving surgical treatment within 20 working days of receiving diagnostic results was 65.7% which was below the target of 90%. 95% CIs were also below target. There is insufficient data from services for interpretation. Data collection needs to be improved.

Appendix A: Denominators

Population denominator data

The eligible populations in this report were calculated from the projected resident populations for each Lead Provider district, provided by Statistics New Zealand. The projections are based on the New Zealand Census 2001, assuming medium fertility, mortality, migration and inter-ethnic mobility. The populations are the mean of the projected populations for 2003. These figures are used as population denominators for the screening period from 1 July 2003 to 30 June 2004.

Table AA.1. Population projections for BreastScreen Aotearoa, by age group (2003)

Lead Provider	Summary by Age Group			Total Eligible Population
	50-54	55-59	60-64	
BSAN	43810	37640	28960	110410
BSM	18900	16800	14190	49890
BSCtoC	16525	14365	12135	43025
BSC	13690	11820	9320	34830
BSS	22240	19300	15530	57070
BSHC	8950	7850	6600	23400
BSA Total	124115	107775	86735	318625

Ethnic group denominators

The denominators for each ethnic group are also taken from the 2001 census, and calculated from projected resident populations in each lead provider district, provided by Statistics New Zealand.

In the census it is possible to choose more than one ethnic group. Where more than one category has been chosen, priority is given to certain ethnic groups for the purposes of classification by the New Zealand Health Information Service (NZHIS). Thus, if a woman chooses more than one category and one of these is Maori, she is counted as Maori.

Table AA.2 below uses the prioritised definition of ethnicity.

Table AA.2. Population projections for BreastScreen Aotearoa, by ethnicity (2003)

Lead Provider	Summary by Ethnicity			Total
	Maori	Pacific	Other	
BSAN	9370	8140	92890	110410
BSM	7300	530	42090	49890
BSCtoC	5725	405	36900	43025
BSC	2495	1670	30630	34830
BSS	2010	380	54680	57070
BSHC	880	115	22390	23400
BSA Total	27780	11240	279580	318625