BREASTSCREEN AOTEAROA

INDEPENDENT MONITORING REPORT:

SCREENING AND ASSESSMENT REPORT OF WOMEN ATTENDING BSA

(WOMEN SCREENED JULY 2006 TO JUNE 2008)

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EXECUTIVE SUMMARY

This report presents cross-sectional data for the period January-June 2008 (6 months) and July 2006 to June 2008 (2 years), and trend data from programme inception to June 2008 for all BreastScreen Aotearoa screening and assessment indicators. Treatment indicators are located in a previous report.[1] BreastScreen Aotearoa (BSA) has offered government funded biennial mammography screening for all NZ women aged 50-64 years since 1999. In July 2004 the target age group was extended to include women aged 45-49 years and 65-69 years. Targets are provided for indicators for women aged 50-69 years. Due to the paucity of trial and screening service evidence, there is insufficient data on which to base targets for the screening of women under 50 years at present. Therefore, BSA and provider performance for the 45-49 years age group is documented throughout the report, but there are no specific recommendations. Trend data for key indicators are presented for women aged 50-64 years, however, a new times-series has also been established for the target age group of women aged 50-69 years. Some indicators in this report have 'expected' and 'desirable' targets. In the text of this Executive Summary quoted targets relate to 'expected' target values.

1. Coverage

BSA screened 100,543 women aged 45-69 years over the 6-month period from January to June 2008, of which 77,516 were aged between 50 and 69 years. For women in this age group, the biennial participation was 63.2%, which was below the target of 70%. Of biennial screens, 14.2% were initial screens and 85.8% were subsequent screens. The proportion of initial screens has declined over time, reflecting the maturing BSA programme and the increasing number of women attending for subsequent screens.

For women aged 50-69 years, significantly lower biennial participation was evident for the eligible Maori and Pacific populations (47.4% and 50.1% respectively), compared with the remaining ethnic groups (65.1%).

BSSL continues to exceed the biennial coverage target of 70%, and has consistently had higher biennial coverage relative to other lead providers (although coverage declined in BSSL following age-extension to 50-69 years). BSHC also exceeded the biennial coverage target of 70% for the first time since the programme was extended to include women aged 50-69 years.

Re-screening proportion and timeliness
The proportion of women re-screened for the six-month period for women aged 50-69 years was 85.1% within 27 months (target >85%). Of those who attended for re-screen, 83.0% attended within 20-24 months (target >75%). The 20-24-month re-screen rate was statistically above the target, with most Lead Providers exceeding the target value. Re-screen rates (within 27 months) show increasing trends for all lead providers.

2. Provision of quality screening and assessment
Most targets were met for indicators relating to the provision of quality screening and assessment for each age group for the 6-month reporting period. For women 50-69 years, the two-year referral to assessment was 9.0% (target <10%) for initial screens, and 2.9% (target <5%) for subsequent screens.

False positives and positive predictive value
The proportion of false positives for women aged 50-69 years for the 6 month period was 8.2% for initial screens (target <9%), and 2.3% for subsequent screens (target <4%). The positive predictive value (PPV) for the programme for the 6 month reporting period was 10.3% for initial screens and 18.8% for subsequent screens, for women aged 50-69 years.

Technical recall
Technical recall rates for fixed sites achieved the target of <0.5% for BSA and continue to show an improving trend overall (and for the majority of Lead Providers). Expected targets were not met for a number of indicators. Technical

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[1] Page A, Taylor R. BreastScreen Aotearoa: Independent Monitoring Report -Treatment of women with screen detected cancers (women screened July 2005-June 2007). BreastScreen Aotearoa: Wellington 2009.

recall rates for mobile sites exceeded the target value of <3% overall for BSA, and showed increasing disparity between Lead Providers. The reason for high technical recalls for some Lead Providers should be investigated, and standardised requirements should be developed for inadequate films.

3. Early detection of DCIS or invasive breast cancer

DCIS and invasive cancer detection rate
The biennial cancer detection per 1,000 screens - invasive and DCIS combined - for women aged 50-69 years was 9.3 per 1,000 for initial screens and 5.5 per 1,000 for subsequent screens. This represented 1,668 cancers detected through BSA for the 2-year period. Trends in cancer detection for initial and subsequent screens have remained relatively stable across Lead Providers. BSHC cancer detection has consistently been below the BSA total cancer detection rate. The proportion of DCIS of all cancers for this age group over the biennium was 22.6%, ranging from 18.3% to 28.6% across Lead Providers. Trends in proportion of DCIS have remained relatively stable across Lead Providers.

A total of 459 cases of invasive cancer and DCIS (combined) were detected through BSA for women 50-69 years in the 6 month reporting period for initial and subsequent screens combined. The BSA cancer detection for the six-month period (DCIS and invasive combined) for women 50-69 years was 9.7 per 1,000 for initial screens and 5.4 per 1,000 women screened for subsequent screens.

Invasive cancer detection rate
The BSA biennial invasive cancer detection for women aged 50-69 years was 6.9 per 1,000 women screened for initial screens (achieving the target of ≥ 6.1 per 1,000) and 4.0 per 1,000 for subsequent screens (achieving the target of ≥ 3.45 per 1,000). This represented 1,225 invasive cancers detected by BSA for the 2-year reporting period. The overall proportion of node negative cancers (of all invasive cancers) was 74.3% for initial screens (target >70%) and 79.8% for subsequent screens (target >75%).

Invasive cancer detected ≤ 10mm
For women 50-69 years the overall proportion of screen detected invasive cancers ≤ 10mm in size for the 2-year period was 26.8% for initial screens (target ≥ 25%) and 40.5% for subsequent screens (target ≥ 30%). The corresponding detection rates per 10,000 women screened for invasive cancers ≤ 10mm were better than the target value at 18.4 for initial screens (target ≥ 15.2 per 10,000 screens) and 16.3 for subsequent screens (target ≥ 10.45 per 10,000 screens).

Invasive cancer detected <15mm
For women 50-69 years the overall proportion of screen detected invasive cancers <15mm in size for the 2-year reporting period was 41.6% for initial screens (significantly below the target value of >50%) and 60.9% for subsequent screens (exceeding the target of >50%). The corresponding detection rates per 10,000 women screened for invasive cancers <15mm were on target at 28.6 for initial screens (target value >30.5 per 10,000 screens) and 24.6 for subsequent screens (target value >17.3 per 10,000 screens).

4. Provision of an appropriate and acceptable service

The majority of targets for indicators relating to the provision of an appropriate and acceptable service were met.

The overall proportion of women in the 6-month period who were notified of screening results within 10 working days was 96.4% for women 50-69 years, which was higher than the target value of ≥ 90%.

Assessment
The overall proportion of women offered a first assessment within 15 working days for the biennium for women 50-69 years was 80.9%, which was below the target value of 90%. Trend data for this indicator show stable estimates for the programme overall, but a continued significant decline in BSHC.

Time taken from assessment to final diagnostic biopsy
The proportion of women receiving an open biopsy within 15 working days (of those who required an open biopsy) was below the target value of 90%. The biennial proportion for this indicator for women 50-69 years was 66.3%. For the 6-month period the overall proportion receiving an open biopsy within 15 days was 62.0% for women 50-69 years.

The proportion of women who received their final diagnostic biopsy results within 5 working days was 90.9%, which was on target for this indicator (target value 90%). The overall proportion for the 6-month period was 90.6% for women aged 50-69 years.

5. Conclusion

BSA is a population-based mammography screening programme that has participation rates across the target age group 50-69 years approaching the target of 70%, notwithstanding associated service capacity constraints related to the recent age extension into the 45-49 and 65-69 year age groups. Coverage rates lower than the target value can be attributed to the significantly lower coverage in Maori and Pacific groups. Overall, targets for key indicators are being exceeded, or are close to being achieved. There is variation for some indicators across Lead Providers. Areas where target values were not met by BSA in the period covered in this report, and where differences between observed and expected values were of greatest magnitude, included:

- Coverage for Maori and Pacific groups (1a.7)
- Technical recall rates for mobile sites (2b.2)
- Percentage receiving an open biopsy within 15 working days (5c.2)
- Percentage of women offered first assessment appointment within 15 working days (5b)

BSA ADVISORY GROUP COMMENTS AND RECOMMENDATIONS

1. <u>Coverage</u>
The BSA Advisory Group is pleased to note the upward trend in coverage but, also notes that despite increases, the overall coverage is still below the target of 70%. Also of concern are the disparities in coverage for Maori and Pacific women.

The BSA Advisory Group makes the following recommendations:
- the NSU is asked to review the numerous points of contact before a women is screened in order to minimise the time between enrolment and screening
- the NSU should urgently develop mechanisms to improve database matching between primary care and BSA in order to identify unscreened women. This should be a priority for the NSU
- the NSU should review the denominator populations and smoothing effects.

2. <u>Technical Recall Rate</u>
It is noted that there may be differences in recording technical recall across the Lead Providers.

The BSA Advisory Group recommends that the recording of technical recall is discussed at the next meeting of the MRT UDG with a view to standardising the recording.

3. <u>Time from Screening to First Assessment</u>
The deteriorating statistics relating to the timeliness for BSHC are of concern to the BSA Advisory Group.

It is therefore recommended that BreastScreen Health Care review the mechanisms available to them to improve timeliness from screening to assessment as a high priority.

4. <u>Women having Open Biopsy</u>
The BSA Advisory Group is still concerned about the failure to meet the target (90%) for the time from assessment to final biopsy.

The recommendation is made that the NSU considers changing the target to 20 days in line with the recommendation made by the BSA Surgeons UDG. This allows the target to be brought into alignment with the standard time for surgical treatment of confirmed breast cancer cases.

5. <u>Detection of Invasive Cancers < 15 mm</u>
The NSU is asked to clarify the definitions for measurements used in Table 3c. 1. and 3c.2. This would normally be less than or equal to 15mm (to allow for rounding up) rather than less than 15 mm.

6. <u>Final Diagnostic Biopsy to Reporting Assessment Results</u>
It is noted that BSM has consistently not met this target and the BSA Advisory Group recommends that BSM reviews the configuration of the service so that it is patient centred.

FOREWORD: BSA MONITORING PROCESS

Data are sent monthly from the eight BreastScreen Aotearoa Lead Providers (LPs) 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, encrypts the National Health Index (NHI) numbers, and produces 6-monthly data extraction and tables of performance indicators by Lead Provider for the preceding 6 months and preceding 2 years of the reporting period.

The tables are sent to the BSA Independent Monitoring Group (IMG) at the University of Queensland (Australia). The IMG produces an Independent Monitoring Report (IMR) including calculations of confidence intervals (CI's), time trend graphs, an analysis of data against national indicators and targets, explanatory notes and commentary. The IMG can request additional tabulations where it is felt appropriate. The IMG sends the first draft of IMR to NSU for verification and review, after which the IMR is updated.

The updated IMR draft is sent to members of the BSA Advisory Group (AG) prior to a collective meeting, where multidisciplinary and consumer context is added to comments regarding outliers. The draft report is then circulated to LPs for further comment and a final version is produced. The NSU publishes the final report and distributes to providers.

This BSA Independent Monitoring Report was reviewed by the BSA Advisory Group on 27 April, 2009.

TECHNICAL NOTES FOR INTERPRETING THIS REPORT

Presentation of age extension data

As for previous reports, following age extension to women 45-49 years and 65-69 years, this report has aggregated the main eligible age group and presents data for women aged 50-69 years as the target age group. Data for women aged 45-49 years are presented separately. Interpreting trends in this report should take into consideration that indicators for a comparable age group are not available for periods prior to Jul-Dec, 2006. Trend data are presented for women aged 50-64 years for the programme from the first reporting period in 2001 to the June 2006, after which time-series data are broken and a new series has been established for women aged 50-69 years.

Changes to BSA Lead Providers

BreastScreen Auckland and North was split into 3 separate Lead Providers during previous reporting periods: BSAL, BSCM, BSWN. The following table provides a listing of Lead Providers clarifying these changes, and explains the absence of some data in figures showing programme trends.

Lead Provider	Abbreviation	Inception and period of programme
BreastScreen Auckland and North	BSAN	1999-June 2005
BreastScreen Auckland Limited	BSAL	July, 2005-Present
BreastScreen Counties Manukau	BSCM	October, 2005-Present
BreastScreen Waitemata and North	BSWN	February, 2006-Present
BreastScreen Midland	BSM	1999-Present
BreastScreen Coast to Coast	BSCtoC	1999-Present
BreastScreen Central	BSC	1999-Present
BreastScreen South Limited	BSSL	1999-Present
BreastScreen HealthCare	BSHC	1999-Present

Trends in programme indicators

As noted above, this report presents trend data for women aged 50-64 years from the first reporting period in 2001 to June 2007. For the current reporting period a new time series has been established for women aged 50-69 years; this aggregates the first biennium of data for women aged 65-69 years with women aged 50-64 years. Given the large number of indicators, and the fact that, for many indicators, large stochastic variations are evident over time (due to small underlying numbers), trend data have been presented for: (1) key programme indicators relating to participation, referral to assessment, and cancer detection; and (2) for other indicators where noteworthy trends were evident. Trend data have not been presented for women aged 45-49 years.

Population denominators

Population denominators for this report are based on smoothed estimates (by age group and ethnic group). Six-monthly population denominators are estimates based on weighted interpolation using annual population projections provided for each year. Interpolations are used to reflect population increases (or declines) in each 6-month period and result in more stable estimates for each indicator presented. This ensures that there are no artefactual increases in reported estimates due to the same annual denominator population being applied to changing 6-monthly indicator data. Population estimates for this report, and previous reporting periods (used in trend estimates), are provided in Appendix A and Appendix B.

Projected resident populations in each Lead Provider district for each year were provided by Statistics New Zealand. The projections are based on the 2001 New Zealand Census, assuming medium fertility, medium mortality, medium inter-ethnic mobility and medium migration assumptions. The denominators for each ethnic group are also taken from the Census, and are calculated from projected resident populations in each Lead Provider district, as 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. Thus, if a woman chooses more than one category, and one of these is Maori, she is counted as Maori.

Confidence Intervals (CI's)

95% CI's have been reported for all indicators in this report. From the Central Limit Theorem, the estimate for a particular indicator - for example, invasive cancer detection rate in a 6 month period - is assumed to come from a hypothetical distribution of values for that indicator. The overall average value of this hypothetical distribution is the universal or 'true' invasive cancer detection rate for the population being studied. The 95% confidence interval indicates that there is a 1 in 20 chance that the 'true' population rate (or proportion, or mean) lies outside the range of values contained by the 95% confidence interval. Thus, the wider the 95% confidence interval, the less precise the estimate is to the true population parameter. Additionally, different statistical distributions provide more accurate and appropriate estimations of the 95% confidence intervals, and depend upon the type of indicator being studied, and the frequency of the event. For this report, 95% confidence intervals for rare events occurring in a population have been calculated using the Poisson distribution. For indicators with small numbers where proportions represent cases and non-cases the 95% confidence interval is based on the Exact Binomial distribution.

Differences between observed and target values

Both the magnitude of differences, and their statistical significance, are used to assess the relation of observed to target values.

The magnitude of the difference between the observed value and the target value is important in the interpretation of each indicator. In this report, differences of ≥ 5% in magnitude that are statistically significantly different from the target value, based on 95% confidence intervals, are noted as important differences, and are indicated by '✓✓' if better than the target, or 'xx' if worse than the target. Differences of ≥ 10% that are statistically significant (from the target value) are indicated by '✓✓✓' if better than the target, or 'xxx' if worse than the target. Differences of <5% in magnitude from the target value and/or differences which are not significantly different from the target value are indicated by '✓' and are considered 'on target'.

For each indicator, differences in magnitude between the observed value and the target value need to be interpreted in the context and meaning of the indicator under investigation. If the standard is 80% then a 10% difference in magnitude would contain values ranging from 72%-88%. If the standard is 10%, then a 10% difference in magnitude would contain values ranging from 9%-11%. As a guide, slight differences can be considered to be of a relative magnitude of 0-5%, moderate differences of 5-9%, and large differences >10%.

Formal assessment of observed values in comparison to target values do not apply to 45-49 year old women as there is no long term trial data to indicate the achievable and optimal targets for this age group.

Target values relate only to biennial rates for women in the target age-group (50-69 years) for all indicators, and ticks and crosses for 6-month rates are not presented.

AT A GLANCE: BIENNIAL INDICATORS FOR WOMEN 50-69 YEARS

Figure 1: Biennial indicators 'on target', 'better than target', or 'worse than target' for BSA as measured by percent difference between observed and target value (Table reference in brackets)

Percent difference from target
(Values >0 have reached target value)

-150   0   150

- %Cancers from referral to assessment, Subsequent (2f.2)
- %Rejected films, Mobile (2c.2)
- Benign open biopsy rate, Subsequent (2m.2)
- %Rejected films, Fixed (2c.2)
- Invasive cancers <=10mm per 10,000 screens, Subsequent (3b.2)
- Technical recall rate, Fixed (2b.2)
- Invasive cancers <15mm per 10,000 screens, Subsequent (3c.2)
- False positive rate, Subsequent (2e.2)
- %Referral to assessment, Subsequent (2d.2)
- Benign open biopsy rate, Initial (2m.2)
- %Preoperative diagnosis of cancer (2h)
- %Invasive cancers <=10mm, Subsequent (3b.1)
- %Invasive cancers <15mm, Subsequent (3c.1)
- Invasive cancers <=10mm per 10,000 screens, Initial (3b.2)
- Invasive cancer detection rate, Subsequent (3a.2b)
- %Cancers from referral to assessment, Initial (2f.2)
- Four films or fewer, Fixed (2a.2)
- False positive rate, Initial (2e.2)
- Invasive cancer detection rate, Initial (3a.2b)
- %Referral to assessment, Initial (2d.2)
- Re-screen, 20-24 months (1b.2)
- Four films or fewer, Mobile (2a.2)
- %Invasive cancers <=10mm, Initial (3b.1)
- %Notified of results <10 days (5a)
- Specificity, Subsequent (2l.2)
- %Receiving needle biopsy <5 days after assessment (5c.1)
- Specificity, Initial (2l.2)
- Re-screen within 27 months (1b.1)
- %Final diagnostic biopsy results <5 days (5d)
- Invasive cancers <15mm per 10,000 screens, Initial (3c.2)
- Coverage, Other (1a.7)
- Overall coverage (1a.1)
- %Offered first assessment appointment <15 days (5b)
- %Invasive cancers <15mm, Initial (3c.1)
- Technical recall rate, Mobile (2b.2)
- %Open biopsy <15 working days (5c.2)
- Coverage, Pacific (1a.7)
- Coverage, Maori (1a.7)

NB: The vertical line represent a ± 10% difference between the observed value and the target value

Figure 2: Biennial indicators 'on target', 'better than target', or 'worse than target' for BSWN as measured by percent difference between observed and target value (Table reference in brackets). Note: These data are for an almost complete biennium following re-distribution of BSAN areas.
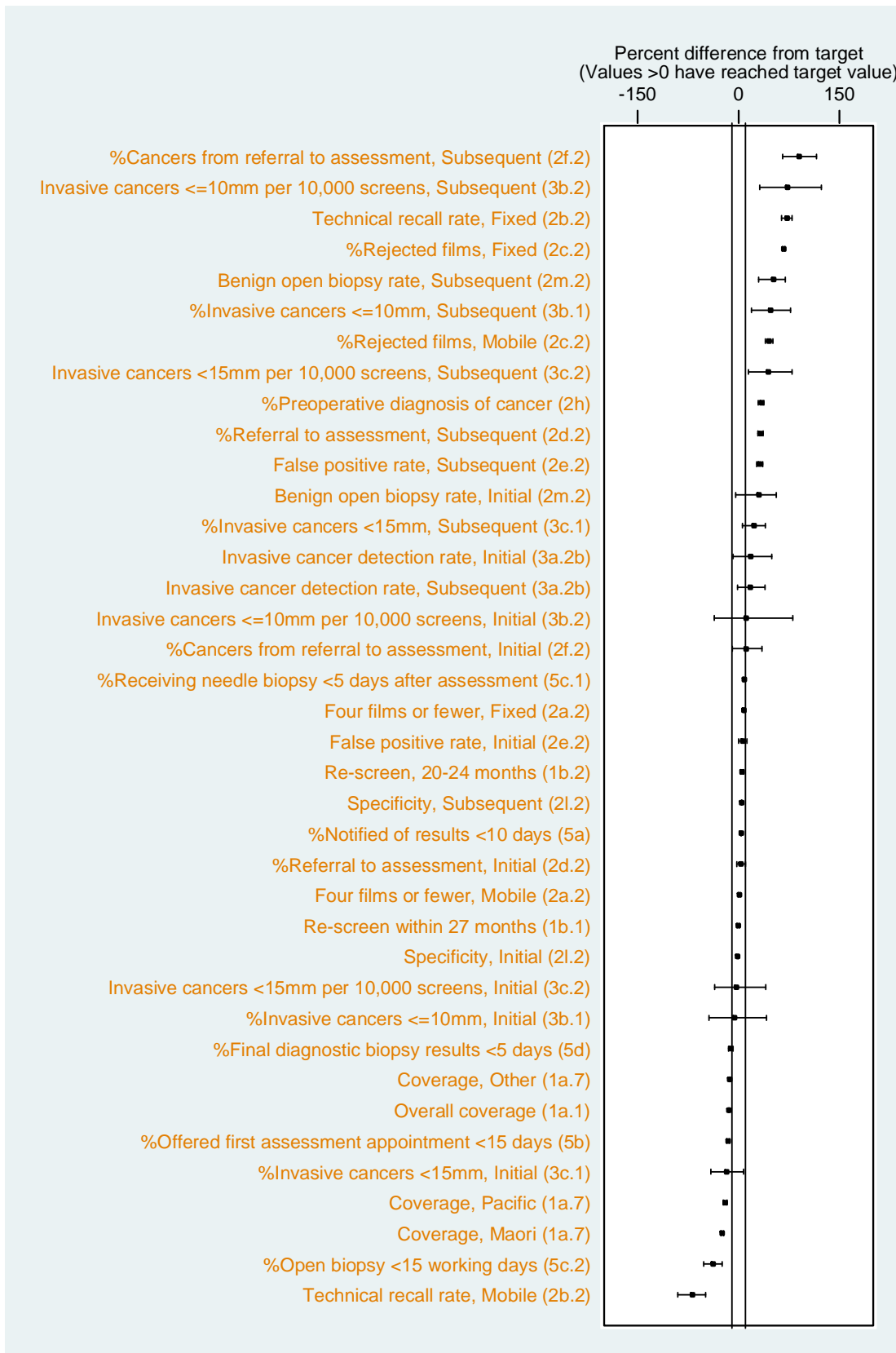
NB: The vertical line represent a ± 10% difference between the observed value and the target value

Figure 3: Biennial indicators 'on target', 'better than target', or 'worse than target' for BSCM as measured by percent difference between observed and target value (Table reference in brackets).

NB: The vertical line represent a ± 10% difference between the observed value and the target value

Figure 4: Biennial indicators 'on target', 'better than target', or 'worse than target' for BSAL as measured by percent difference between observed and target value (Table reference in brackets). Note: These data are for an almost complete biennium following re-distribution of BSAN areas.

NB: The vertical line represent a ± 10% difference between the observed value and the target value

Figure 5: Biennial indicators 'on target', 'better than target', or 'worse than target' for BSM as measured by percent difference between observed and target value (Table reference in brackets)

NB: The vertical line represent a ± 10% difference between the observed value and the target value

Figure 6: Biennial indicators 'on target', 'better than target', or 'worse than target' for BSCtoC as measured by percent difference between observed and target value (Table reference in brackets)

Percent difference from target
(Values >0 have reached target value)

%Cancers from referral to assessment, Subsequent (2f.2)
Benign open biopsy rate, Subsequent (2m.2)
%Rejected films, Mobile (2c.2)
Benign open biopsy rate, Initial (2m.2)
%Rejected films, Fixed (2c.2)
False positive rate, Subsequent (2e.2)
%Referral to assessment, Subsequent (2d.2)
Technical recall rate, Fixed (2b.2)
Invasive cancers <15mm per 10,000 screens, Subsequent (3c.2)
%Preoperative diagnosis of cancer (2h)
Invasive cancers <=10mm per 10,000 screens, Subsequent (3b.2)
Invasive cancer detection rate, Subsequent (3a.2b)
False positive rate, Initial (2e.2)
%Cancers from referral to assessment, Initial (2f.2)
%Referral to assessment, Initial (2d.2)
%Invasive cancers <15mm, Subsequent (3c.1)
Four films or fewer, Fixed (2a.2)
%Notified of results <10 days (5a)
%Receiving needle biopsy <5 days after assessment (5c.1)
Invasive cancer detection rate, Initial (3a.2b)
%Invasive cancers <=10mm, Subsequent (3b.1)
Specificity, Subsequent (2l.2)
Four films or fewer, Mobile (2a.2)
Re-screen within 27 months (1b.1)
Specificity, Initial (2l.2)
Re-screen, 20-24 months (1b.2)
%Final diagnostic biopsy results <5 days (5d)
%Offered first assessment appointment <15 days (5b)
Coverage, Other (1a.7)
Overall coverage (1a.1)
Technical recall rate, Mobile (2b.2)
Invasive cancers <=10mm per 10,000 screens, Initial (3b.2)
%Invasive cancers <=10mm, Initial (3b.1)
Coverage, Maori (1a.7)
Invasive cancers <15mm per 10,000 screens, Initial (3c.2)
Coverage, Pacific (1a.7)
%Invasive cancers <15mm, Initial (3c.1)
%Open biopsy <15 working days (5c.2)

NB: The vertical line represent a $\pm$ 10% difference between the observed value and the target value

Figure 7: Biennial indicators 'on target', 'better than target', or 'worse than target' for BSC as measured by percent difference between observed and target value (Table reference in brackets)

Percent difference from target
(Values >0 have reached target value)

NB: The vertical line represent a ± 10% difference between the observed value and the target value

Figure 8: Biennial indicators 'on target', 'better than target', or 'worse than target' for BSSL as measured by percent difference between observed and target value (Table reference in brackets)
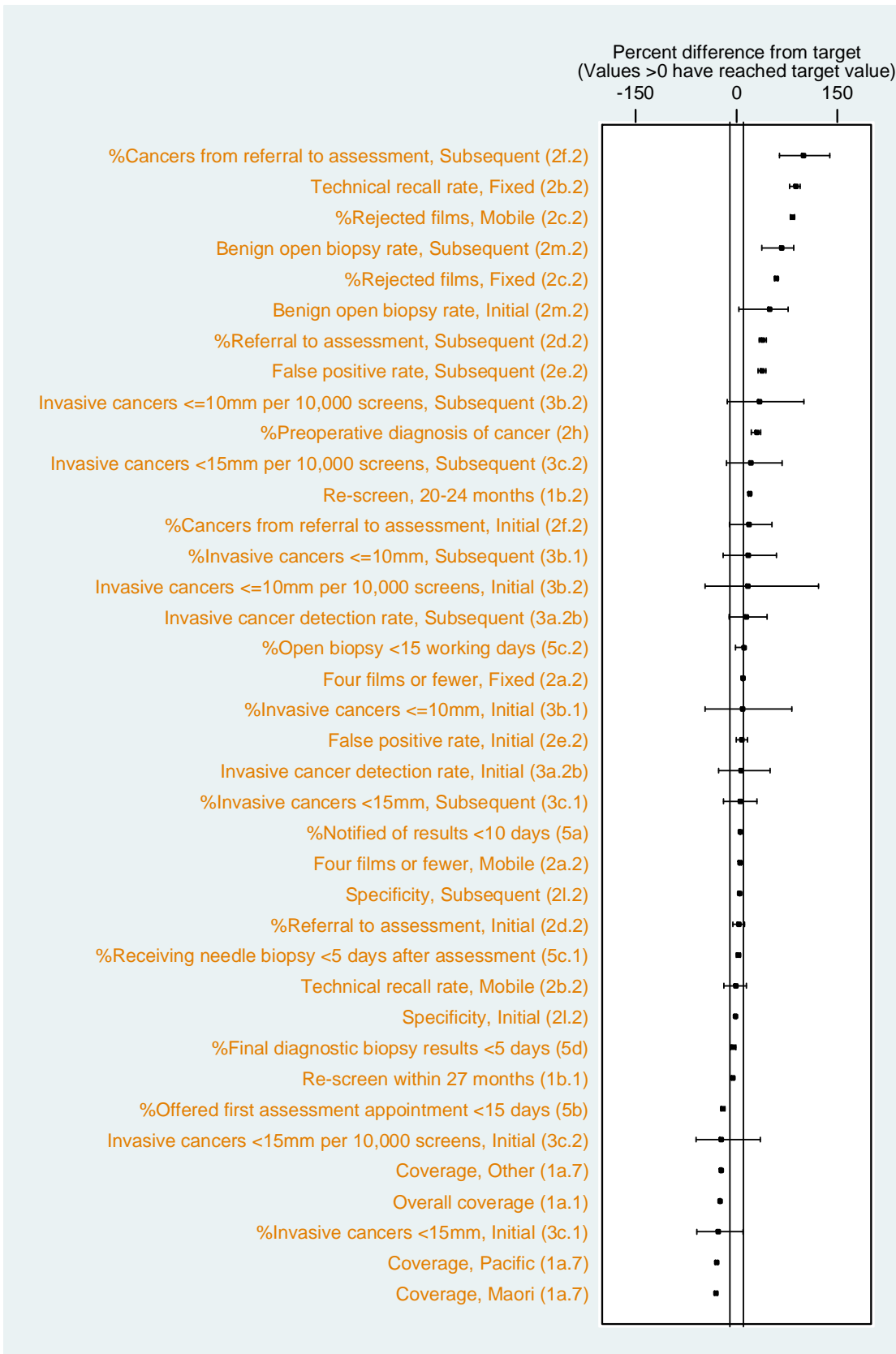

Percent difference from target
(Values >0 have reached target value)

Invasive cancers <=10mm per 10,000 screens, Initial (3b.2)
%Cancers from referral to assessment, Subsequent (2f.2)
Invasive cancers <15mm per 10,000 screens, Initial (3c.2)
%Cancers from referral to assessment, Initial (2f.2)
Benign open biopsy rate, Initial (2m.2)
%Rejected films, Mobile (2c.2)
Benign open biopsy rate, Subsequent (2m.2)
%Rejected films, Fixed (2c.2)
Technical recall rate, Fixed (2b.2)
%Invasive cancers <=10mm, Initial (3b.1)
Invasive cancer detection rate, Initial (3a.2b)
%Referral to assessment, Subsequent (2d.2)
False positive rate, Subsequent (2e.2)
Invasive cancers <=10mm per 10,000 screens, Subsequent (3b.2)
Invasive cancers <15mm per 10,000 screens, Subsequent (3c.2)
Technical recall rate, Mobile (2b.2)
%Preoperative diagnosis of cancer (2h)
False positive rate, Initial (2e.2)
%Referral to assessment, Initial (2d.2)
%Invasive cancers <=10mm, Subsequent (3b.1)
%Invasive cancers <15mm, Subsequent (3c.1)
%Invasive cancers <15mm, Initial (3c.1)
Re-screen, 20-24 months (1b.2)
Four films or fewer, Fixed (2a.2)
Coverage, Other (1a.7)
Overall coverage (1a.1)
Four films or fewer, Mobile (2a.2)
Invasive cancer detection rate, Subsequent (3a.2b)
%Notified of results <10 days (5a)
Coverage, Pacific (1a.7)
%Final diagnostic biopsy results <5 days (5d)
Re-screen within 27 months (1b.1)
%Offered first assessment appointment <15 days (5b)
Specificity, Subsequent (2l.2)
Specificity, Initial (2l.2)
Coverage, Maori (1a.7)
%Open biopsy <15 working days (5c.2)
%Receiving needle biopsy <5 days after assessment (5c.1)
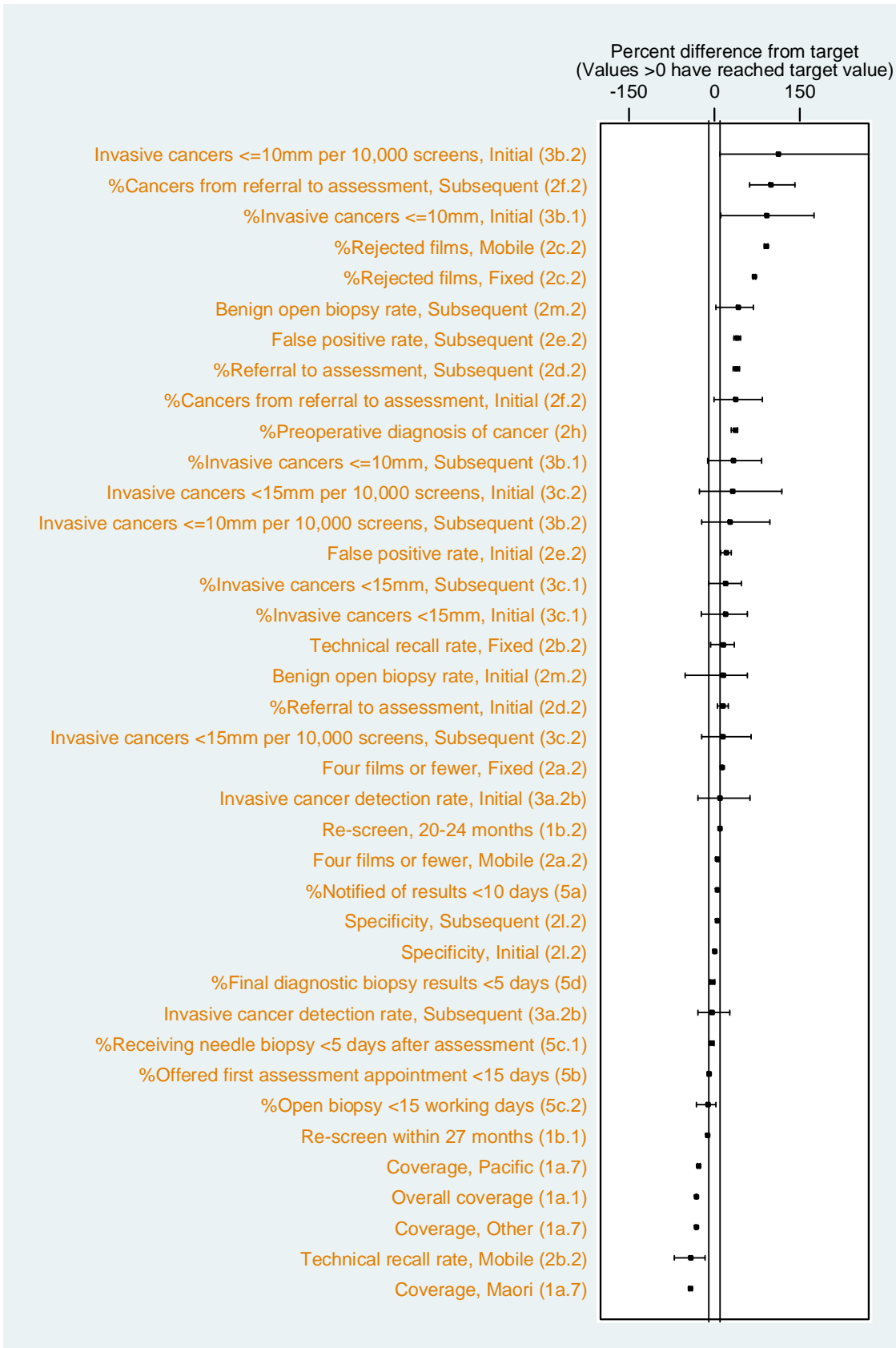
NB: The vertical line represent a ± 10% difference between the observed value and the target value

Figure 9: Biennial indicators 'on target', 'better than target', or 'worse than target' for BSHC as measured by percent difference between observed and target value (Table reference in brackets)
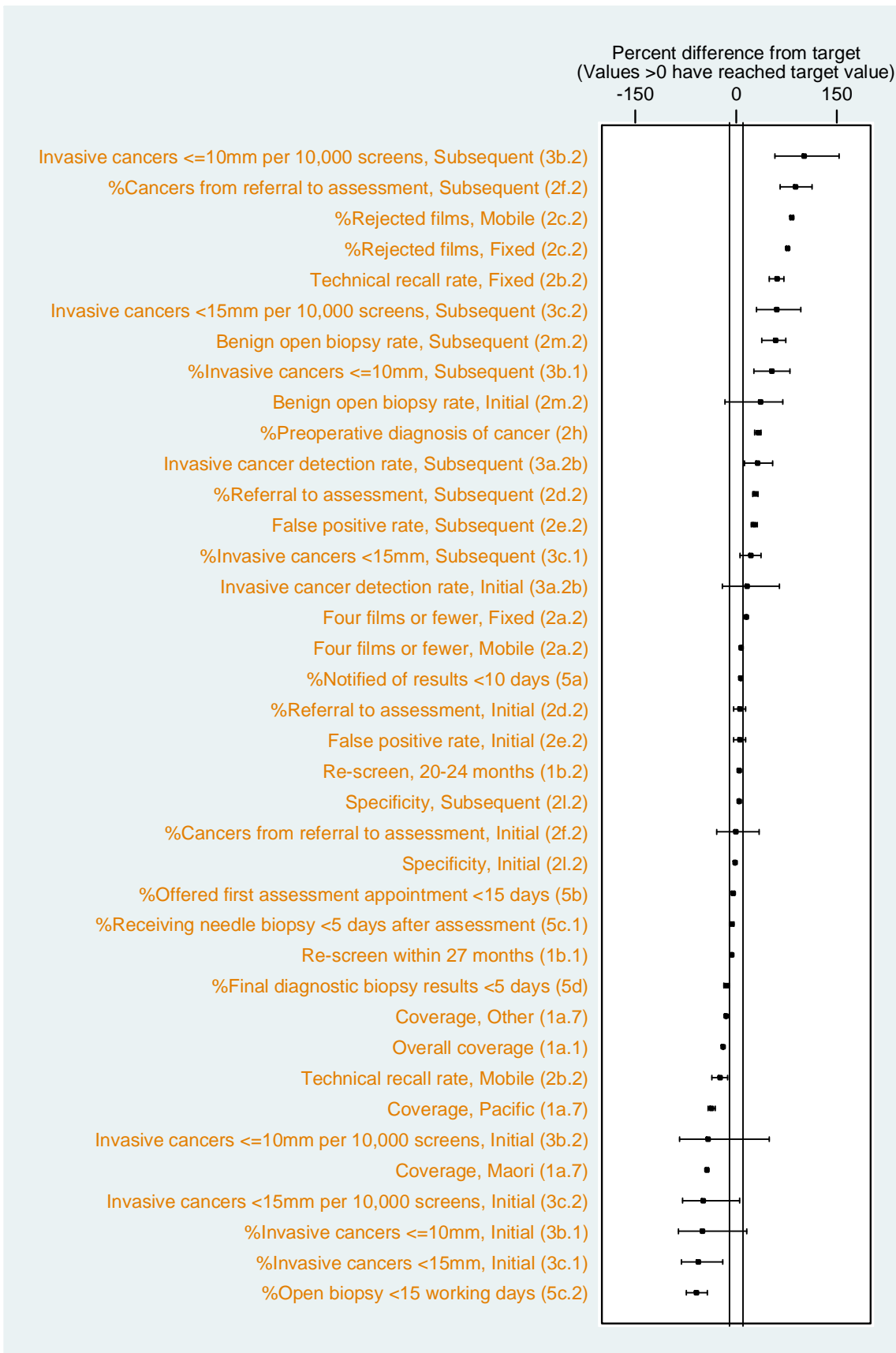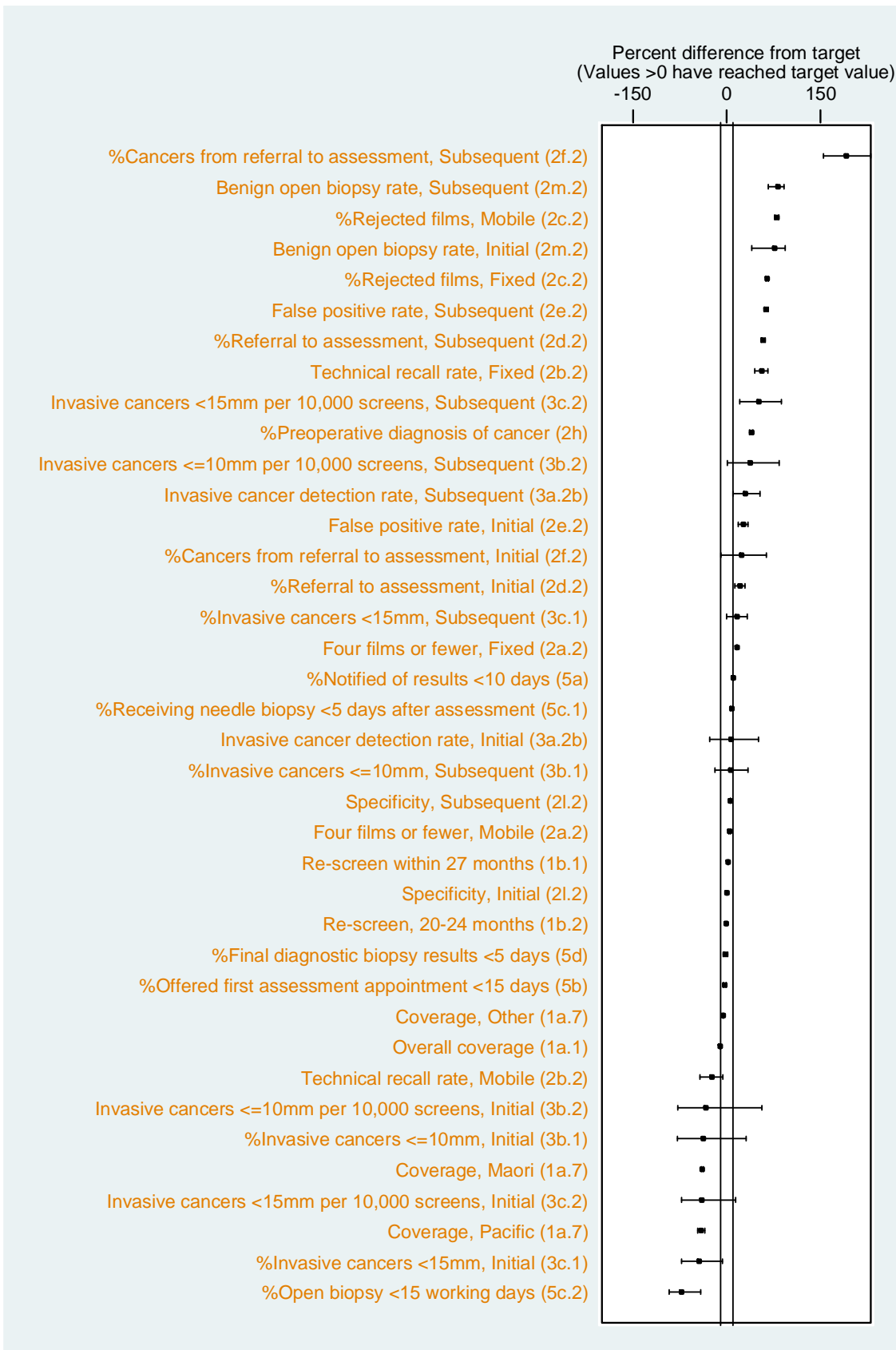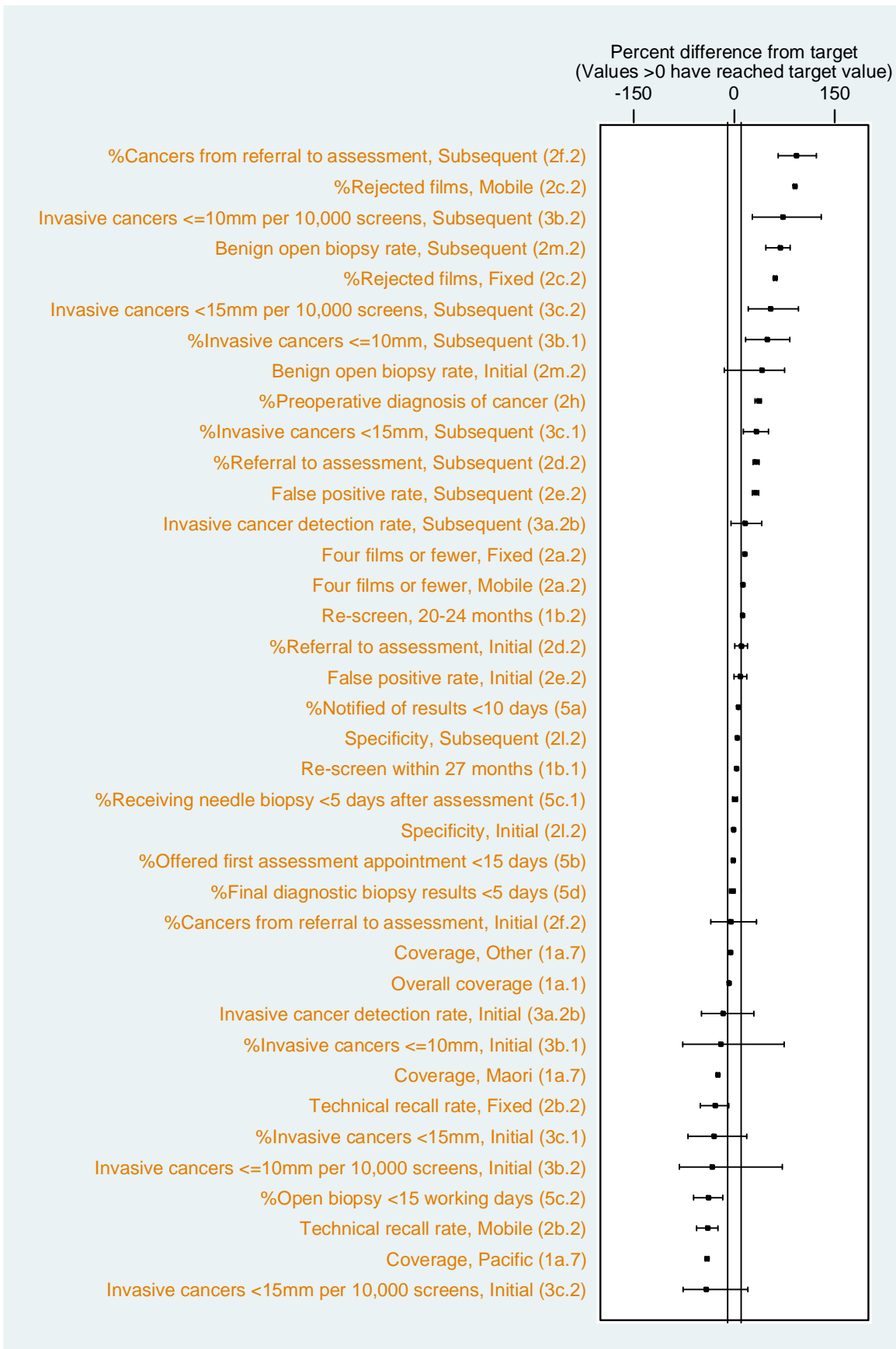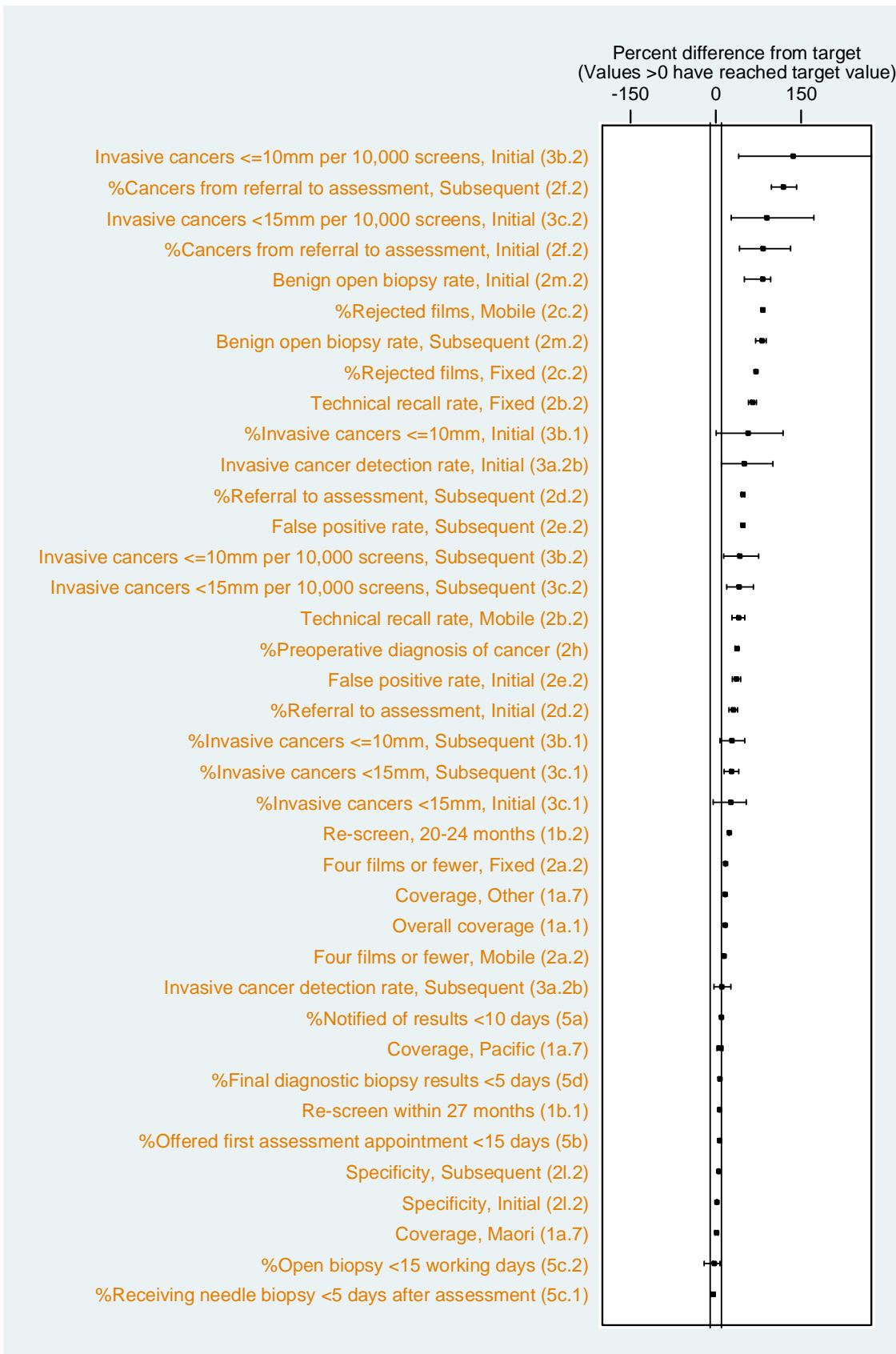

Percent difference from target
(Values >0 have reached target value)

-150   0   150

%Rejected films, Mobile (2c.2)
%Cancers from referral to assessment, Subsequent (2f.2)
Benign open biopsy rate, Subsequent (2m.2)
Invasive cancers <=10mm per 10,000 screens, Subsequent (3b.2)
%Rejected films, Fixed (2c.2)
%Invasive cancers <=10mm, Subsequent (3b.1)
%Referral to assessment, Subsequent (2d.2)
False positive rate, Subsequent (2e.2)
Technical recall rate, Fixed (2b.2)
%Preoperative diagnosis of cancer (2h)
%Invasive cancers <=10mm, Initial (3b.1)
Invasive cancers <15mm per 10,000 screens, Subsequent (3c.2)
Four films or fewer, Mobile (2a.2)
%Invasive cancers <15mm, Subsequent (3c.1)
Specificity, Subsequent (2l.2)
Invasive cancers <=10mm per 10,000 screens, Initial (3b.2)
Four films or fewer, Fixed (2a.2)
Coverage, Other (1a.7)
Re-screen within 27 months (1b.1)
Invasive cancer detection rate, Subsequent (3a.2b)
Overall coverage (1a.1)
%Receiving needle biopsy <5 days after assessment (5c.1)
%Open biopsy <15 working days (5c.2)
%Notified of results <10 days (5a)
Specificity, Initial (2l.2)
%Final diagnostic biopsy results <5 days (5d)
Technical recall rate, Mobile (2b.2)
Coverage, Pacific (1a.7)
Invasive cancer detection rate, Initial (3a.2b)
%Referral to assessment, Initial (2d.2)
False positive rate, Initial (2e.2)
Re-screen, 20-24 months (1b.2)
%Invasive cancers <15mm, Initial (3c.1)
Coverage, Maori (1a.7)
Invasive cancers <15mm per 10,000 screens, Initial (3c.2)
%Cancers from referral to assessment, Initial (2f.2)
%Offered first assessment appointment <15 days (5b)
Benign open biopsy rate, Initial (2m.2)

NB: The vertical line represent a ± 10% difference between the observed value and the target value

1. COVERAGE

1.a.1. Overall coverage of eligible women
Description: This is a population-based measure of the percentage of women in the target age group (45-49, 50-69 years) who have had a screening mammogram in the programme
Target: ≥ 70% of eligible women receive a screen within the programme in the most recent 24-month period

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

	6 months			2 years				
	Number of women screened	Eligible Population	% (95%CI)	Number of women screened	Eligible Population	% (95%CI)		
45-49 years								
BSWN	3,770	26,115	14.4 (14.0-14.9)	13,704	26,115	52.5 (51.9-53.1)		
BSCM	1,503	15,965	9.4 (9.0-9.9)	7,248	15,965	45.4 (44.6-46.2)		
BSAL	1,871	15,940	11.7 (11.2-12.2)	6,008	15,940	37.7 (36.9-38.4)		
BSM	2,261	24,285	9.3 (8.9-9.7)	9,796	24,285	40.3 (39.7-41.0)		
BSCtoC	2,711	20,525	13.2 (12.7-13.7)	9,608	20,525	46.8 (46.1-47.5)		
BSC	2,276	17,545	13.0 (12.5-13.5)	8,003	17,545	45.6 (44.9-46.4)		
BSSL	6,664	26,955	24.7 (24.2-25.2)	21,508	26,955	79.8 (79.3-80.3)		
BSHC	1,971	11,180	17.6 (16.9-18.3)	6,221	11,180	55.6 (54.7-56.6)		
BSA Total	23,027	158,510	14.5 (14.4-14.7)	82,096	158,510	51.8 (51.5-52.0)		
50-69 years								
BSWN	12,260	70,595	17.4 (17.1-17.6)	42,276	70,595	59.9 (59.5-60.2)	✗✗✗	*
BSCM	5,609	42,070	13.3 (13.0-13.7)	22,223	42,070	52.8 (52.3-53.3)	✗✗✗	*
BSAL	7,386	39,390	18.8 (18.4-19.1)	18,804	39,390	47.7 (47.2-48.2)	✗✗✗	*
BSM	9,273	69,925	13.3 (13.0-13.5)	39,387	69,925	56.3 (56.0-56.7)	✗✗✗	*
BSCtoC	10,292	58,905	17.5 (17.2-17.8)	36,965	58,905	62.8 (62.4-63.1)	✗✗✗	*
BSC	9,009	46,505	19.4 (19.0-19.7)	30,086	46,505	64.7 (64.3-65.1)	✗✗	*
BSSL	16,881	78,345	21.5 (21.3-21.8)	63,962	78,345	81.6 (81.4-81.9)	✓✓✓	*
BSHC	6,806	31,590	21.5 (21.1-22.0)	22,777	31,590	72.1 (71.6-72.6)	✓	*
BSA Total	77,516	437,325	17.7 (17.6-17.8)	276,480	437,325	63.2 (63.1-63.4)	✗✗	*

Note: Eligible population for 2008 is based on projections from the 2001 census
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
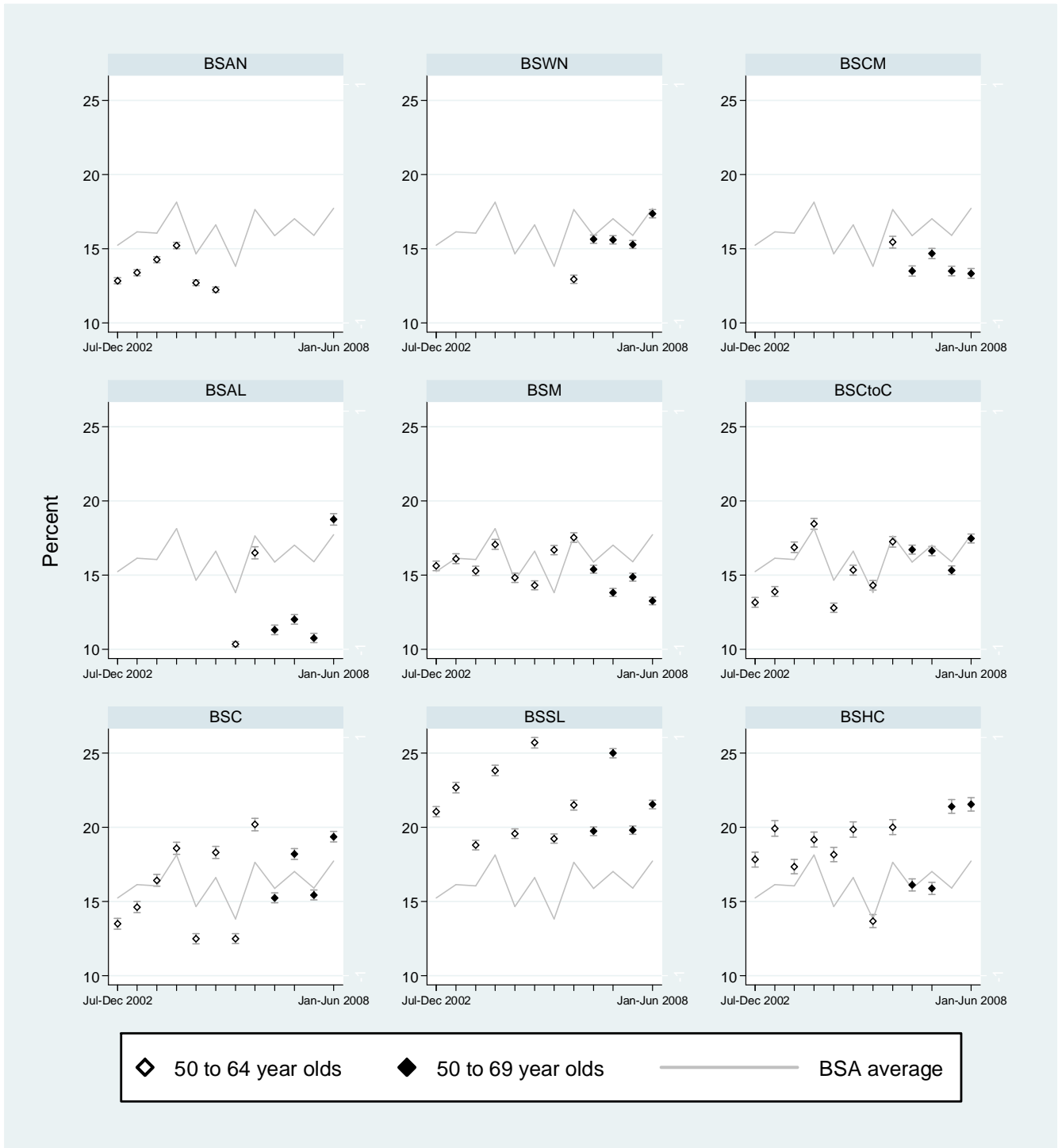✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
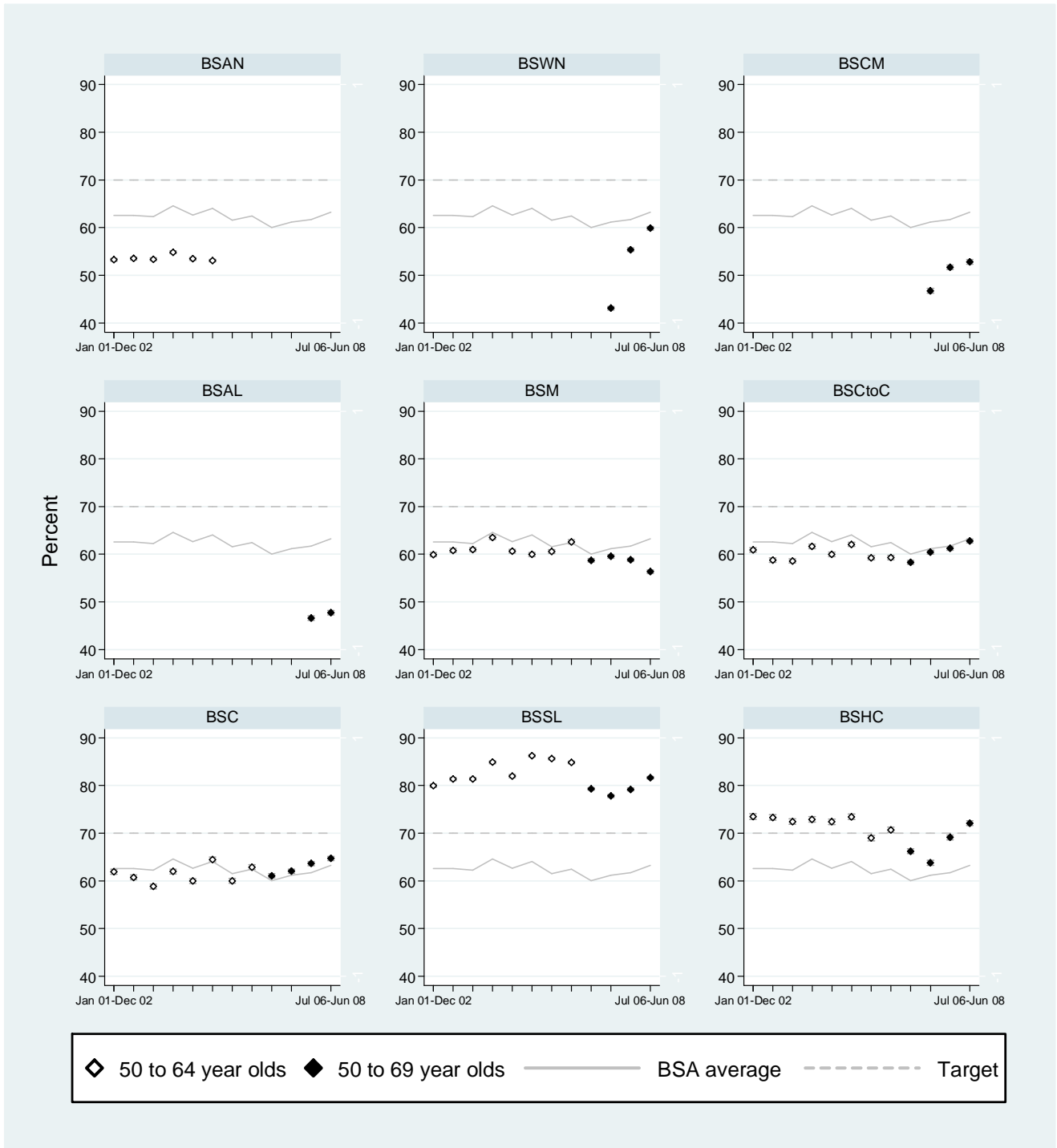xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 1a.1: Trends in 6 month coverage of eligible women

**Figure 1a.1: Trends in biennial coverage of eligible women**

1.a.2. The percentage of screens that are initial and subsequent screens

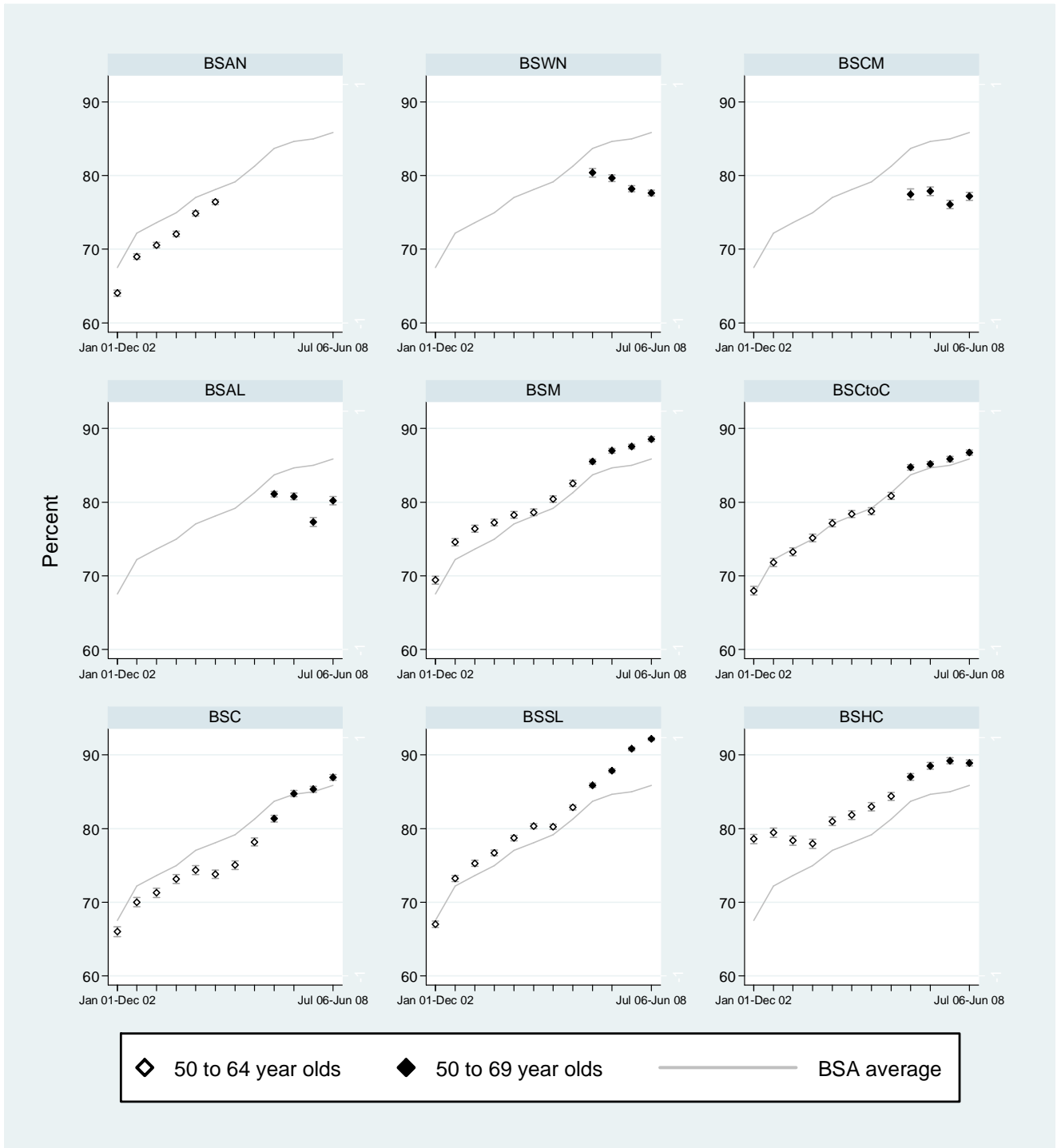**Table 1.a.2. The percentage of screens that are initial and subsequent screens, 2 years**

	Initial screens	Number of women screened	% (95%CI)	Subsequent screens	Number of women screened	% (95%CI)
45-49 years						
BSWN	11,994	13,704	87.5 (87.0-88.1)	1,710	13,704	12.5 (11.9-13.0)
BSCM	6,934	7,248	95.7 (95.2-96.1)	314	7,248	4.3 (3.9-4.8)
BSAL	5,027	6,008	83.7 (82.7-84.6)	981	6,008	16.3 (15.4-17.3)
BSM	6,649	9,796	67.9 (66.9-68.8)	3,147	9,796	32.1 (31.2-33.1)
BSCtoC	6,879	9,608	71.6 (70.7-72.5)	2,729	9,608	28.4 (27.5-29.3)
BSC	5,639	8,003	70.5 (69.4-71.5)	2,364	8,003	29.5 (28.5-30.6)
BSSL	15,296	21,508	71.1 (70.5-71.7)	6,212	21,508	28.9 (28.3-29.5)
BSHC	4,241	6,221	68.2 (67.0-69.3)	1,980	6,221	31.8 (30.7-33.0)
BSA Total	62,659	82,096	76.3 (76.0-76.6)	19,437	82,096	23.7 (23.4-24.0)
50-69 years						
BSWN	9,453	42,276	22.4 (22.0-22.8)	32,823	42,276	77.6 (77.2-78.0)
BSCM	5,070	22,223	22.8 (22.3-23.4)	17,153	22,223	77.2 (76.6-77.7)
BSAL	3,722	18,804	19.8 (19.2-20.4)	15,082	18,804	80.2 (79.6-80.8)
BSM	4,506	39,387	11.4 (11.1-11.8)	34,881	39,387	88.6 (88.2-88.9)
BSCtoC	4,909	36,965	13.3 (12.9-13.6)	32,056	36,965	86.7 (86.4-87.1)
BSC	3,924	30,086	13.0 (12.7-13.4)	26,162	30,086	87.0 (86.6-87.3)
BSSL	5,012	63,962	7.8 (7.6-8.0)	58,950	63,962	92.2 (92.0-92.4)
BSHC	2,527	22,777	11.1 (10.7-11.5)	20,250	22,777	88.9 (88.5-89.3)
BSA Total	39,123	276,480	14.2 (14.0-14.3)	237,357	276,480	85.8 (85.7-86.0)

Figure 1a.2: Percentage of initial screens for each screening biennium

BSA Screening and Assessment Report - Women screened July 2006-June 2008

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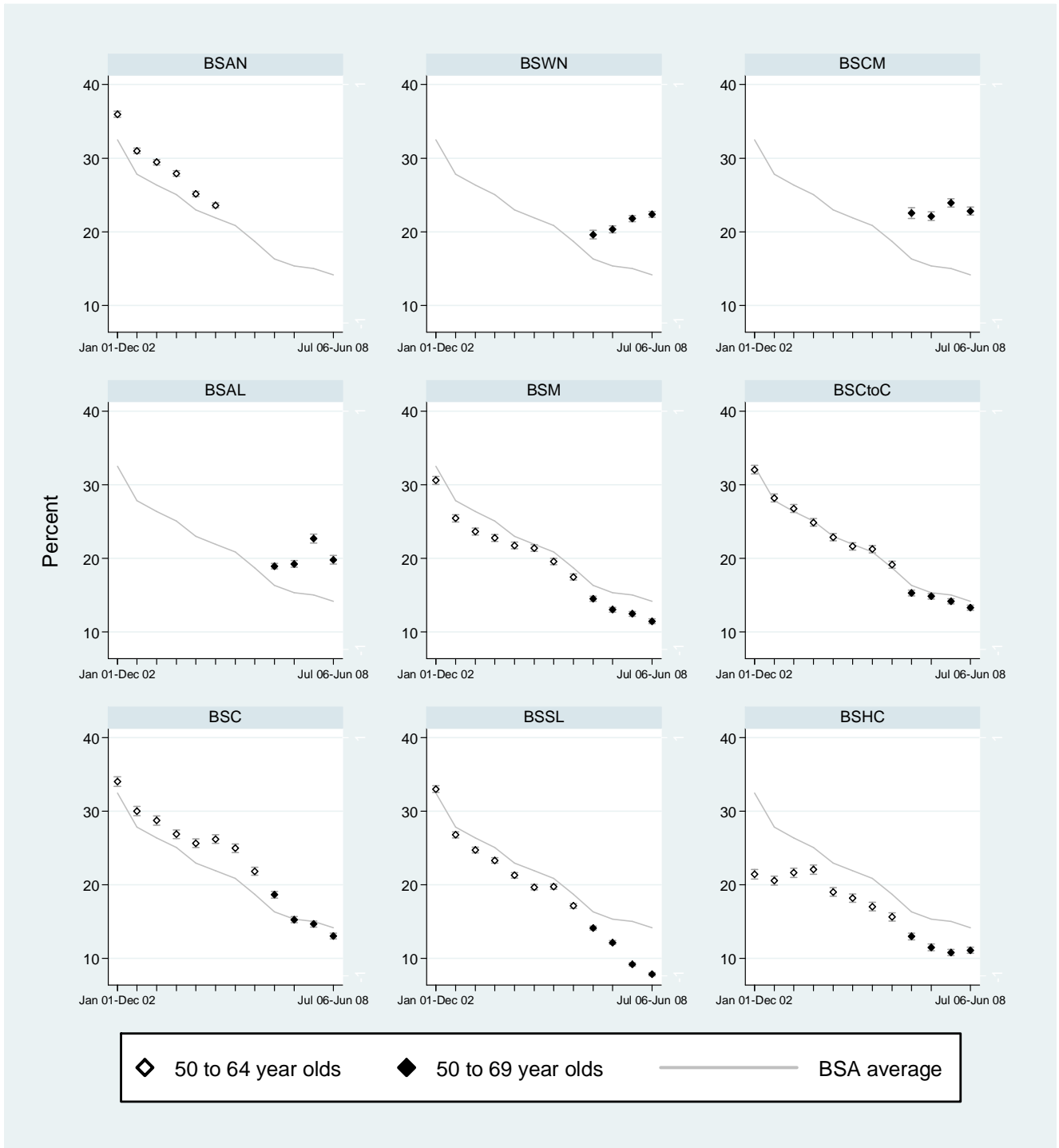
Figure 1a.2: Percentage of subsequent screens for each screening biennium

1.a.3. The percentage of women screened by type of screening unit

Table 1.a.3. Percentage of women screened by type of screening unit

	Fixed site screens	Number of women screened	% (95%CI)	Mobile site screens,	Number of women screened	% (95%CI)
45-49 years						
BSWN	12,074	13,704	88.1 (87.6-88.6)	1,630	13,704	11.9 (11.4-12.4)
BSCM	5,087	7,248	70.2 (69.1-71.2)	2,161	7,248	29.8 (28.8-30.9)
BSAL	4,865	6,008	81.0 (80.0-82.0)	1,143	6,008	19.0 (18.0-20.0)
BSM	7,020	9,796	71.7 (70.8-72.6)	2,776	9,796	28.3 (27.4-29.2)
BSCtoC	8,211	9,608	85.5 (84.7-86.2)	1,397	9,608	14.5 (13.8-15.3)
BSC	6,436	8,003	80.4 (79.5-81.3)	1,567	8,003	19.6 (18.7-20.5)
BSSL	19,333	21,508	89.9 (89.5-90.3)	2,175	21,508	10.1 (9.7-10.5)
BSHC	3,795	6,221	61.0 (59.8-62.2)	2,426	6,221	39.0 (37.8-40.2)
BSA Total	66,821	82,096	81.4 (81.1-81.7)	15,275	82,096	18.6 (18.3-18.9)
50-69 years						
BSWN	36,960	42,276	87.4 (87.1-87.7)	5,316	42,276	12.6 (12.3-12.9)
BSCM	17,432	22,223	78.4 (77.9-79.0)	4,791	22,223	21.6 (21.0-22.1)
BSAL	16,190	18,804	86.1 (85.6-86.6)	2,614	18,804	13.9 (13.4-14.4)
BSM	27,956	39,387	71.0 (70.5-71.4)	11,431	39,387	29.0 (28.6-29.5)
BSCtoC	32,028	36,965	86.6 (86.3-87.0)	4,937	36,965	13.4 (13.0-13.7)
BSC	22,920	30,086	76.2 (75.7-76.7)	7,166	30,086	23.8 (23.3-24.3)
BSSL	57,321	63,962	89.6 (89.4-89.9)	6,641	63,962	10.4 (10.1-10.6)
BSHC	14,989	22,777	65.8 (65.2-66.4)	7,788	22,777	34.2 (33.6-34.8)
BSA Total	225,796	276,480	81.7 (81.5-81.8)	50,684	276,480	18.3 (18.2-18.5)

1.a.4 Age-specific coverage of women aged 50-69 years

Table 1.a.4: Age-specific coverage of women aged 50-69 years

	6 months			2 years				
	Number of women screened	Eligible Population	% (95%CI)	Number of women screened	Eligible Population	% (95%CI)		
50-54 years								
BSWN	3,322	21,765	15.3 (14.8-15.7)	12,138	21,765	55.8 (55.1-56.4)	xxx	*
BSCM	1,606	13,275	12.1 (11.5-12.7)	6,512	13,275	49.1 (48.2-49.9)	xxx	*
BSAL	2,166	13,290	16.3 (15.7-16.9)	5,627	13,290	42.3 (41.5-43.2)	xxx	*
BSM	2,374	21,400	11.1 (10.7-11.5)	10,234	21,400	47.8 (47.2-48.5)	xxx	*
BSCtoC	2,747	17,965	15.3 (14.8-15.8)	10,256	17,965	57.1 (56.4-57.8)	xxx	*
BSC	2,316	14,525	15.9 (15.4-16.6)	8,483	14,525	58.4 (57.6-59.2)	xxx	*
BSSL	4,812	23,845	20.2 (19.7-20.7)	19,343	23,845	81.1 (80.6-81.6)	✓✓✓	*
BSHC	1,930	9,535	20.2 (19.4-21.1)	6,806	9,535	71.4 (70.5-72.3)	✓	*
BSA Total	21,273	135,600	15.7 (15.5-15.9)	79,399	135,600	58.6 (58.3-58.8)	xxx	*
55-59 years								
BSWN	3,468	19,655	17.6 (17.1-18.2)	11,662	19,655	59.3 (58.6-60.0)	xxx	*
BSCM	1,655	11,820	14.0 (13.4-14.6)	6,356	11,820	53.8 (52.9-54.7)	xxx	*
BSAL	2,359	11,070	21.3 (20.6-22.1)	5,680	11,070	51.3 (50.4-52.2)	xxx	*
BSM	2,322	18,945	12.3 (11.8-12.7)	10,432	18,945	55.1 (54.4-55.8)	xxx	*
BSCtoC	3,097	16,155	19.2 (18.6-19.8)	10,244	16,155	63.4 (62.7-64.2)	xx	*
BSC	2,774	13,150	21.1 (20.4-21.8)	8,695	13,150	66.1 (65.3-66.9)	xx	*
BSSL	4,828	22,045	21.9 (21.4-22.5)	17,663	22,045	80.1 (79.6-80.6)	✓✓✓	*
BSHC	1,884	8,765	21.5 (20.6-22.4)	6,176	8,765	70.5 (69.5-71.4)	✓	ns
BSA Total	22,387	121,605	18.4 (18.2-18.6)	76,908	121,605	63.2 (63.0-63.5)	xx	*
60-64 years								
BSWN	3,144	16,165	19.4 (18.8-20.1)	10,331	16,165	63.9 (63.2-64.7)	xx	*
BSCM	1,401	9,485	14.8 (14.1-15.5)	5,373	9,485	56.6 (55.6-57.6)	xxx	*
BSAL	1,711	8,340	20.5 (19.7-21.4)	4,370	8,340	52.4 (51.3-53.5)	xxx	*
BSM	2,381	15,900	15.0 (14.4-15.5)	9,355	15,900	58.8 (58.1-59.6)	xxx	*
BSCtoC	2,691	13,220	20.4 (19.7-21.1)	8,751	13,220	66.2 (65.4-67.0)	xx	*
BSC	2,288	10,335	22.1 (21.3-23.0)	7,147	10,335	69.2 (68.3-70.0)	✓	ns
BSSL	4,313	17,675	24.4 (23.8-25.0)	14,680	17,675	83.1 (82.5-83.6)	✓✓✓	*
BSHC	1,699	7,055	24.1 (23.1-25.1)	5,393	7,055	76.4 (75.4-77.4)	✓✓	*
BSA Total	19,628	98,175	20.0 (19.7-20.2)	65,400	98,175	66.6 (66.3-66.9)	✓	*
65-69 years								
BSWN	2,326	13,010	17.9 (17.2-18.5)	8,145	13,010	62.6 (61.8-63.4)	xxx	*
BSCM	947	7,490	12.6 (11.9-13.4)	3,982	7,490	53.2 (52.0-54.3)	xxx	*
BSAL	1,150	6,690	17.2 (16.3-18.1)	3,130	6,690	46.8 (45.6-48.0)	xxx	*
BSM	2,196	13,680	16.1 (15.4-16.7)	9,366	13,680	68.5 (67.7-69.2)	✓	*
BSCtoC	1,757	11,565	15.2 (14.5-15.9)	7,714	11,565	66.7 (65.8-67.6)	✓	*
BSC	1,631	8,495	19.2 (18.4-20.1)	5,761	8,495	67.8 (66.8-68.8)	✓	*
BSSL	2,928	14,780	19.8 (19.2-20.5)	12,276	14,780	83.1 (82.4-83.7)	✓✓✓	*
BSHC	1,293	6,235	20.7 (19.7-21.8)	4,402	6,235	70.6 (69.5-71.7)	✓	ns
BSA Total	14,228	81,945	17.4 (17.1-17.6)	54,776	81,945	66.8 (66.5-67.2)	✓	*

Note: Eligible population for 2008 is based on projections from the 2001 census.
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

1.a.7 Coverage by ethnicity

1.a.7a Coverage by ethnicity, women 45-49 years

Table 1.a.7a Coverage by ethnicity women 45-49 years

	6 months			2 years		
	Number of women screened	Eligible population	% (95%CI)	Number of women screened	Eligible population	% (95%CI)
Maori						
BSWN	407	3,200	12.7 (11.6-13.9)	1,306	3,200	40.8 (39.1-42.5)
BSCM	153	2,220	6.9 (5.9-8.0)	815	2,220	36.7 (34.7-38.8)
BSAL	106	1,100	9.6 (8.0-11.5)	404	1,100	36.7 (33.9-39.7)
BSM	325	5,010	6.5 (5.8-7.2)	1,349	5,010	26.9 (25.7-28.2)
BSCtoC	320	3,845	8.3 (7.5-9.2)	1,133	3,845	29.5 (28.0-30.9)
BSC	235	1,905	12.3 (10.9-13.9)	734	1,905	38.5 (36.3-40.8)
BSSL	282	1,505	18.7 (16.8-20.8)	998	1,505	66.3 (63.9-68.7)
BSHC	77	670	11.5 (9.2-14.2)	228	670	34.0 (30.4-37.8)
BSA Total	1,905	19,455	9.8 (9.4-10.2)	6,967	19,455	35.8 (35.1-36.5)
Pacific						
BSWN	182	1,145	15.9 (13.8-18.1)	551	1,145	48.1 (45.2-51.1)
BSCM	294	2,525	11.6 (10.4-13.0)	1,089	2,525	43.1 (41.2-45.1)
BSAL	203	1,630	12.5 (10.9-14.2)	684	1,630	42.0 (39.6-44.4)
BSM	20	345	5.8 (3.6-8.8)	107	345	31.0 (26.2-36.2)
BSCtoC	30	310	9.7 (6.6-13.5)	93	310	30.0 (25.0-35.4)
BSC	78	930	8.4 (6.7-10.4)	289	930	31.1 (28.1-34.2)
BSSL	68	280	24.3 (19.4-29.7)	210	280	75.0 (69.5-80.0)
BSHC	11	80	13.8 (7.1-23.3)	33	80	41.2 (30.4-52.8)
BSA Total	886	7,245	12.2 (11.5-13.0)	3,056	7,245	42.2 (41.0-43.3)
Other						
BSWN	3,173	21,770	14.6 (14.1-15.1)	11,802	21,770	54.2 (53.5-54.9)
BSCM	1,056	11,220	9.4 (8.9-10.0)	5,343	11,220	47.6 (46.7-48.5)
BSAL	1,556	13,210	11.8 (11.2-12.3)	4,888	13,210	37.0 (36.2-37.8)
BSM	1,906	18,930	10.1 (9.6-10.5)	8,312	18,930	43.9 (43.2-44.6)
BSCtoC	2,325	16,370	14.2 (13.7-14.7)	8,317	16,370	50.8 (50.0-51.6)
BSC	1,925	14,710	13.1 (12.5-13.6)	6,767	14,710	46.0 (45.2-46.8)
BSSL	6,284	25,170	25.0 (24.4-25.5)	20,147	25,170	80.0 (79.5-80.5)
BSHC	1,856	10,430	17.8 (17.1-18.5)	5,908	10,430	56.6 (55.7-57.6)
BSA Total	20,081	131,810	15.2 (15.0-15.4)	71,484	131,810	54.2 (54.0-54.5)

Table 1.a.7a Coverage by ethnicity women 50-69 years

	6 months			2 years				
	Number of women screened	Eligible population	% (95%CI)	Number of women screened	Eligible population	% (95%CI)		
Maori								
BSWN	969	6,430	15.1 (14.2-16.0)	3,415	6,430	53.1 (51.9-54.3)	✗✗✗	*
BSCM	565	4,550	12.4 (11.5-13.4)	2,211	4,550	48.6 (47.1-50.1)	✗✗✗	*
BSAL	386	2,450	15.8 (14.3-17.3)	996	2,450	40.7 (38.7-42.6)	✗✗✗	*
BSM	1,067	10,620	10.0 (9.5-10.6)	4,215	10,620	39.7 (38.8-40.6)	✗✗✗	*
BSCtoC	990	8,010	12.4 (11.6-13.1)	3,418	8,010	42.7 (41.6-43.8)	✗✗✗	*
BSC	545	3,470	15.7 (14.5-17.0)	1,838	3,470	53.0 (51.3-54.6)	✗✗✗	*
BSSL	543	2,860	19.0 (17.6-20.5)	2,026	2,860	70.8 (69.1-72.5)	✓	ns
BSHC	212	1,225	17.3 (15.2-19.5)	655	1,225	53.5 (50.6-56.3)	✗✗✗	*
BSA Total	5,277	39,615	13.3 (13.0-13.7)	18,774	39,615	47.4 (46.9-47.9)	✗✗✗	*
Pacific								
BSWN	492	2,445	20.1 (18.5-21.8)	1,374	2,445	56.2 (54.2-58.2)	✗✗✗	*
BSCM	839	5,510	15.2 (14.3-16.2)	2,717	5,510	49.3 (48.0-50.6)	✗✗✗	*
BSAL	729	3,450	21.1 (19.8-22.5)	1,757	3,450	50.9 (49.2-52.6)	✗✗✗	*
BSM	61	715	8.5 (6.6-10.8)	317	715	44.3 (40.7-48.1)	✗✗✗	*
BSCtoC	67	590	11.4 (8.9-14.2)	244	590	41.4 (37.3-45.4)	✗✗✗	*
BSC	214	2,285	9.4 (8.2-10.6)	948	2,285	41.5 (39.5-43.5)	✗✗✗	*
BSSL	92	545	16.9 (13.8-20.3)	409	545	75.0 (71.2-78.6)	✓✓	*
BSHC	25	145	17.2 (11.5-24.4)	86	145	59.3 (50.8-67.4)	✗✗✗	*
BSA Total	2,519	15,685	16.1 (15.5-16.6)	7,852	15,685	50.1 (49.3-50.8)	✗✗✗	*
Other								
BSWN	10,786	61,720	17.5 (17.2-17.8)	37,428	61,720	60.6 (60.3-61.0)	✗✗✗	*
BSCM	4,205	32,010	13.1 (12.8-13.5)	17,294	32,010	54.0 (53.5-54.6)	✗✗✗	*
BSAL	6,254	33,490	18.7 (18.3-19.1)	15,985	33,490	47.7 (47.2-48.3)	✗✗✗	*
BSM	8,126	58,590	13.9 (13.6-14.2)	34,812	58,590	59.4 (59.0-59.8)	✗✗✗	*
BSCtoC	9,169	50,305	18.2 (17.9-18.6)	33,194	50,305	66.0 (65.6-66.4)	✗✗	*
BSC	8,192	40,750	20.1 (19.7-20.5)	26,968	40,750	66.2 (65.7-66.6)	✗✗	*
BSSL	16,172	74,940	21.6 (21.3-21.9)	61,236	74,940	81.7 (81.4-82.0)	✓✓✓	*
BSHC	6,517	30,220	21.6 (21.1-22.0)	21,930	30,220	72.6 (72.1-73.1)	✓	*
BSA Total	69,421	382,025	18.2 (18.0-18.3)	248,847	382,025	65.1 (65.0-65.3)	✗✗	*

Note: Eligible population for 2008 is based on projections from the 2001 census.
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 1a7.1: Trends in 6 month coverage for Maori
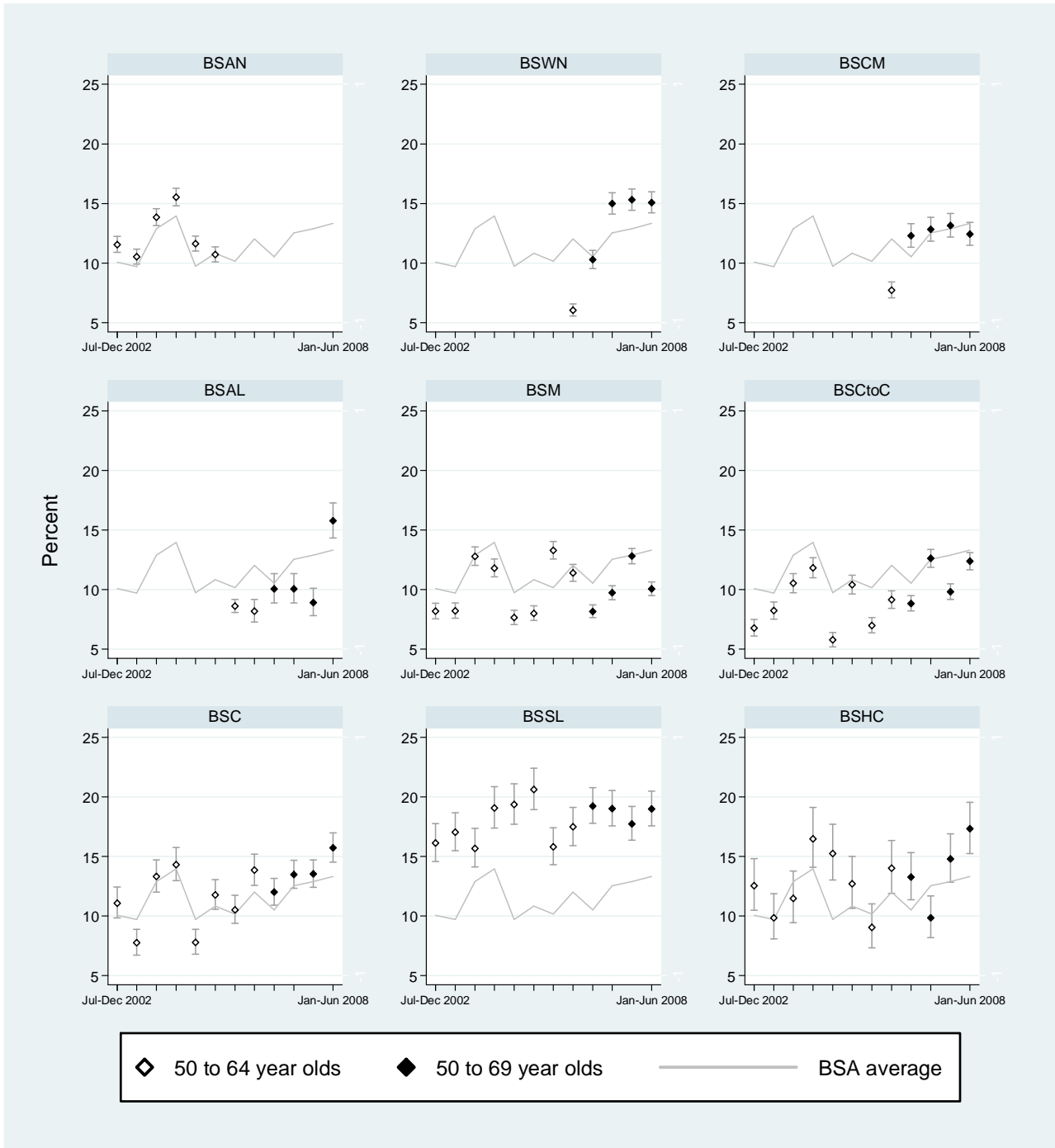
Figure 1a7.1: Trends in biennial coverage for Maori
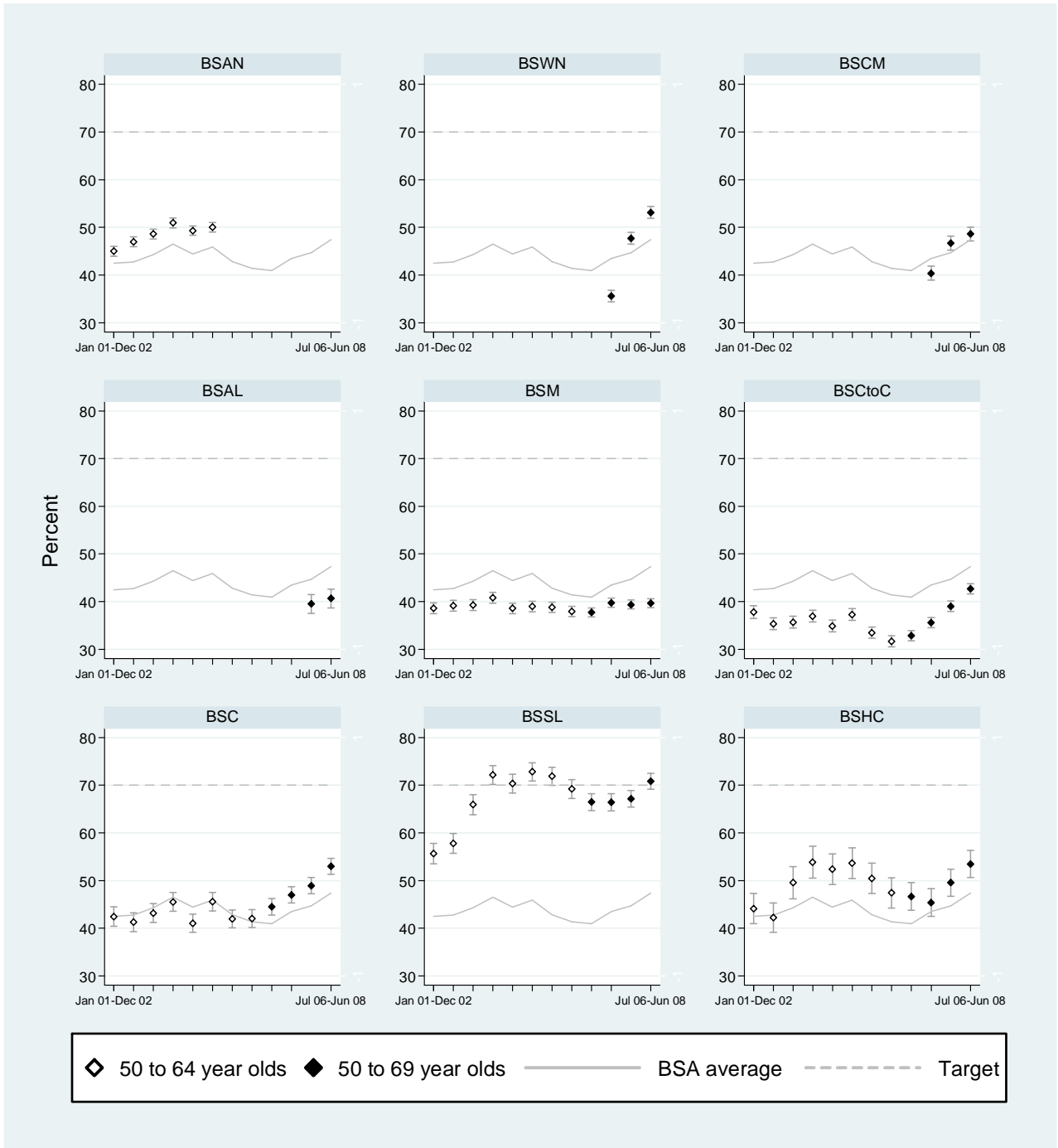
Figure 1a7.1: Trends in 6 month coverage for Pacific
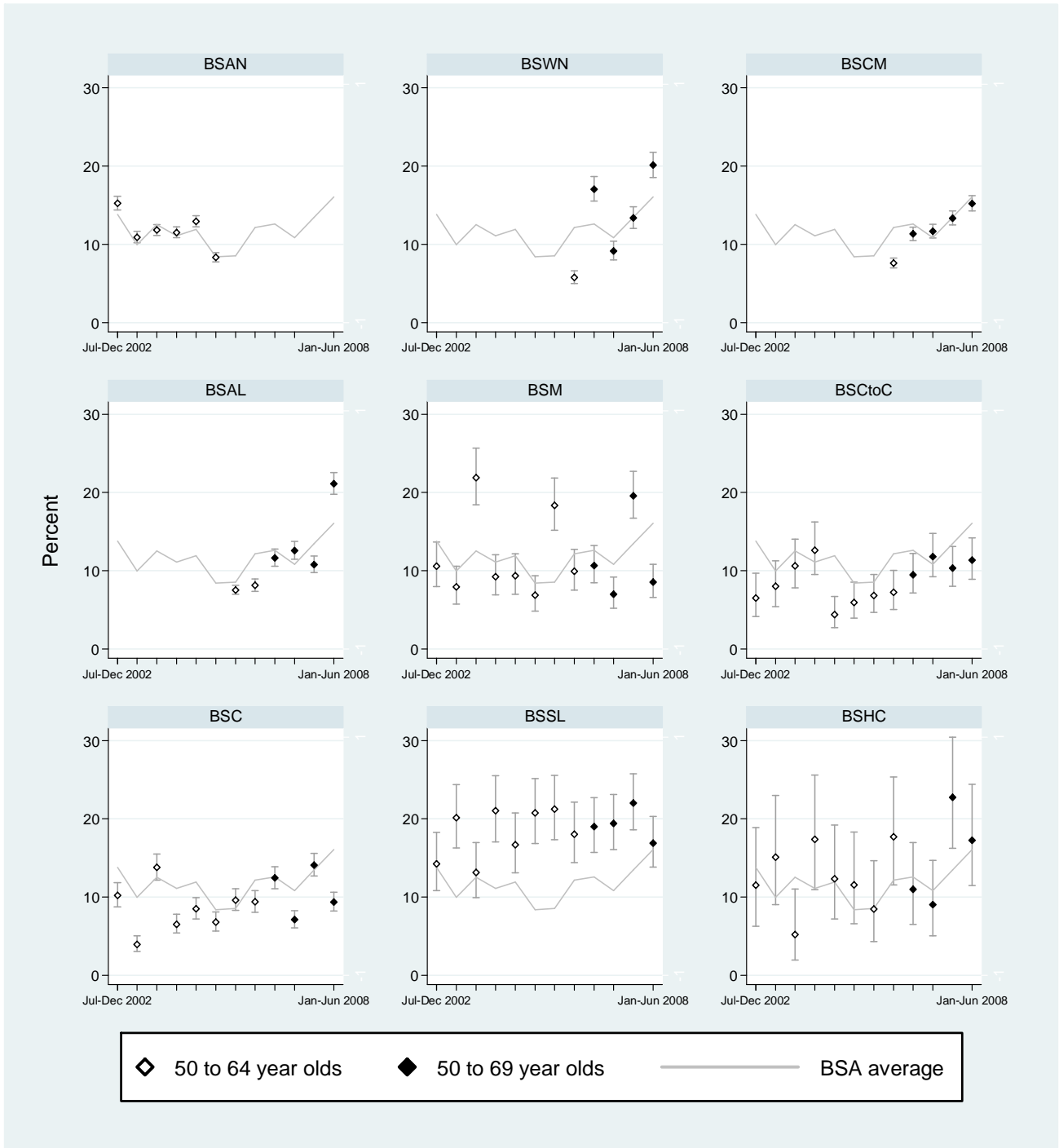
Figure 1a7.1: Trends in biennial coverage for Pacific
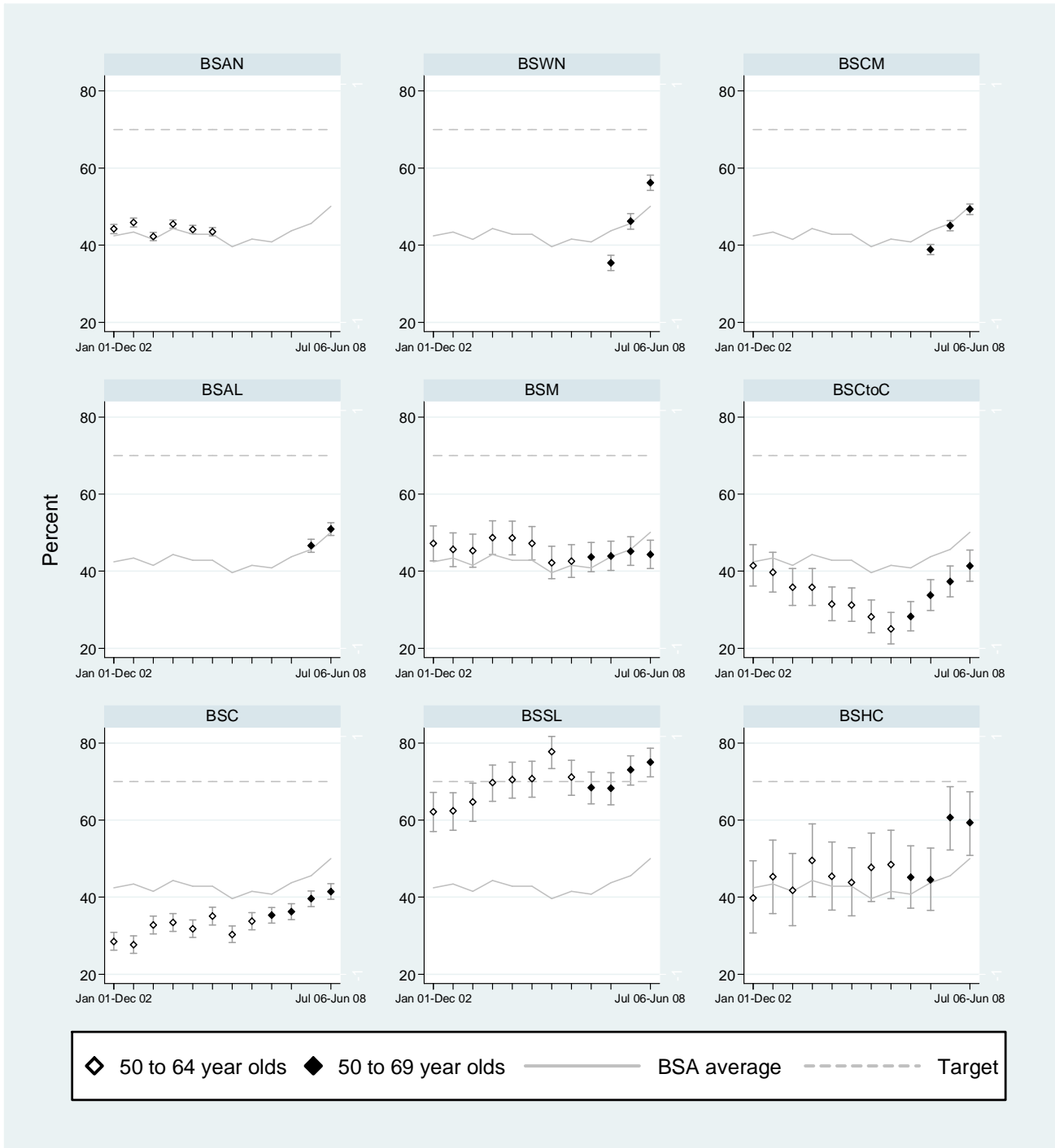
Figure 1a7.1: Trends in 6 month coverage for other ethnic groups
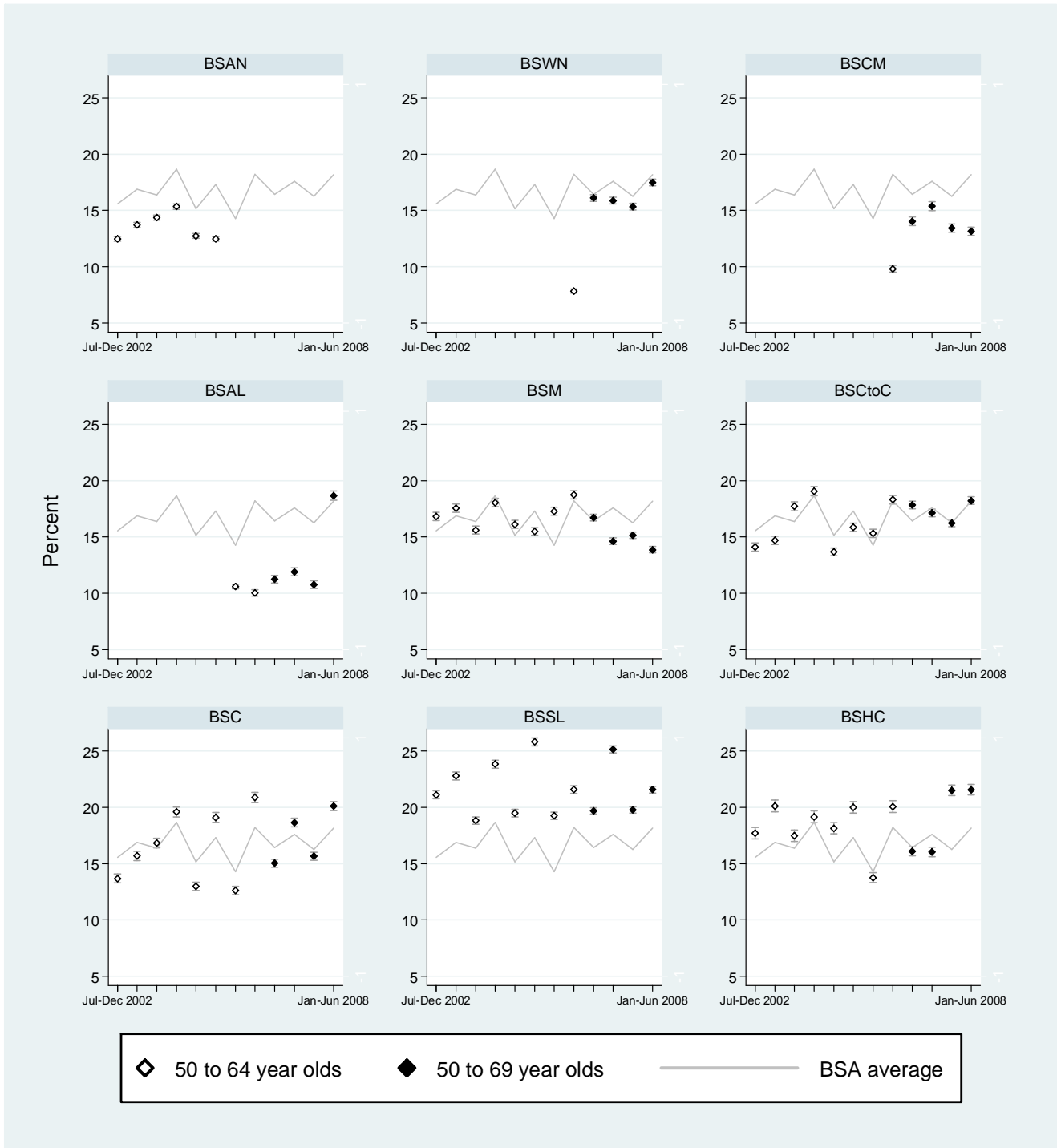
Figure 1a7.1: Trends in biennial coverage for other ethnic groups
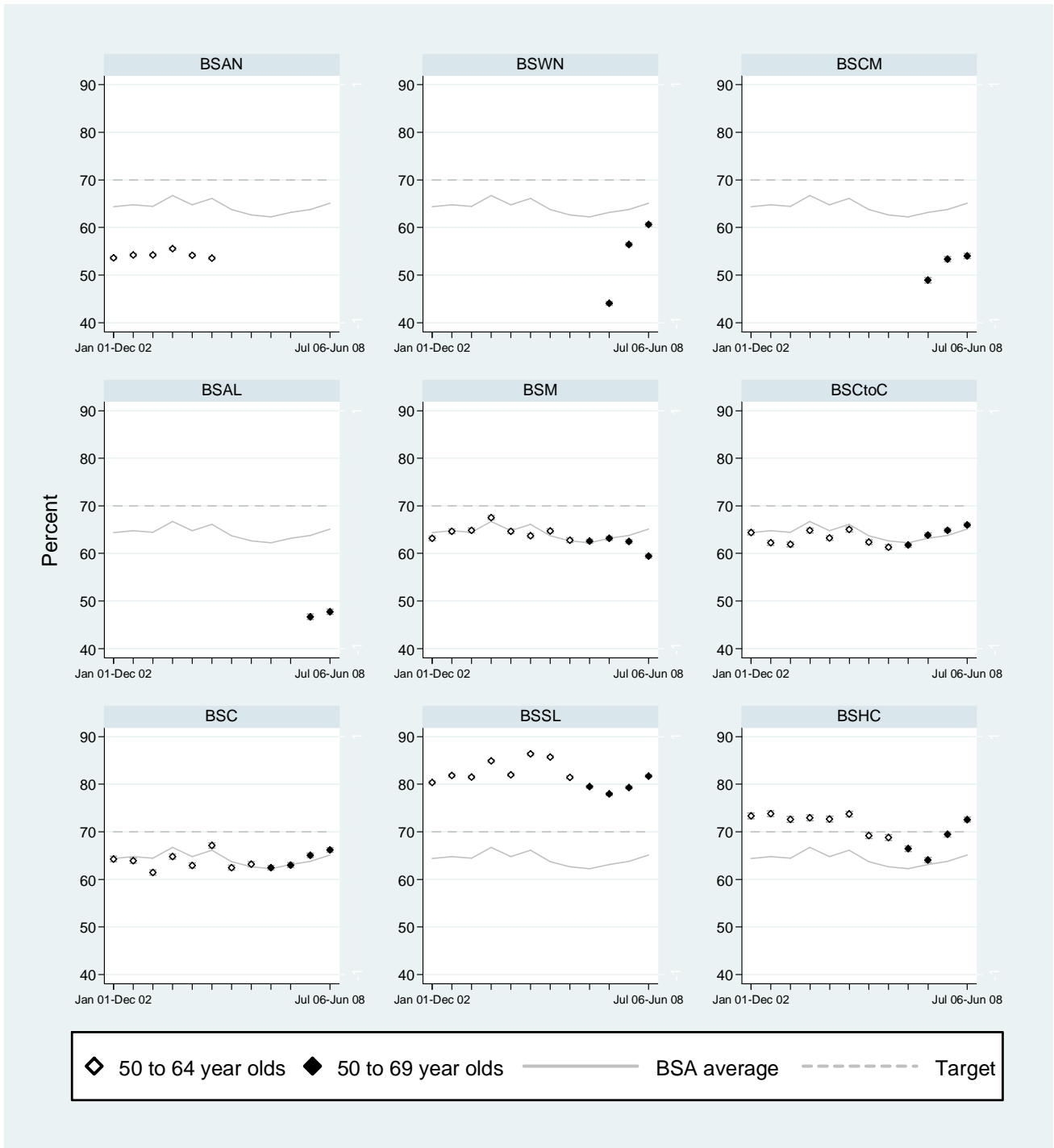
1.b. Routine re-screening

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, 45-69 years

	6 months			2 years				
	Women screened within 27 months	Women eligible for re-screen	% (95%CI)	Women screened within 27 months	Women eligible for re-screen	% (95%CI)		
45-49 years								
BSWN	142	344	41.3 (36.0-46.7)	142	344	41.3 (36.0-46.7)		
BSCM	31	59	52.5 (39.1-65.7)	37	70	52.9 (40.6-64.9)		
BSAL	268	540	49.6 (45.3-53.9)	1,104	2,602	42.4 (40.5-44.4)		
BSM	1,026	2,378	43.1 (41.1-45.2)	2,732	6,073	45.0 (43.7-46.2)		
BSCtoC	981	1,882	52.1 (49.8-54.4)	2,082	4,050	51.4 (49.9-53.0)		
BSC	656	1,172	56.0 (53.1-58.8)	1,618	2,998	54.0 (52.2-55.8)		
BSSL	2,744	5,330	51.5 (50.1-52.8)	3,740	8,453	44.2 (43.2-45.3)		
BSHC	548	1,056	51.9 (48.8-54.9)	1,569	3,195	49.1 (47.4-50.9)		
BSA Total	6,396	12,761	50.1 (49.3-51.0)	13,024	27,785	46.9 (46.3-47.5)		
50-69 years								
BSWN	2,080	2,452	84.8 (83.3-86.2)	2,080	2,452	84.8 (83.3-86.2)	✓	ns
BSCM	2,382	2,936	81.1 (79.7-82.5)	2,530	3,145	80.4 (79.0-81.8)	✗✗	*
BSAL	5,133	6,125	83.8 (82.9-84.7)	34,683	46,107	75.2 (74.8-75.6)	✗✗✗	*
BSM	5,025	7,000	71.8 (70.7-72.8)	21,577	27,157	79.5 (79.0-79.9)	✗✗	*
BSCtoC	4,931	5,546	88.9 (88.1-89.7)	19,895	22,894	86.9 (86.5-87.3)	✓	*
BSC	4,939	5,424	91.1 (90.3-91.8)	17,061	19,365	88.1 (87.6-88.6)	✓	*
BSSL	8,083	8,989	89.9 (89.3-90.5)	40,320	44,458	90.7 (90.4-91.0)	✓✓	*
BSHC	3,005	3,313	90.7 (89.7-91.7)	13,189	14,991	88.0 (87.4-88.5)	✓	*
BSA Total	35,578	41,785	85.1 (84.8-85.5)	151,335	180,569	83.8 (83.6-84.0)	✓	*

Note: Denominator for re-screens indexed according to original screening provider.
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Table 1b.2: Percentage of women who return for a screen who are re-screened within 20-24 months, 45 to 69 years

	6 months			2 years				
	Women screened within 20-24 months	Women re-screened within 27 months	% (95% CI)	Women screened within 20-24 months	Women re-screened within 27 months	% (95% CI)		
45-49 years								
BSWN	78	142	54.9 (46.4-63.3)	78	142	54.9 (46.4-63.3)		
BSCM	24	31	77.4 (58.9-90.4)	29	37	78.4 (61.8-90.2)		
BSAL	234	268	87.3 (82.7-91.1)	922	1,104	83.5 (81.2-85.7)		
BSM	632	1,026	61.6 (58.5-64.6)	2,016	2,732	73.8 (72.1-75.4)		
BSCtoC	650	981	66.3 (63.2-69.2)	1,627	2,082	78.1 (76.3-79.9)		
BSC	595	656	90.7 (88.2-92.8)	1,416	1,618	87.5 (85.8-89.1)		
BSSL	2,605	2,744	94.9 (94.0-95.7)	3,526	3,740	94.3 (93.5-95.0)		
BSHC	444	548	81.0 (77.5-84.2)	803	1,569	51.2 (48.7-53.7)		
BSA Total	5,262	6,396	82.3 (81.3-83.2)	10,417	13,024	80.0 (79.3-80.7)		
50-69 years								
BSWN	1,643	2,080	79.0 (77.2-80.7)	1,643	2,080	79.0 (77.2-80.7)	✓✓	*
BSCM	2,149	2,382	90.2 (89.0-91.4)	2,274	2,530	89.9 (88.6-91.0)	✓✓✓	*
BSAL	4,455	5,133	86.8 (85.8-87.7)	28,557	34,683	82.3 (81.9-82.7)	✓✓	*
BSM	3,172	5,025	63.1 (61.8-64.5)	16,957	21,577	78.6 (78.0-79.1)	✓	*
BSCtoC	3,570	4,931	72.4 (71.1-73.6)	14,841	19,895	74.6 (74.0-75.2)	✓	ns
BSC	4,345	4,939	88.0 (87.0-88.9)	14,425	17,061	84.5 (84.0-85.1)	✓✓✓	*
BSSL	7,680	8,083	95.0 (94.5-95.5)	37,367	40,320	92.7 (92.4-92.9)	✓✓✓	*
BSHC	2,510	3,005	83.5 (82.2-84.8)	7,741	13,189	58.7 (57.8-59.5)	✗✗✗	*
BSA Total	29,524	35,578	83.0 (82.6-83.4)	123,805	151,335	81.8 (81.6-82.0)	✓✓	*

Note: Denominator for re-screens indexed according to original screening provider.
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
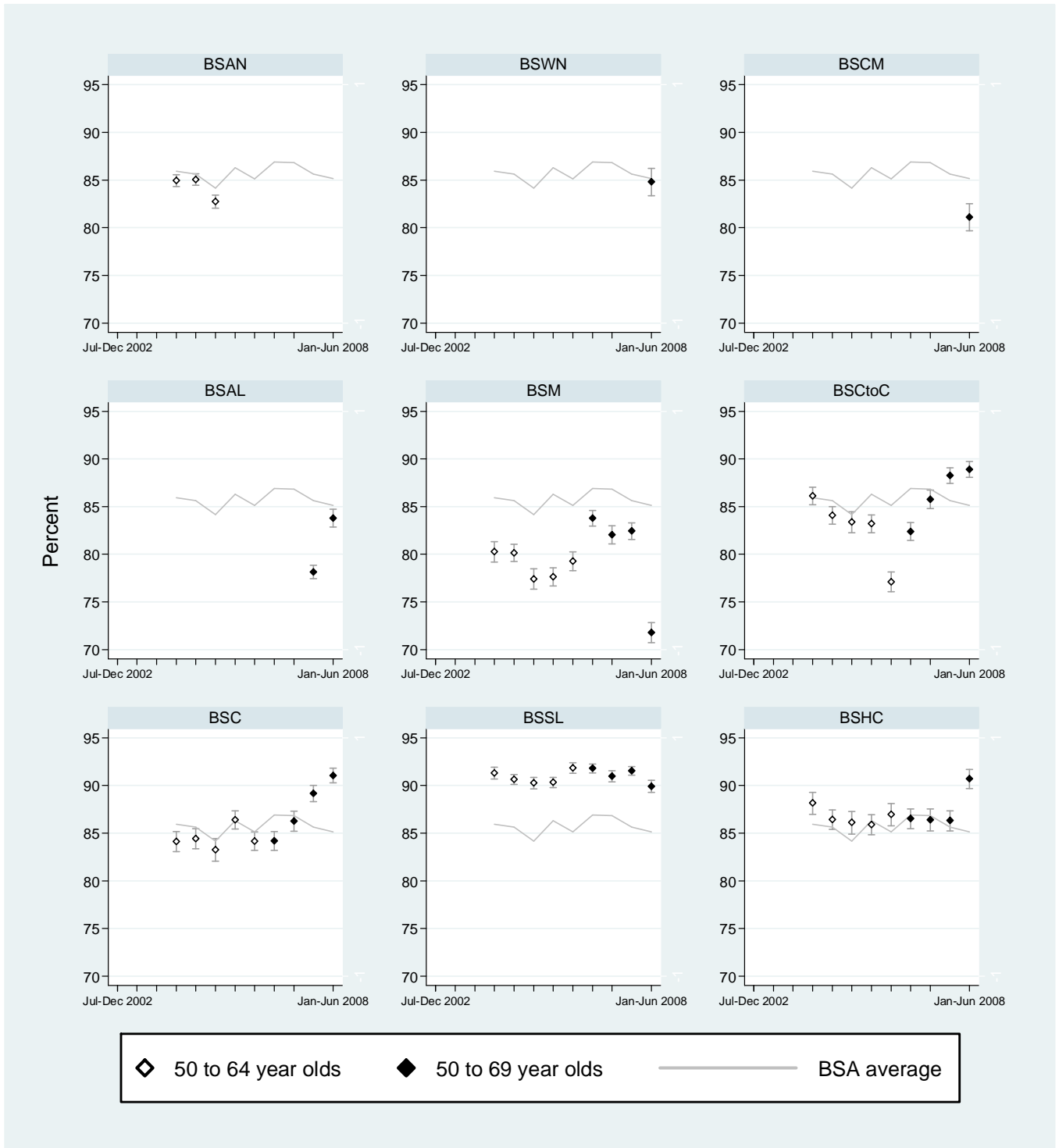✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 1b.1: Trends in re-screen rates (within 27 months), 6 months

Figure 1b.1: Trends in re-screen rates (within 27 months), 2 years
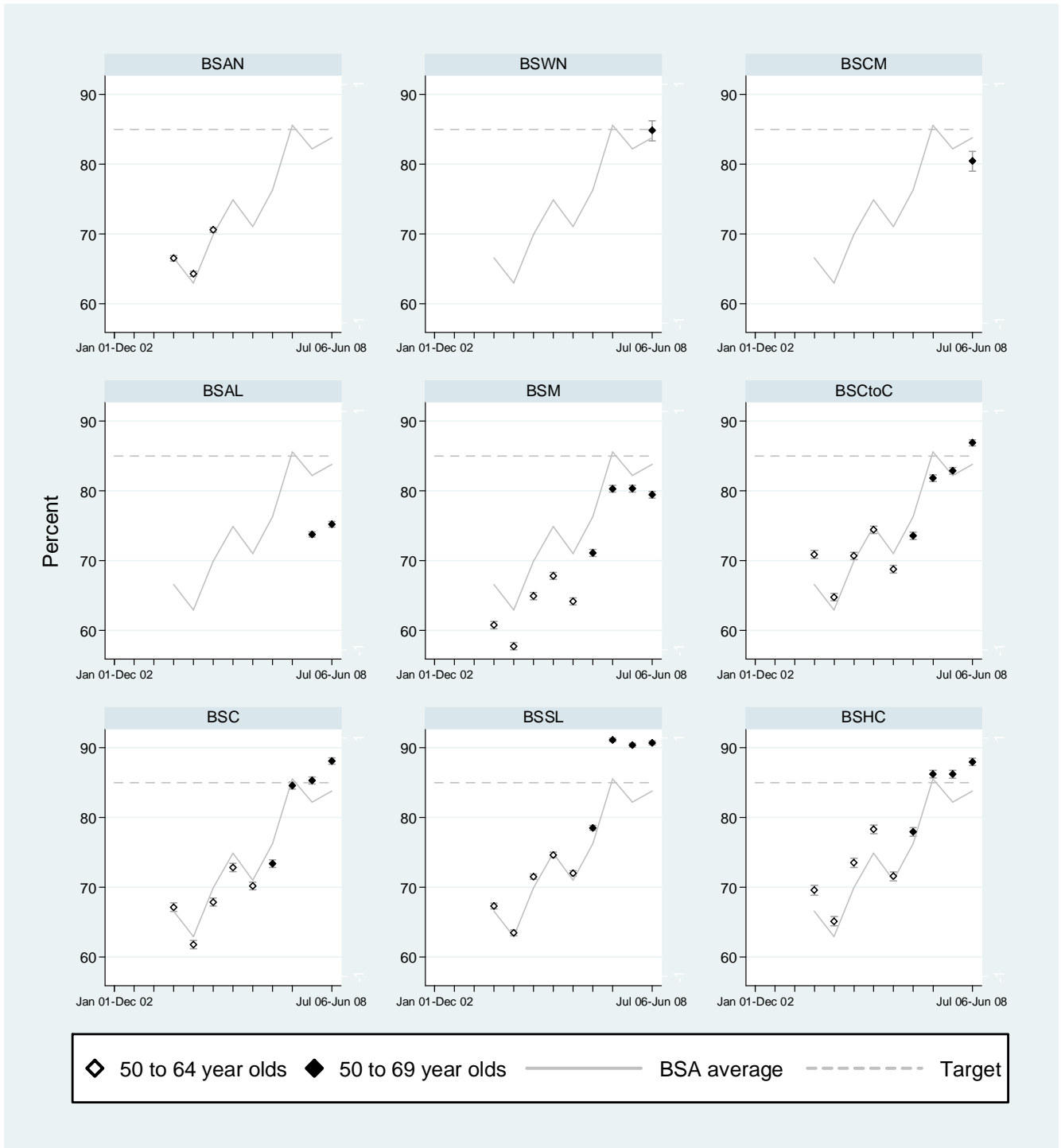
2. PROVISION OF HIGH QUALITY SCREENING AND ASSESSMENT

2.a. Screened women who have no more than four films taken
Description:
 The percentage of women who have no more than four films taken.
Target:
> 80% of women screened have four films taken or fewer.

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

	Fixed site			Mobile site		
	Women having ≤ 4 films	Women screened	% (95%CI)	Women having ≤ 4 films	Women screened	% (95%CI)
45-49 years						
BSWN	2,774	3,223	86.1 (84.8-87.2)	433	547	79.2 (75.5-82.5)
BSCM	888	1,022	86.9 (84.7-88.9)	405	481	84.2 (80.6-87.3)
BSAL	1,468	1,664	88.2 (86.6-89.7)	163	207	78.7 (72.5-84.1)
BSM	1,791	1,909	93.8 (92.6-94.9)	302	352	85.8 (81.7-89.3)
BSCtoC	2,068	2,276	90.9 (89.6-92.0)	367	435	84.4 (80.6-87.7)
BSC	1,570	1,808	86.8 (85.2-88.4)	415	468	88.7 (85.4-91.4)
BSSL	5,511	6,134	89.8 (89.1-90.6)	492	530	92.8 (90.3-94.9)
BSHC	1,049	1,297	80.9 (78.6-83.0)	594	674	88.1 (85.4-90.5)
BSA Total	17,119	19,333	88.5 (88.1-89.0)	3,171	3,694	85.8 (84.7-87.0)
50-69 years						
BSWN	9,096	10,747	84.6 (83.9-85.3)	1,202	1,513	79.4 (77.3-81.5)
BSCM	3,499	3,993	87.6 (86.6-88.6)	1,325	1,616	82.0 (80.0-83.8)
BSAL	5,630	6,523	86.3 (85.5-87.1)	658	863	76.2 (73.3-79.0)
BSM	6,643	7,137	93.1 (92.5-93.7)	1,809	2,136	84.7 (83.1-86.2)
BSCtoC	7,775	8,743	88.9 (88.3-89.6)	1,258	1,549	81.2 (79.2-83.1)
BSC	5,611	6,507	86.2 (85.4-87.1)	2,148	2,502	85.9 (84.4-87.2)
BSSL	13,880	15,350	90.4 (89.9-90.9)	1,393	1,531	91.0 (89.4-92.4)
BSHC	3,370	4,378	77.0 (75.7-78.2)	2,078	2,428	85.6 (84.1-87.0)
BSA Total	55,504	63,378	87.6 (87.3-87.8)	11,871	14,138	84.0 (83.3-84.6)

Description:
 The percentage of women who have no more than four films taken
Target:
> 80% of women screened have four films taken or fewer.

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

	Fixed site					Mobile site				
	Women having ≤ 4 films	Women screened	% (95%CI)			Women having ≤ 4 films	Women screened	% (95%CI)		
45-49 years										
BSWN	10,461	12,074	86.6 (86.0-87.2)			1,326	1,630	81.3 (79.4-83.2)		
BSCM	4,364	5,087	85.8 (84.8-86.7)			1,829	2,161	84.6 (83.0-86.1)		
BSAL	4,251	4,865	87.4 (86.4-88.3)			996	1,143	87.1 (85.1-89.0)		
BSM	6,465	7,020	92.1 (91.4-92.7)			2,400	2,776	86.5 (85.1-87.7)		
BSCtoC	7,506	8,211	91.4 (90.8-92.0)			1,196	1,397	85.6 (83.7-87.4)		
BSC	5,929	6,436	92.1 (91.4-92.8)			1,435	1,567	91.6 (90.1-92.9)		
BSSL	17,900	19,333	92.6 (92.2-93.0)			1,985	2,175	91.3 (90.0-92.4)		
BSHC	3,124	3,795	82.3 (81.1-83.5)			2,230	2,426	91.9 (90.8-93.0)		
BSA Total	60,000	66,821	89.8 (89.6-90.0)			13,397	15,275	87.7 (87.2-88.2)		
50-69 years										
BSWN	31,908	36,960	86.3 (86.0-86.7)	✓✓	*	4,297	5,316	80.8 (79.7-81.9)	✓	ns
BSCM	15,264	17,432	87.6 (87.1-88.0)	✓✓	*	4,043	4,791	84.4 (83.3-85.4)	✓✓	*
BSAL	14,732	16,190	91.0 (90.5-91.4)	✓✓✓	*	2,207	2,614	84.4 (83.0-85.8)	✓✓	*
BSM	25,835	27,956	92.4 (92.1-92.7)	✓✓✓	*	9,847	11,431	86.1 (85.5-86.8)	✓✓	*
BSCtoC	29,852	32,028	93.2 (92.9-93.5)	✓✓✓	*	4,131	4,937	83.7 (82.6-84.7)	✓	*
BSC	21,271	22,920	92.8 (92.5-93.1)	✓✓✓	*	6,495	7,166	90.6 (89.9-91.3)	✓✓✓	*
BSSL	53,656	57,321	93.6 (93.4-93.8)	✓✓✓	*	6,070	6,641	91.4 (90.7-92.1)	✓✓✓	*
BSHC	12,481	14,989	83.3 (82.7-83.9)	✓	*	6,988	7,788	89.7 (89.0-90.4)	✓✓✓	*
BSA Total	204,999	225,796	90.8 (90.7-90.9)	✓✓✓	*	44,078	50,684	87.0 (86.7-87.3)	✓✓	*

* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

2.b. Technical recall rate

Description: The number of women who have to return to a screening unit (either Fixed or Mobile) for further films to complete their screening episode, expressed as a percentage of the number screened.

Target:

Fixed: <0.5%

Mobile: <3%

Table 2.b.1: Women having technical recall as a percentage of Women screened, 6 Months

	Fixed site				Mobile site		
	Women having technical recall	Women screened	% (95%CI)		Women having technical recall	Women screened	% (95%CI)
45-49 years							
BSWN	2	3,223	0.1 (0.0-0.2)		23	547	4.2 (2.7-6.3)
BSCM	0	1,022	0.0 (0.0-0.4)		14	481	2.9 (1.6-4.9)
BSAL	12	1,664	0.7 (0.4-1.3)		5	207	2.4 (0.8-5.6)
BSM	3	1,909	0.2 (0.0-0.5)		7	352	2.0 (0.8-4.1)
BSCtoC	2	2,276	0.1 (0.0-0.3)		24	435	5.5 (3.5-8.2)
BSC	27	1,808	1.5 (1.0-2.2)		27	468	5.8 (3.8-8.4)
BSSL	16	6,134	0.3 (0.1-0.4)		10	530	1.9 (0.9-3.5)
BSHC	4	1,297	0.3 (0.1-0.8)		30	674	4.5 (3.0-6.4)
BSA Total	66	19,333	0.3 (0.3-0.4)		140	3,694	3.8 (3.2-4.5)
50-69 years							
BSWN	2	10,747	0.0 (0.0-0.1)		77	1,513	5.1 (4.0-6.4)
BSCM	1	3,993	0.0 (0.0-0.1)		51	1,616	3.2 (2.3-4.1)
BSAL	32	6,523	0.5 (0.3-0.7)		30	863	3.5 (2.3-5.0)
BSM	22	7,137	0.3 (0.2-0.5)		107	2,136	5.0 (4.1-6.1)
BSCtoC	6	8,743	0.1 (0.0-0.1)		56	1,549	3.6 (2.7-4.7)
BSC	78	6,507	1.2 (0.9-1.5)		103	2,502	4.1 (3.4-5.0)
BSSL	23	15,350	0.1 (0.1-0.2)		32	1,531	2.1 (1.4-3.0)
BSHC	13	4,378	0.3 (0.2-0.5)		102	2,428	4.2 (3.4-5.1)
BSA Total	177	63,378	0.3 (0.2-0.3)		558	14,138	3.9 (3.6-4.3)

Poisson 95% Confidence Intervals presented

Description: The number of women who have to return to a screening unit (either Fixed or Mobile) for further films to complete their screening episode, expressed as a percentage of the number screened.
Target:
Fixed: <0.5%, Mobile: <3%

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

	Fixed site					Mobile site				
	Women having technical recall	Women screened	% (95%CI)			Women having technical recall	Women screened	% (95%CI)		
45-49 years										
BSWN	36	12,074	0.3 (0.2-0.4)			82	1,630	5.0 (4.0-6.2)		
BSCM	5	5,087	0.1 (0.0-0.2)			64	2,161	3.0 (2.3-3.8)		
BSAL	41	4,865	0.8 (0.6-1.1)			40	1,143	3.5 (2.5-4.8)		
BSM	11	7,020	0.2 (0.1-0.3)			94	2,776	3.4 (2.7-4.1)		
BSCtoC	17	8,211	0.2 (0.1-0.3)			60	1,397	4.3 (3.3-5.5)		
BSC	63	6,436	1.0 (0.8-1.3)			73	1,567	4.7 (3.7-5.9)		
BSSL	46	19,333	0.2 (0.2-0.3)			44	2,175	2.0 (1.5-2.7)		
BSHC	17	3,795	0.4 (0.3-0.7)			87	2,426	3.6 (2.9-4.4)		
BSA Total	236	66,821	0.4 (0.3-0.4)			544	15,275	3.6 (3.3-3.9)		
50-69 years										
BSWN	51	36,960	0.1 (0.1-0.2)	✓✓✓	*	269	5,316	5.1 (4.5-5.7)	✗✗✗	*
BSCM	10	17,432	0.1 (0.0-0.1)	✓✓✓	*	145	4,791	3.0 (2.6-3.6)	✓	ns
BSAL	68	16,190	0.4 (0.3-0.5)	✓	ns	111	2,614	4.2 (3.5-5.1)	✗✗✗	*
BSM	54	27,956	0.2 (0.1-0.3)	✓✓✓	*	425	11,431	3.7 (3.4-4.1)	✗✗✗	*
BSCtoC	70	32,028	0.2 (0.2-0.3)	✓✓✓	*	183	4,937	3.7 (3.2-4.3)	✗✗✗	*
BSC	147	22,920	0.6 (0.5-0.8)	✗✗✗	*	300	7,166	4.2 (3.7-4.7)	✗✗✗	*
BSSL	101	57,321	0.2 (0.1-0.2)	✓✓✓	*	119	6,641	1.8 (1.5-2.1)	✓✓✓	*
BSHC	50	14,989	0.3 (0.2-0.4)	✓✓✓	*	258	7,788	3.3 (2.9-3.7)	✓	ns
BSA Total	551	225,796	0.2 (0.2-0.3)	✓✓✓	*	1,810	50,684	3.6 (3.4-3.7)	✗✗✗	*

Poisson 95% Confidence Intervals presented.
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 2b1: Technical recall rates for fixed sites, women aged 50-69 years, fixed sites, 6 months
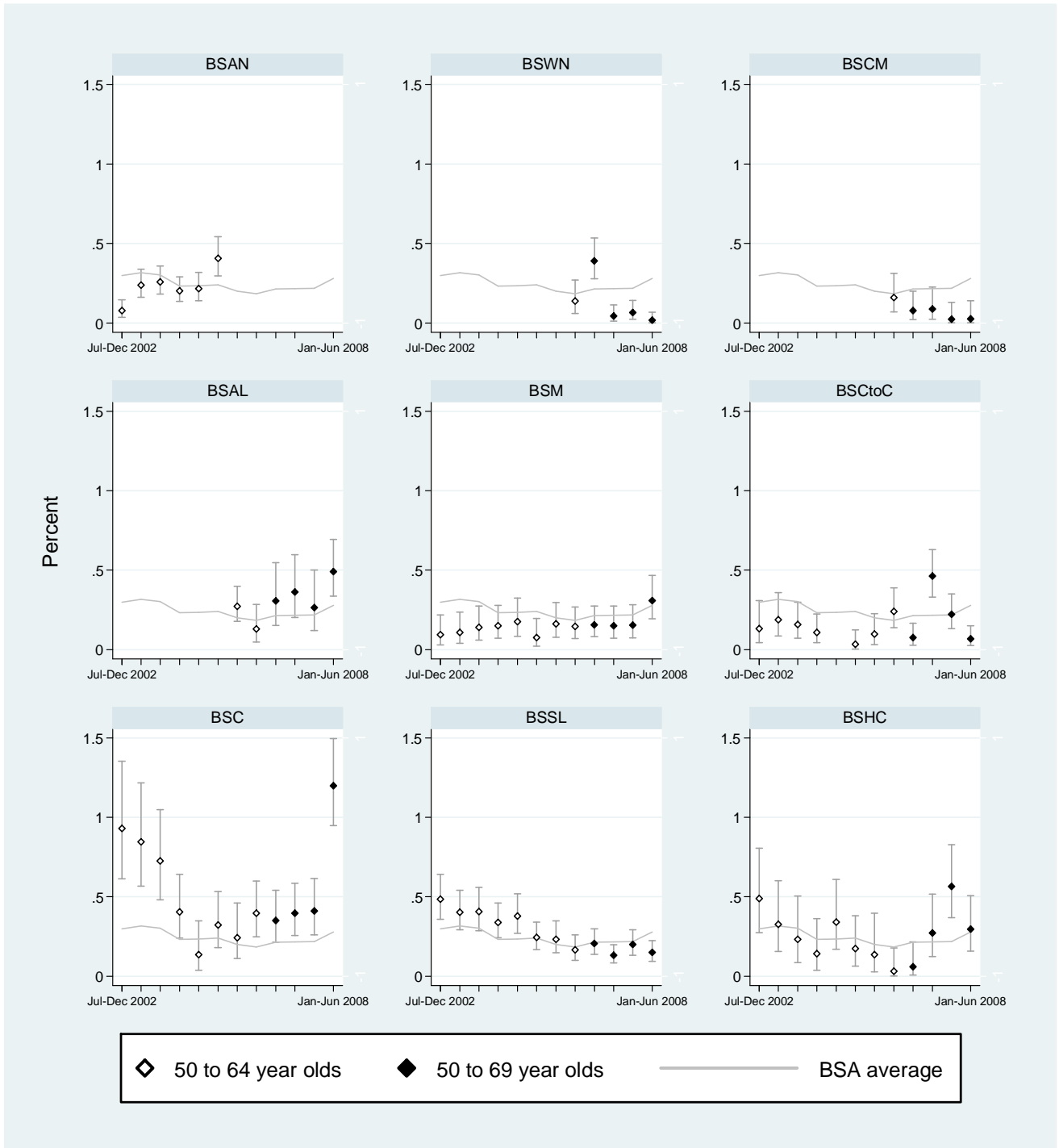
Figure 2b1: Technical recall rates for fixed sites, women aged 50-69 years, fixed sites, 2 years
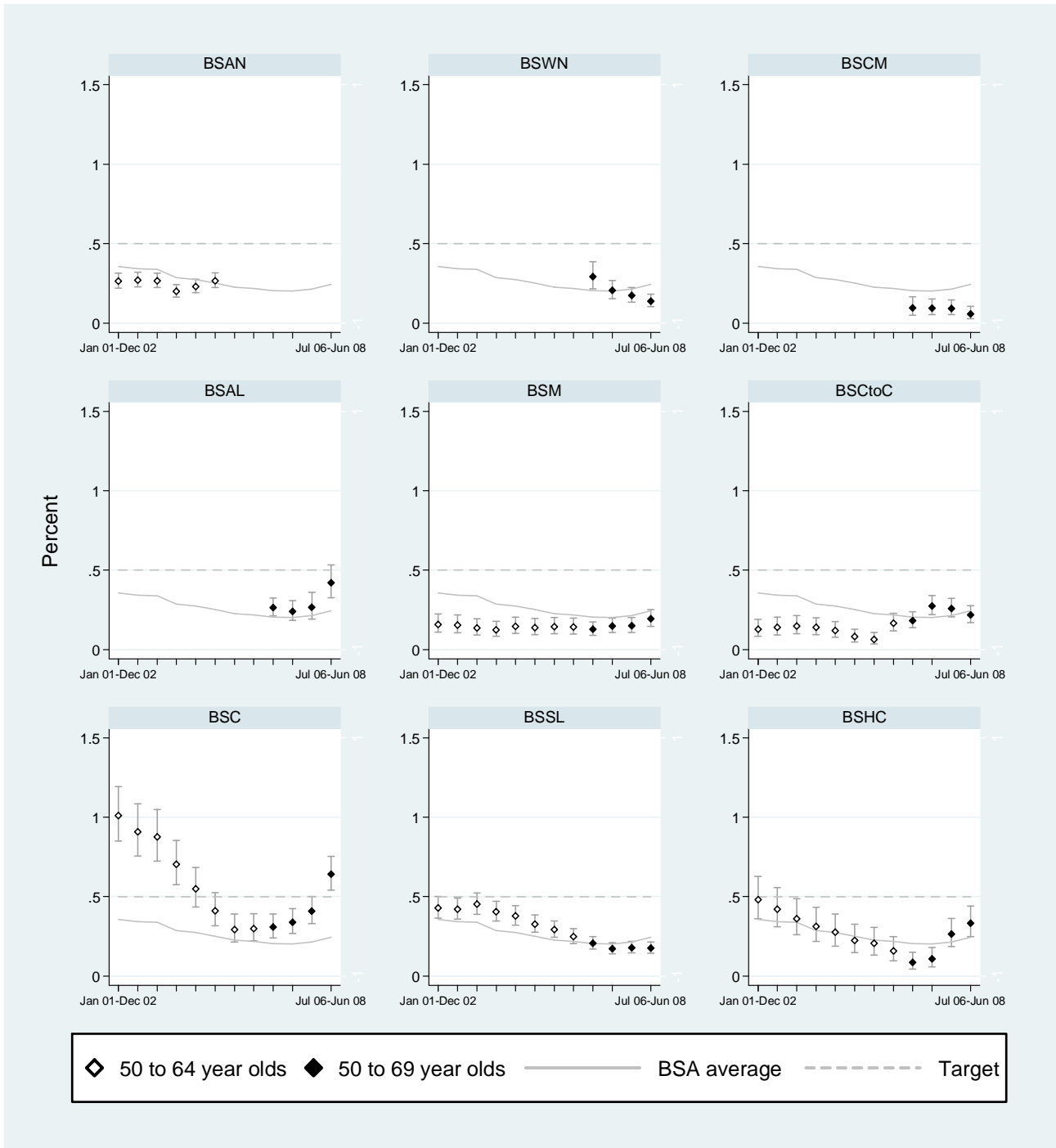
Figure 2b.2: Technical recall rates for mobile sites, women aged 50-69 years, 6 months
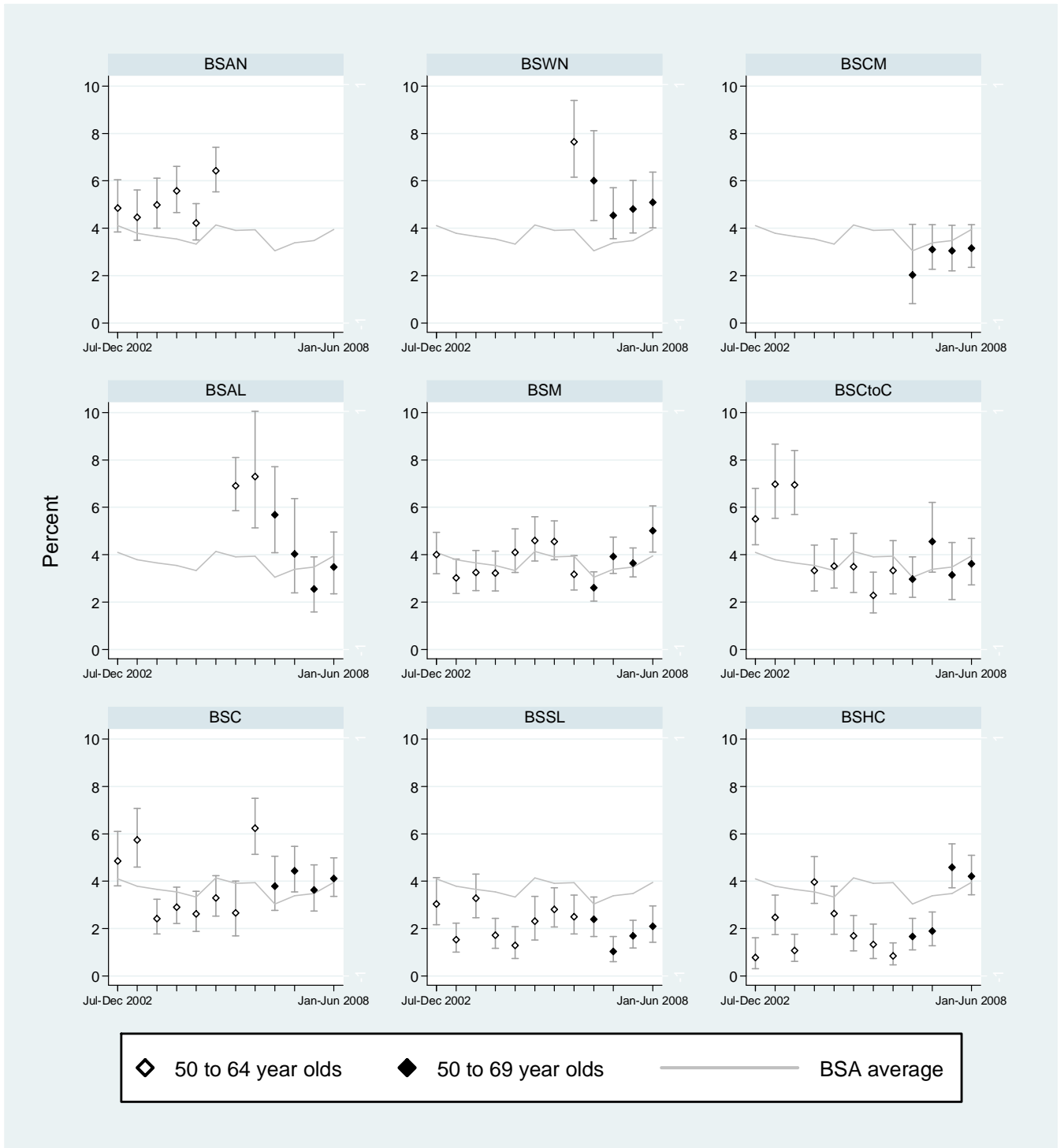
Figure 2b.2: Technical recall rates for mobile sites, women aged 50-69 years, 2 years
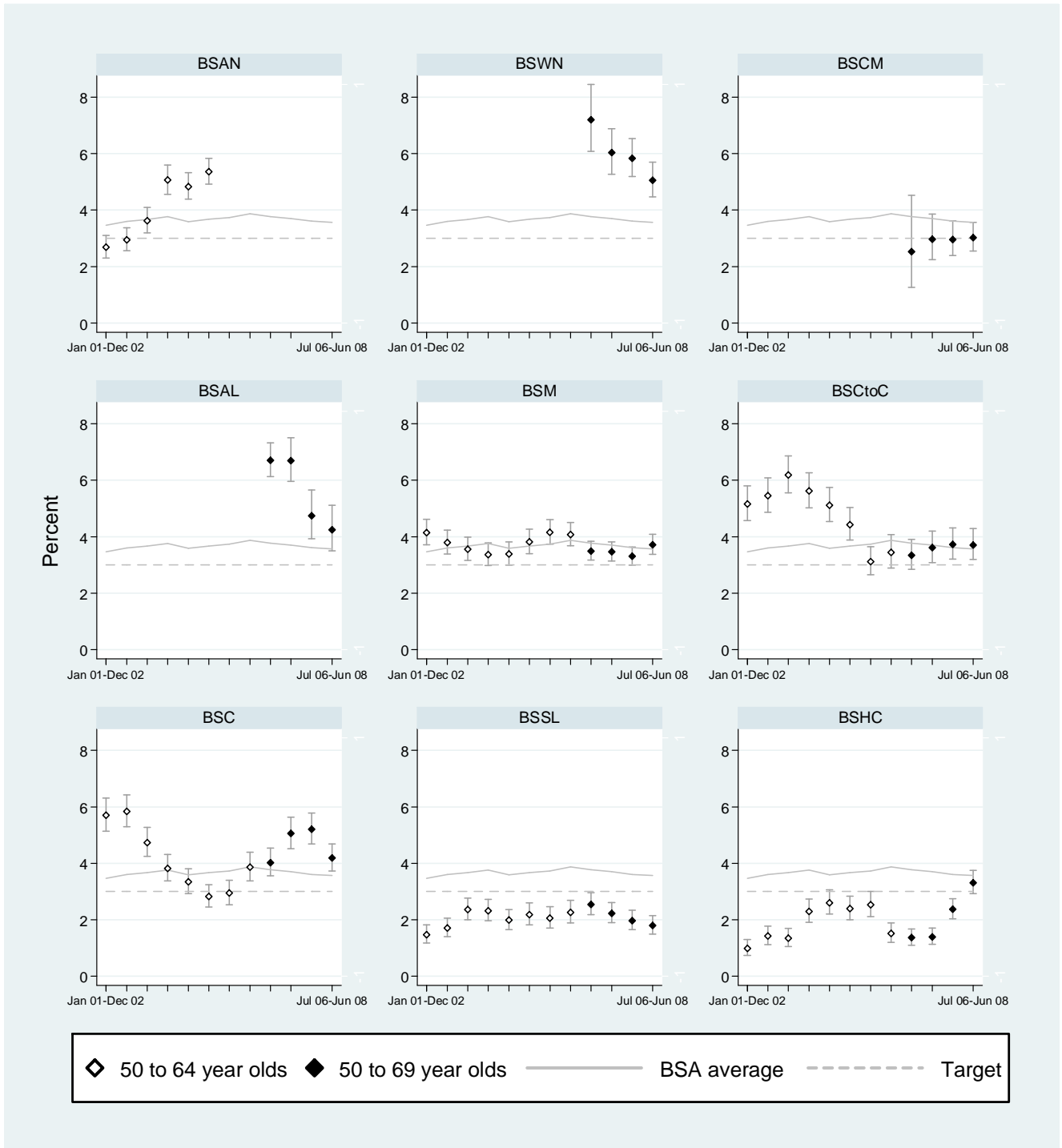
2.c. Technical reject rate

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 and a mobile unit.
Target:
Fixed: <3%
Mobile: <3%

2.c.1. Rejected films as a percentage of total films taken, 6 Months

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

|	Fixed site				Mobile site		
	Films rejected	Total films taken	% (95%CI)		Films rejected	Total films taken	% (95%CI)
45-49 years							
BSWN	119	13,652	0.9 (0.7-1.0)		33	2,374	1.4 (1.0-2.0)
BSCM	37	4,317	0.9 (0.6-1.2)		6	2,057	0.3 (0.1-0.6)
BSAL	29	6,980	0.4 (0.3-0.6)		0	905	0.0 (0.0-0.4)
BSM	46	7,835	0.6 (0.4-0.8)		1	1,497	0.1 (0.0-0.4)
BSCtoC	110	9,418	1.2 (1.0-1.4)		20	1,877	1.1 (0.7-1.6)
BSC	93	7,613	1.2 (1.0-1.5)		3	1,954	0.2 (0.0-0.4)
BSSL	224	25,509	0.9 (0.8-1.0)		10	2,184	0.5 (0.2-0.8)
BSHC	83	5,558	1.5 (1.2-1.9)		8	2,816	0.3 (0.1-0.6)
BSA Total	741	80,882	0.9 (0.9-1.0)		81	15,664	0.5 (0.4-0.6)
50-69 years							
BSWN	430	45,481	0.9 (0.9-1.0)		110	6,572	1.7 (1.4-2.0)
BSCM	182	16,678	1.1 (0.9-1.3)		30	6,972	0.4 (0.3-0.6)
BSAL	231	27,579	0.8 (0.7-1.0)		5	3,803	0.1 (0.0-0.3)
BSM	229	29,266	0.8 (0.7-0.9)		77	9,072	0.8 (0.7-1.1)
BSCtoC	396	36,342	1.1 (1.0-1.2)		38	6,686	0.6 (0.4-0.8)
BSC	346	27,295	1.3 (1.1-1.4)		37	10,577	0.3 (0.2-0.5)
BSSL	524	63,519	0.8 (0.8-0.9)		35	6,334	0.6 (0.4-0.8)
BSHC	289	19,071	1.5 (1.3-1.7)		35	10,279	0.3 (0.2-0.5)
BSA Total	2,627	265,231	1.0 (1.0-1.0)		367	60,295	0.6 (0.5-0.7)

Poisson 95% Confidence Intervals presented

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 and a mobile unit.
Target:
Fixed: <3%
Mobile: <3%

2.c.2. Rejected films as a percentage of total films taken, 2 Years

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

	Fixed site					Mobile site				
	Films rejected	Total films taken	% (95%CI)			Films rejected	Total films taken	% (95%CI)		
45-49 years										
BSWN	489	52,882	0.9 (0.8-1.0)			134	7,085	1.9 (1.6-2.2)		
BSCM	264	21,862	1.2 (1.1-1.4)			49	9,227	0.5 (0.4-0.7)		
BSAL	217	21,768	1.0 (0.9-1.1)			7	5,376	0.1 (0.1-0.3)		
BSM	200	29,022	0.7 (0.6-0.8)			52	11,727	0.4 (0.3-0.6)		
BSCtoC	393	34,716	1.1 (1.0-1.2)			40	5,988	0.7 (0.5-0.9)		
BSC	296	27,829	1.1 (0.9-1.2)			13	6,529	0.2 (0.1-0.3)		
BSSL	768	83,272	0.9 (0.9-1.0)			59	9,113	0.6 (0.5-0.8)		
BSHC	218	16,510	1.3 (1.2-1.5)			15	10,011	0.1 (0.1-0.2)		
BSA Total	2,845	287,861	1.0 (1.0-1.0)			369	65,056	0.6 (0.5-0.6)		
50-69 years										
BSWN	1,642	166,718	1.0 (0.9-1.0)	✓✓✓	*	386	23,663	1.6 (1.5-1.8)	✓✓✓	*
BSCM	927	75,806	1.2 (1.1-1.3)	✓✓✓	*	102	20,417	0.5 (0.4-0.6)	✓✓✓	*
BSAL	671	75,028	0.9 (0.8-1.0)	✓✓✓	*	33	12,428	0.3 (0.2-0.4)	✓✓✓	*
BSM	807	115,374	0.7 (0.7-0.7)	✓✓✓	*	245	48,323	0.5 (0.4-0.6)	✓✓✓	*
BSCtoC	1,468	138,609	1.1 (1.0-1.1)	✓✓✓	*	128	21,674	0.6 (0.5-0.7)	✓✓✓	*
BSC	1,179	100,440	1.2 (1.1-1.2)	✓✓✓	*	84	30,211	0.3 (0.2-0.3)	✓✓✓	*
BSSL	2,163	248,059	0.9 (0.8-0.9)	✓✓✓	*	144	27,930	0.5 (0.4-0.6)	✓✓✓	*
BSHC	1,031	67,654	1.5 (1.4-1.6)	✓✓✓	*	75	32,405	0.2 (0.2-0.3)	✓✓✓	*
BSA Total	9,888	987,688	1.0 (1.0-1.0)	✓✓✓	*	1,197	217,051	0.6 (0.5-0.6)	✓✓✓	*

Poisson 95% Confidence Intervals presented.
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

2.d. Assessment rate

Description:
Number of women referred to assessment as a percentage of all women screened
Target:
Initial (Prevalent) screen: expected value <10% and the desired value is <7%
Subsequent (Incident) screen: expected value <5% and the desired value is <4%

2.d.1. Referral to Assessment as a percentage of Women screened, 6 Months

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

	Initial			Subsequent		
	Referral to assessment	Women screened	% (95%CI)	Referral to assessment	Women screened	% (95%CI)
45-49 years						
BSWN	261	2,794	9.3 (8.2-10.5)	45	976	4.6 (3.4-6.2)
BSCM	146	1,426	10.2 (8.6-12.0)	3	77	3.9 (0.8-11.4)
BSAL	89	1,189	7.5 (6.0-9.2)	31	682	4.5 (3.1-6.5)
BSM	123	1,236	10.0 (8.3-11.9)	52	1,025	5.1 (3.8-6.7)
BSCtoC	111	1,641	6.8 (5.6-8.1)	30	1,070	2.8 (1.9-4.0)
BSC	110	1,319	8.3 (6.9-10.1)	43	957	4.5 (3.3-6.1)
BSSL	225	3,381	6.7 (5.8-7.6)	114	3,283	3.5 (2.9-4.2)
BSHC	186	1,314	14.2 (12.2-16.3)	24	657	3.7 (2.3-5.4)
BSA Total	1,251	14,300	8.7 (8.3-9.2)	342	8,727	3.9 (3.5-4.4)
50-69 years						
BSWN	240	2,200	10.9 (9.6-12.4)	323	10,060	3.2 (2.9-3.6)
BSCM	123	1,217	10.1 (8.4-12.1)	134	4,392	3.1 (2.6-3.6)
BSAL	88	932	9.4 (7.6-11.6)	193	6,454	3.0 (2.6-3.4)
BSM	95	967	9.8 (7.9-12.0)	308	8,306	3.7 (3.3-4.1)
BSCtoC	87	1,179	7.4 (5.9-9.1)	168	9,113	1.8 (1.6-2.1)
BSC	90	871	10.3 (8.3-12.7)	274	8,138	3.4 (3.0-3.8)
BSSL	62	1,111	5.6 (4.3-7.2)	407	15,770	2.6 (2.3-2.8)
BSHC	101	880	11.5 (9.3-13.9)	146	5,926	2.5 (2.1-2.9)
BSA Total	886	9,357	9.5 (8.9-10.1)	1953	68,159	2.9 (2.7-3.0)

Poisson 95% Confidence Intervals presented

2.d.2. Referral to Assessment as a percentage of Women screened, 2 Years

Description:
Number of women referred to assessment as a percentage of all women screened
Target:
Initial (Prevalent) screen: expected value <10% and the desired value is <7%

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

Table 2d.2: Referral to assessment as a percentage of women screened, 2 years

	Initial					Subsequent				
	Referral to assessment	Women screened	% (95%CI)			Referral to assessment	Women screened	% (95%CI)		
45-49 years										
BSWN	1,070	11,994	8.9 (8.4-9.5)			81	1,710	4.7 (3.8-5.9)		
BSCM	695	6,934	10.0 (9.3-10.8)			12	314	3.8 (2.0-6.7)		
BSAL	407	5,027	8.1 (7.3-8.9)			36	981	3.7 (2.6-5.1)		
BSM	617	6,649	9.3 (8.6-10.0)			149	3,147	4.7 (4.0-5.6)		
BSCtoC	487	6,879	7.1 (6.5-7.7)			74	2,729	2.7 (2.1-3.4)		
BSC	490	5,639	8.7 (7.9-9.5)			105	2,364	4.4 (3.6-5.4)		
BSSL	961	15,296	6.3 (5.9-6.7)			237	6,212	3.8 (3.3-4.3)		
BSHC	492	4,241	11.6 (10.6-12.7)			76	1,980	3.8 (3.0-4.8)		
BSA Total	5,219	62,659	8.3 (8.1-8.6)			770	19,437	4.0 (3.7-4.3)		
50-69 years										
BSWN	909	9,453	9.6 (9.0-10.3)	✓	ns	1,106	32,823	3.4 (3.2-3.6)	✓✓✓	*
BSCM	488	5,070	9.6 (8.8-10.5)	✓	ns	524	17,153	3.1 (2.8-3.3)	✓✓✓	*
BSAL	315	3,722	8.5 (7.6-9.5)	✓✓✓	*	463	15,082	3.1 (2.8-3.4)	✓✓✓	*
BSM	425	4,506	9.4 (8.6-10.4)	✓	ns	1,244	34,881	3.6 (3.4-3.8)	✓✓✓	*
BSCtoC	386	4,909	7.9 (7.1-8.7)	✓✓✓	*	667	32,056	2.1 (1.9-2.2)	✓✓✓	*
BSC	351	3,924	8.9 (8.0-9.9)	✓✓✓	*	882	26,162	3.4 (3.2-3.6)	✓✓✓	*
BSSL	346	5,012	6.9 (6.2-7.7)	✓✓✓	*	1,536	58,950	2.6 (2.5-2.7)	✓✓✓	*
BSHC	294	2,527	11.6 (10.3-13.0)	✗✗✗	*	580	20,250	2.9 (2.6-3.1)	✓✓✓	*
BSA Total	3,514	39,123	9.0 (8.7-9.3)	✓✓✓	*	7,002	237,357	2.9 (2.9-3.0)	✓✓✓	*

Poisson 95% Confidence Intervals presented
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 2d.1: Trends in referral to assessment for initial screens, 6 months

Figure 2d.1: Trends in referral to assessment for initial screens, 2 years

BSA Screening and Assessment Report - Women screened July 2006-June 2008
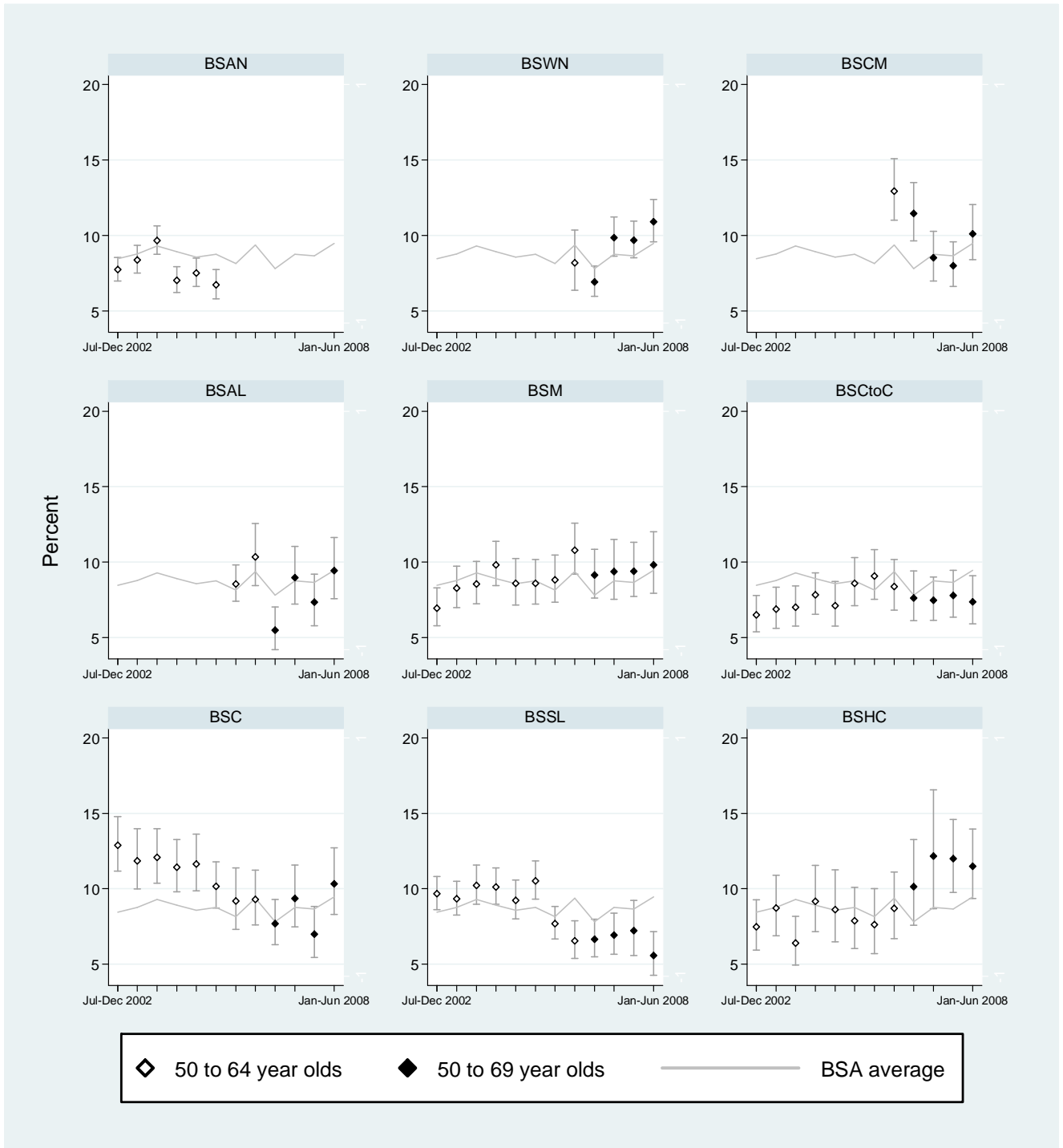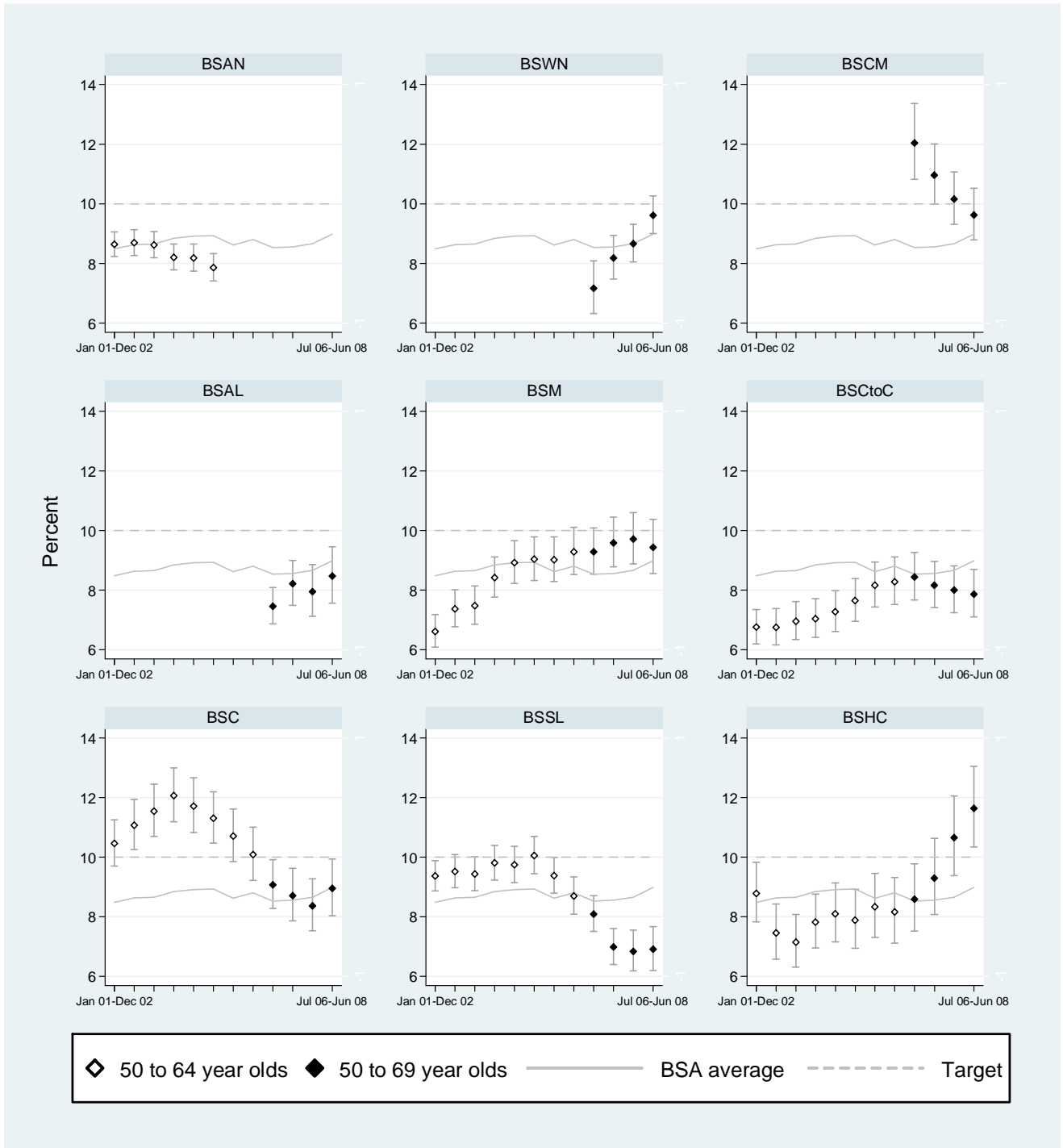
Figure 2d.2: Trends in referral to assessment for subsequent screens, 6 months

Figure 2d.2: Trends in referral to assessment for subsequent screens, 2 years
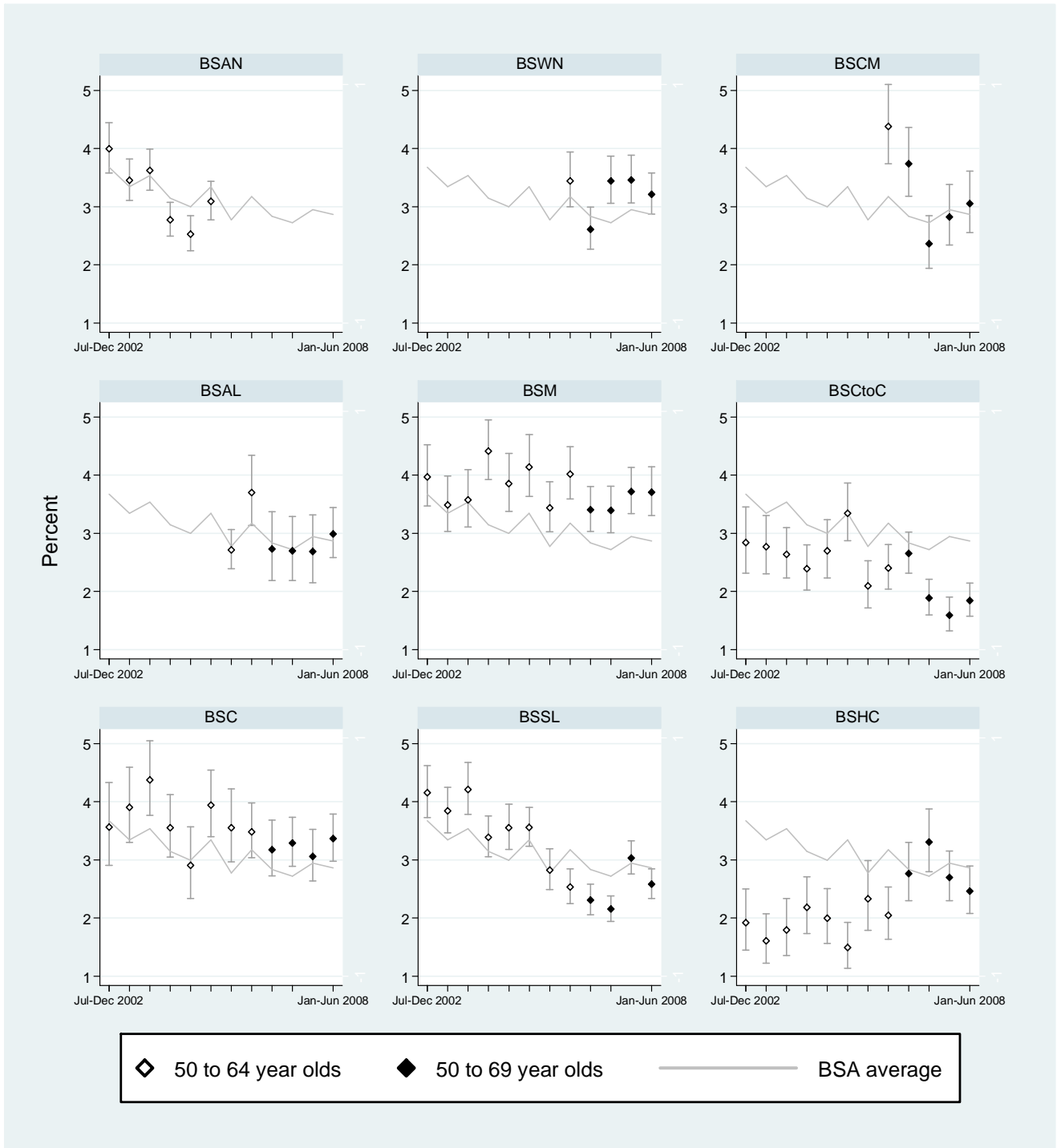
2.e. False positive rate

Description:

Measures the proportion of women who are recalled to assessment, but after assessment are found not to have cancer (DCIS and invasive).

Target:

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

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

2.e.1. False positives as a percentage of Women screened, 6 months

Table 2e.1: False positives as a percentage of women screened, 6 months

	Initial			Subsequent		
	Number of false positives	Women screened	% (95%CI)	Number of false positives	Women screened	% (95%CI)
45-49 years						
BSWN	244	2,794	8.7 (7.7-9.8)	43	976	4.4 (3.2-5.9)
BSCM	134	1,426	9.4 (7.9-11.0)	3	77	3.9 (0.8-11.0)
BSAL	78	1,189	6.6 (5.2-8.1)	29	682	4.3 (2.9-6.1)
BSM	119	1,236	9.6 (8.0-11.4)	47	1,025	4.6 (3.4-6.1)
BSCtoC	98	1,641	6.0 (4.9-7.2)	26	1,070	2.4 (1.6-3.5)
BSC	106	1,319	8.0 (6.6-9.6)	37	957	3.9 (2.7-5.3)
BSSL	212	3,381	6.3 (5.5-7.1)	107	3,283	3.3 (2.7-3.9)
BSHC	177	1,314	13.5 (11.7-15.4)	18	657	2.7 (1.6-4.3)
BSA Total	1,168	14,300	8.2 (7.7-8.6)	310	8,727	3.6 (3.2-4.0)
50-69 years						
BSWN	211	2,200	9.6 (8.4-10.9)	263	10,060	2.6 (2.3-2.9)
BSCM	104	1,217	8.5 (7.0-10.3)	109	4,392	2.5 (2.0-3.0)
BSAL	73	932	7.8 (6.2-9.7)	154	6,454	2.4 (2.0-2.8)
BSM	82	967	8.5 (6.8-10.4)	252	8,306	3.0 (2.7-3.4)
BSCtoC	67	1,179	5.7 (4.4-7.2)	109	9,113	1.2 (1.0-1.4)
BSC	84	871	9.6 (7.8-11.8)	216	8,138	2.7 (2.3-3.0)
BSSL	54	1,111	4.9 (3.7-6.3)	338	15,770	2.1 (1.9-2.4)
BSHC	92	880	10.5 (8.5-12.7)	111	5,926	1.9 (1.5-2.3)
BSA Total	767	9,357	8.2 (7.6-8.8)	1,552	68,159	2.3 (2.2-2.4)

Exact binomial 95% Confidence Intervals presented

2.e.2. False positives as a percentage of Women screened, 2 years

Description:
Measures the proportion of women who are recalled to assessment, but after assessment are found not to have cancer (DCIS and invasive)

Target:
Initial (Prevalent) screen: expected value <9%, desired target <6%
Subsequent (Incident) screen: expected value <4%, desired target <3%

Table 2e.2: False positives as a percentage of women screened, 2 years

	Initial					Subsequent				
	Number of false positives	Women screened	% (95%CI)			Number of false positives	Women screened	% (95%CI)		
45-49 years										
BSWN	986	11,994	8.2 (7.7-8.7)			75	1,710	4.4 (3.5-5.5)		
BSCM	655	6,934	9.4 (8.8-10.2)			10	314	3.2 (1.5-5.8)		
BSAL	334	5,027	6.6 (6.0-7.4)			34	981	3.5 (2.4-4.8)		
BSM	574	6,649	8.6 (8.0-9.3)			135	3,147	4.3 (3.6-5.1)		
BSCtoC	448	6,879	6.5 (5.9-7.1)			65	2,729	2.4 (1.8-3.0)		
BSC	462	5,639	8.2 (7.5-8.9)			91	2,364	3.8 (3.1-4.7)		
BSSL	904	15,296	5.9 (5.5-6.3)			224	6,212	3.6 (3.2-4.1)		
BSHC	465	4,241	11.0 (10.0-11.9)			67	1,980	3.4 (2.6-4.3)		
BSA Total	4,828	62,659	7.7 (7.5-7.9)			701	19,437	3.6 (3.3-3.9)		
50-69 years										
BSWN	795	9,453	8.4 (7.9-9.0)	✓✓	*	898	32,823	2.7 (2.6-2.9)	✓✓✓	*
BSCM	419	5,070	8.3 (7.5-9.1)	✓	ns	424	17,153	2.5 (2.2-2.7)	✓✓✓	*
BSAL	265	3,722	7.1 (6.3-8.0)	✓✓✓	*	360	15,082	2.4 (2.1-2.6)	✓✓✓	*
BSM	383	4,506	8.5 (7.7-9.4)	✓	ns	1,017	34,881	2.9 (2.7-3.1)	✓✓✓	*
BSCtoC	324	4,909	6.6 (5.9-7.3)	✓✓✓	*	473	32,056	1.5 (1.3-1.6)	✓✓✓	*
BSC	320	3,924	8.2 (7.3-9.1)	✓	ns	713	26,162	2.7 (2.5-2.9)	✓✓✓	*
BSSL	286	5,012	5.7 (5.1-6.4)	✓✓✓	*	1,231	58,950	2.1 (2.0-2.2)	✓✓✓	*
BSHC	268	2,527	10.6 (9.4-11.9)	✗✗✗	*	476	20,250	2.4 (2.1-2.6)	✓✓✓	*
BSA Total	3,060	39,123	7.8 (7.6-8.1)	✓✓✓	*	5,592	237,357	2.4 (2.3-2.4)	✓✓✓	*

Exact binomial 95% Confidence Intervals presented
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

2.f. Positive predictive value

2.f.1. Breast Cancers as a percentage of Referrals to Assessment, 6 Months

Description:
The proportion of women screened positive who are ultimately diagnosed as having cancer (DCIS and invasive)
Target:
$\geq 9\%$. The number with diagnosed cancer as a percentage of the number referred to assessment.

Table 2f.1: Cancers as a percentage of referrals to assessment, 6 months

	Initial				Subsequent		
	Number of cancers	Number of referrals	% (95%CI)		Number of cancers	Number of referrals	% (95%CI)
45-49 years							
BSWN	13	261	5.0 (2.7-8.4)		2	45	4.4 (0.5-15.1)
BSCM	7	146	4.8 (1.9-9.6)		0	3	0.0 (0.0-70.8)
BSAL	9	89	10.1 (4.7-18.3)		2	31	6.5 (0.8-21.4)
BSM	4	123	3.3 (0.9-8.1)		5	52	9.6 (3.2-21.0)
BSCtoC	11	111	9.9 (5.1-17.0)		1	30	3.3 (0.1-17.2)
BSC	3	110	2.7 (0.6-7.8)		5	43	11.6 (3.9-25.1)
BSSL	12	225	5.3 (2.8-9.1)		7	114	6.1 (2.5-12.2)
BSHC	4	186	2.2 (0.6-5.4)		5	24	20.8 (7.1-42.2)
BSA Total	63	1,251	5.0 (3.9-6.4)		27	342	7.9 (5.3-11.3)
50-69 years							
BSWN	23	240	9.6 (6.2-14.0)		57	323	17.6 (13.6-22.3)
BSCM	14	123	11.4 (6.4-18.4)		23	134	17.2 (11.2-24.6)
BSAL	13	88	14.8 (8.1-23.9)		37	193	19.2 (13.9-25.4)
BSM	13	95	13.7 (7.5-22.3)		48	308	15.6 (11.7-20.1)
BSCtoC	11	87	12.6 (6.5-21.5)		51	168	30.4 (23.5-37.9)
BSC	5	90	5.6 (1.8-12.5)		51	274	18.6 (14.2-23.7)
BSSL	7	62	11.3 (4.7-21.9)		69	407	17.0 (13.4-21.0)
BSHC	5	101	5.0 (1.6-11.2)		32	146	21.9 (15.5-29.5)
BSA Total	91	886	10.3 (8.4-12.5)		368	1,953	18.8 (17.1-20.6)

Exact binomial 95% Confidence Intervals presented

2.f.2. Breast Cancers as a percentage of Referrals to Assessment, 2 Years

Description:

The proportion of women screened positive who are ultimately diagnosed as having cancer (DCIS and invasive)

Target:

≥ 9%. The number with diagnosed cancer as a percentage of the number referred to assessment.

Table 2f.2: Cancers as a percentage of referrals to assessment, 2 years

	Initial					Subsequent				
	Number of cancers	Number of referrals	% (95%CI)			Number of cancers	Number of referrals	% (95%CI)		
45-49 years										
BSWN	59	1,070	5.5 (4.2-7.1)			5	81	6.2 (2.0-13.8)		
BSCM	31	695	4.5 (3.1-6.3)			2	12	16.7 (2.1-48.4)		
BSAL	45	407	11.1 (8.2-14.5)			2	36	5.6 (0.7-18.7)		
BSM	38	617	6.2 (4.4-8.4)			12	149	8.1 (4.2-13.6)		
BSCtoC	28	487	5.7 (3.9-8.2)			5	74	6.8 (2.2-15.1)		
BSC	21	490	4.3 (2.7-6.5)			13	105	12.4 (6.8-20.2)		
BSSL	55	961	5.7 (4.3-7.4)			13	237	5.5 (3.0-9.2)		
BSHC	15	492	3.0 (1.7-5.0)			7	76	9.2 (3.8-18.1)		
BSA Total	292	5,219	5.6 (5.0-6.3)			59	770	7.7 (5.9-9.8)		
50-69 years										
BSWN	91	909	10.0 (8.1-12.1)	✓	ns	189	1,106	17.1 (14.9-19.4)	✓✓✓	*
BSCM	52	488	10.7 (8.1-13.7)	✓	ns	94	524	17.9 (14.7-21.5)	✓✓✓	*
BSAL	39	315	12.4 (9.0-16.5)	✓	ns	83	463	17.9 (14.5-21.7)	✓✓✓	*
BSM	38	425	8.9 (6.4-12.1)	✓	ns	211	1,244	17.0 (14.9-19.2)	✓✓✓	*
BSCtoC	43	386	11.1 (8.2-14.7)	✓	ns	175	667	26.2 (22.9-29.8)	✓✓✓	*
BSC	30	351	8.5 (5.8-12.0)	✓	ns	153	882	17.3 (14.9-20.0)	✓✓✓	*
BSSL	57	346	16.5 (12.7-20.8)	✓✓✓	*	303	1,536	19.7 (17.8-21.8)	✓✓✓	*
BSHC	15	294	5.1 (2.9-8.3)	✗✗✗	*	95	580	16.4 (13.5-19.6)	✓✓✓	*
BSA Total	365	3,514	10.4 (9.4-11.4)	✓✓✓	*	1,303	7,002	18.6 (17.7-19.5)	✓✓✓	*

Exact binomial 95% Confidence Intervals presented

* Statistically different from target value, ns Not significant

✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target

✓✓ Difference of 5-9% magnitude better than target value and statistically significant

✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant

xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant

xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 2f.1a: DCIS and invasive cancers as a percentage of referrals to assessment for initial screens, women 50-69 years, 6 months
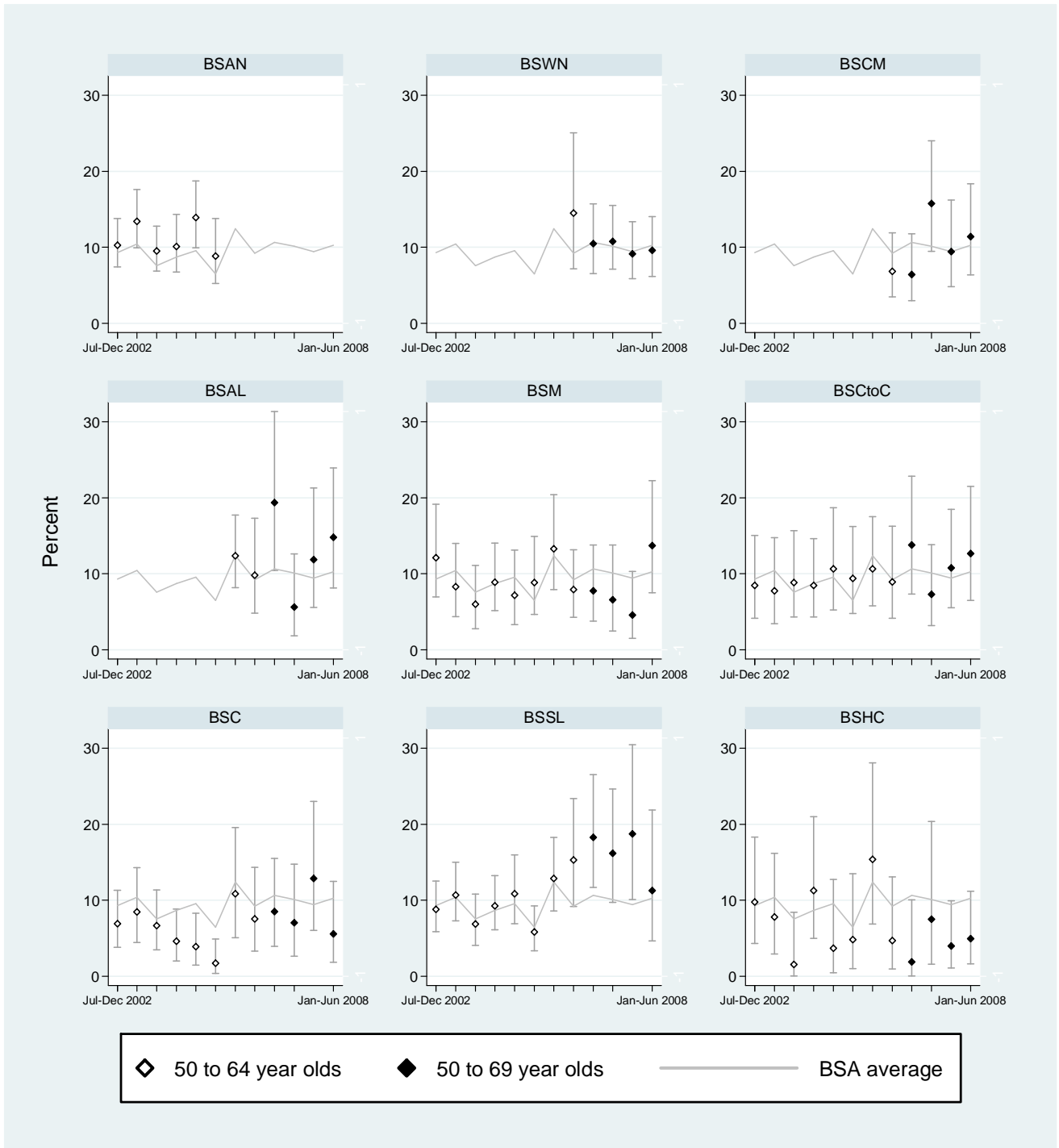
Figure 2f.1b: DCIS and invasive cancers as a percentage of referrals to assessment for initial screens, women 50-69 years, 2 years
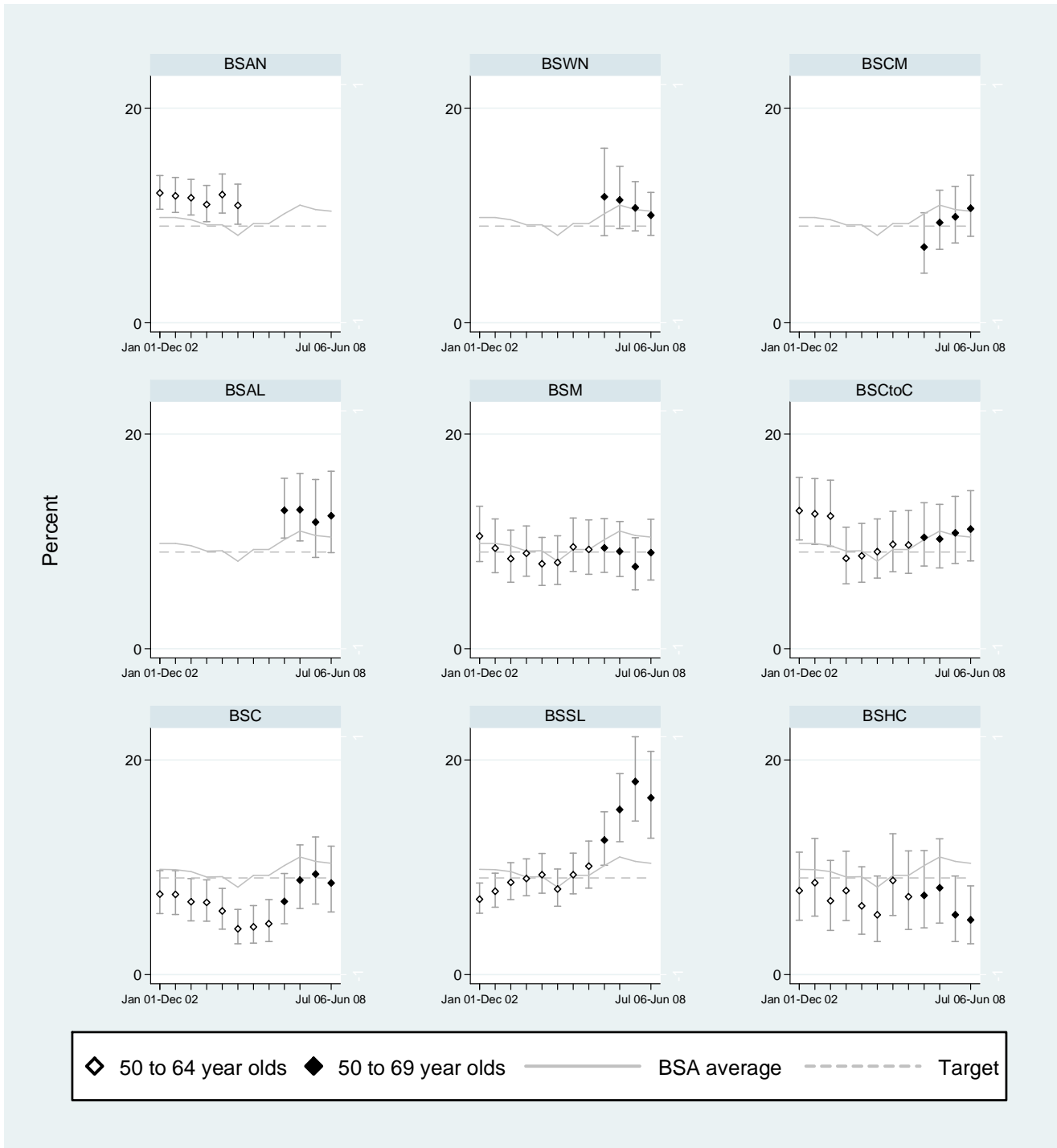
Figure 2f.2a: DCIS and invasive cancers as a percentage of referrals to assessment for subsequent screens, women 50-69 years, 6 months

Figure 2f.2b: DCIS and invasive cancers as a percentage of referrals to assessment for subsequent screens, women 50-69 years, 2 years

2.g. Benign biopsy weight

Description:

Measures the weight of the open biopsy specimen presented to the pathologist

2.g. Benign open biopsies by weight, 2 years, women aged 45-69 years

Table 2g: Benign open biopsies (OB) weighing < 30 g as a percent of all benign open biopsies, 2 years

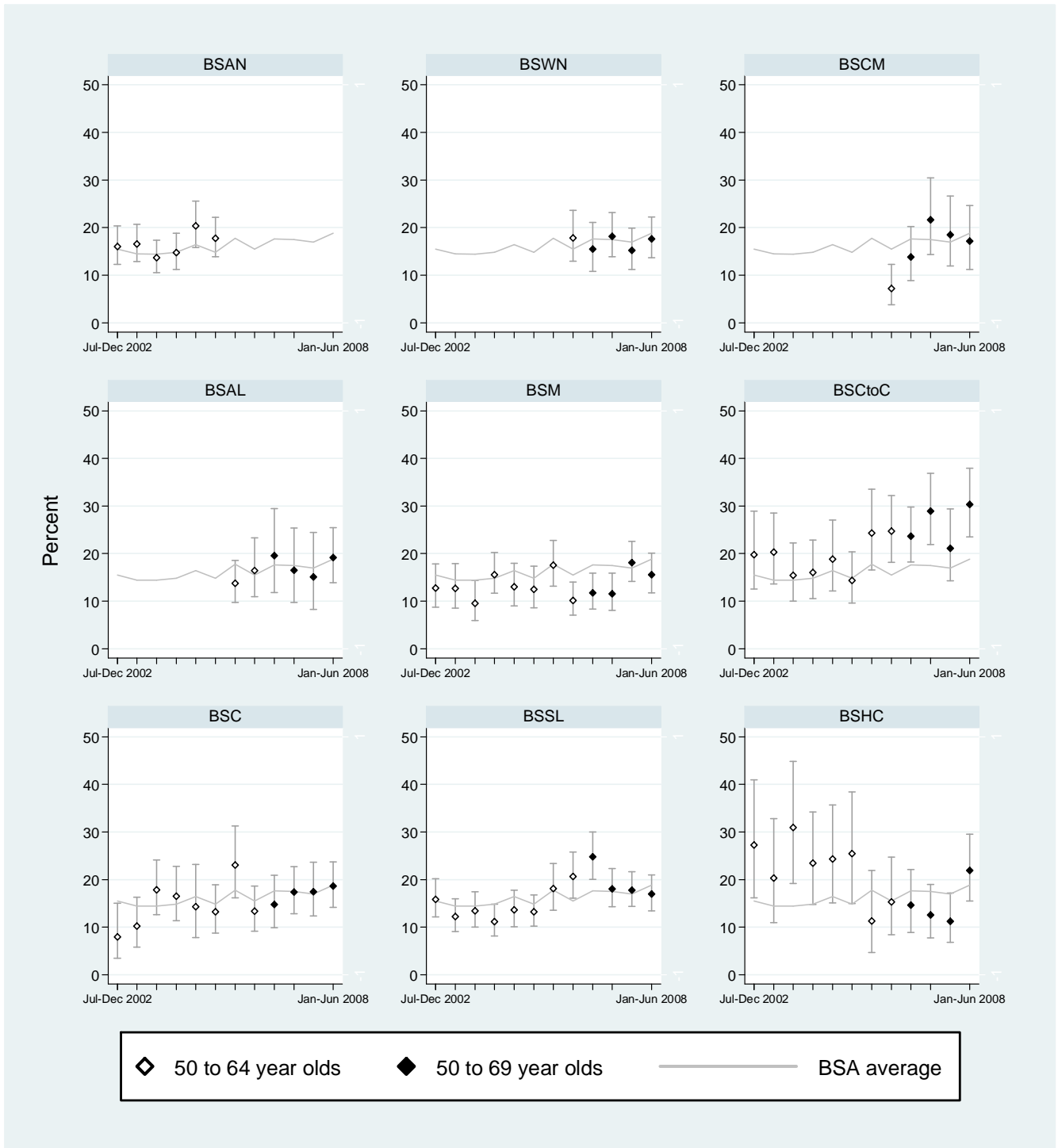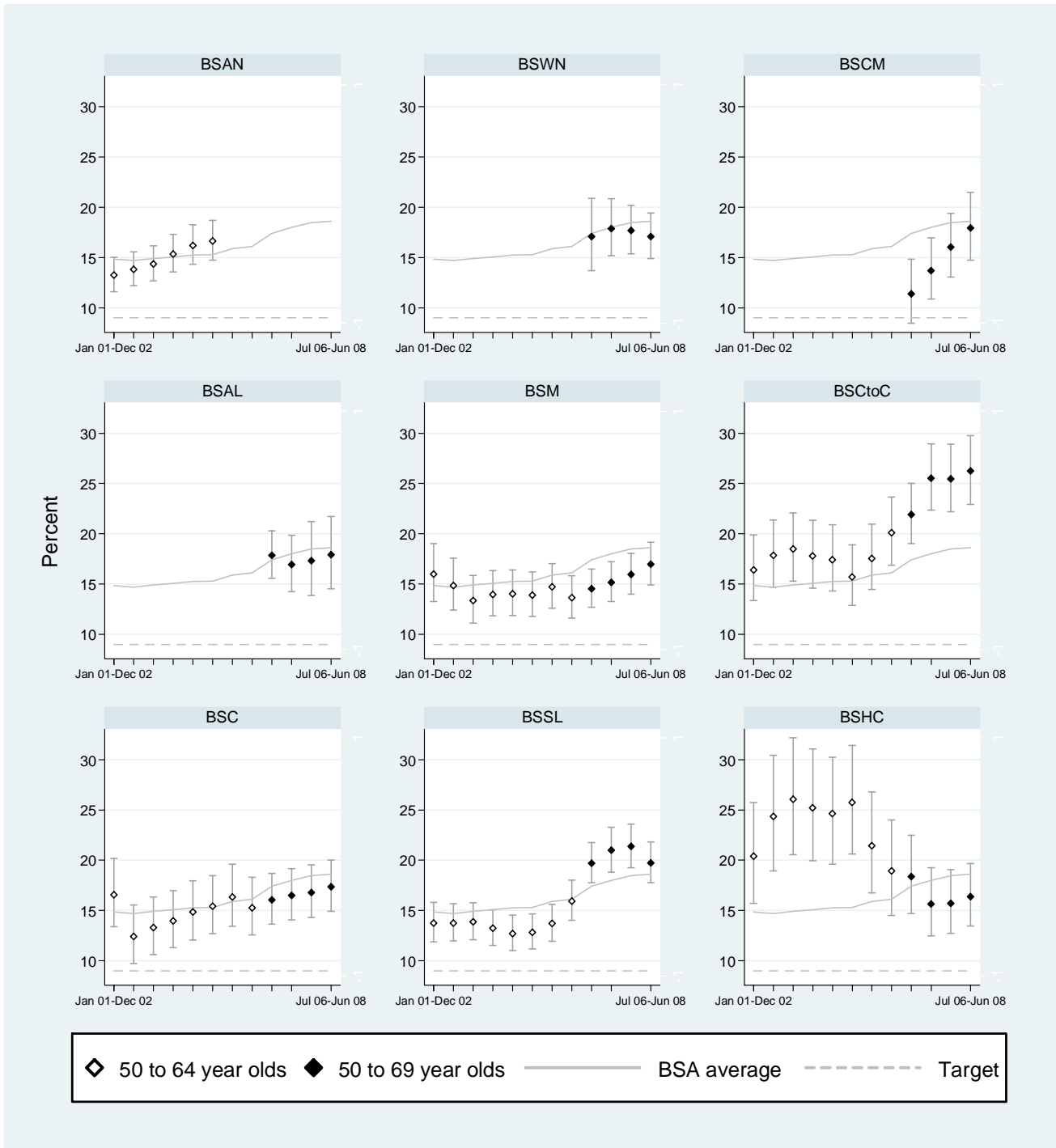|	Total benign OBs	<30 gm	% (95% CIs)	30-49 gm	% (95% CIs)	50-69 gm	% (95% CIs)	≥70 gm	% (95% CIs)	Unknown	% (95% CIs)
45-49 years											
BSWN	20	18	90.0 (68.3-98.8)	2	10.0 (1.2-31.7)	0	0.0 (0.0-16.8)	0	0.0 (0.0-16.8)	0	0.0 (0.0-16.8)
BSCM	9	8	88.9 (51.8-99.7)	1	11.1 (0.3-48.2)	0	0.0 (0.0-33.6)	0	0.0 (0.0-33.6)	0	0.0 (0.0-33.6)
BSAL	15	15	100.0 (78.2-100.0)	0	0.0 (0.0-21.8)	0	0.0 (0.0-21.8)	0	0.0 (0.0-21.8)	0	0.0 (0.0-21.8)
BSM	18	14	77.8 (52.4-93.6)	1	5.6 (0.1-27.3)	1	5.6 (0.1-27.3)	0	0.0 (0.0-18.5)	2	11.1 (1.4-34.7)
BSCtoC	8	4	50.0 (15.7-84.3)	0	0.0 (0.0-36.9)	1	12.5 (0.3-52.7)	1	12.5 (0.3-52.7)	2	25.0 (3.2-65.1)
BSC	6	3	50.0 (11.8-88.2)	0	0.0 (0.0-45.9)	0	0.0 (0.0-45.9)	0	0.0 (0.0-45.9)	3	50.0 (11.8-88.2)
BSSL	18	11	61.1 (35.7-82.7)	3	16.7 (3.6-41.4)	1	5.6 (0.1-27.3)	3	16.7 (3.6-41.4)	0	0.0 (0.0-18.5)
BSHC	15	12	80.0 (51.9-95.7)	2	13.3 (1.7-40.5)	0	0.0 (0.0-21.8)	0	0.0 (0.0-21.8)	1	6.7 (0.2-31.9)
BSA Total	109	85	78.0 (69.0-85.4)	9	8.3 (3.8-15.1)	3	2.8 (0.6-7.8)	4	3.7 (1.0-9.1)	8	7.3 (3.2-14.0)
50-69 years											
BSWN	51	43	84.3 (71.4-93.0)	6	11.8 (4.4-23.9)	2	3.9 (0.5-13.5)	0	0.0 (0.0-7.0)	0	0.0 (0.0-7.0)
BSCM	18	15	83.3 (58.6-96.4)	2	11.1 (1.4-34.7)	1	5.6 (0.1-27.3)	0	0.0 (0.0-18.5)	0	0.0 (0.0-18.5)
BSAL	25	22	88.0 (68.8-97.5)	3	12.0 (2.5-31.2)	0	0.0 (0.0-13.7)	0	0.0 (0.0-13.7)	0	0.0 (0.0-13.7)
BSM	33	25	75.8 (57.7-88.9)	1	3.0 (0.1-15.8)	1	3.0 (0.1-15.8)	1	3.0 (0.1-15.8)	5	15.2 (5.1-31.9)
BSCtoC	13	2	15.4 (1.9-45.4)	2	15.4 (1.9-45.4)	0	0.0 (0.0-24.7)	1	7.7 (0.2-36.0)	8	61.5 (31.6-86.1)
BSC	21	18	85.7 (63.7-97.0)	1	4.8 (0.1-23.8)	1	4.8 (0.1-23.8)	0	0.0 (0.0-16.1)	1	4.8 (0.1-23.8)
BSSL	21	14	66.7 (43.0-85.4)	5	23.8 (8.2-47.2)	1	4.8 (0.1-23.8)	1	4.8 (0.1-23.8)	0	0.0 (0.0-16.1)
BSHC	28	19	67.9 (47.6-84.1)	3	10.7 (2.3-28.2)	1	3.6 (0.1-18.3)	1	3.6 (0.1-18.3)	4	14.3 (4.0-32.7)
BSA Total	210	158	75.2 (68.8-80.9)	23	11.0 (7.1-16.0)	7	3.3 (1.4-6.7)	4	1.9 (0.5-4.8)	18	8.6 (5.2-13.2)

Exact binomial 95% Confidence Intervals presented

2.h. Pre-operative diagnosis rate

Description:
The number of women in which a needle biopsy provides the definitive diagnosis (pre-operative diagnosis), as a percentage of all women diagnosed with breast cancer in the programme
Target:
> 90% (desired target)
> 70% (expected target)

Table 2h: Percentage of women with a preoperative diagnosis of cancer (DCIS and invasive)

	6 months					2 years				
	Preoperative diagnosis of cancer	Number of cancers	% (95%CI)			Preoperative diagnosis of cancer	Number of cancers	% (95%CI)		
45-49 years										
BSWN	15	15				60	64	93.8 (84.8-98.3)		
BSCM	6	7				31	33	93.9 (79.8-99.3)		
BSAL	11	11				45	47	95.7 (85.5-99.5)		
BSM	7	9				46	50	92.0 (80.8-97.8)		
BSCtoC	11	12				28	33	84.8 (68.1-94.9)		
BSC	8	8				33	34	97.1 (84.7-99.9)		
BSSL	18	19				64	68	94.1 (85.6-98.4)		
BSHC	9	9				20	22	90.9 (70.8-98.9)		
BSA Total	85	90	94.4 (87.5-98.2)			327	351	93.2 (90.0-95.6)		
50-69 years										
BSWN	73	80	91.3 (82.8-96.4)	✓✓✓	*	263	280	93.9 (90.5-96.4)	✓✓✓	*
BSCM	33	37	89.2 (74.6-97.0)	✓✓✓	*	133	146	91.1 (85.3-95.2)	✓✓✓	*
BSAL	48	50	96.0 (86.3-99.5)	✓✓✓	*	117	122	95.9 (90.7-98.7)	✓✓✓	*
BSM	59	61	96.7 (88.7-99.6)	✓✓✓	*	232	249	93.2 (89.3-96.0)	✓✓✓	*
BSCtoC	60	62	96.8 (88.8-99.6)	✓✓✓	*	214	218	98.2 (95.4-99.5)	✓✓✓	*
BSC	54	56	96.4 (87.7-99.6)	✓✓✓	*	175	183	95.6 (91.6-98.1)	✓✓✓	*
BSSL	71	76	93.4 (85.3-97.8)	✓✓✓	*	346	360	96.1 (93.6-97.9)	✓✓✓	*
BSHC	35	37	94.6 (81.8-99.3)	✓✓✓	*	102	110	92.7 (86.2-96.8)	✓✓✓	*
BSA Total	433	459	94.3 (91.8-96.3)	✓✓✓	*	1,582	1,668	94.8 (93.7-95.9)	✓✓✓	*

Note: Estimates for small numbers not presented
Exact binomial 95% Confidence Intervals presented
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
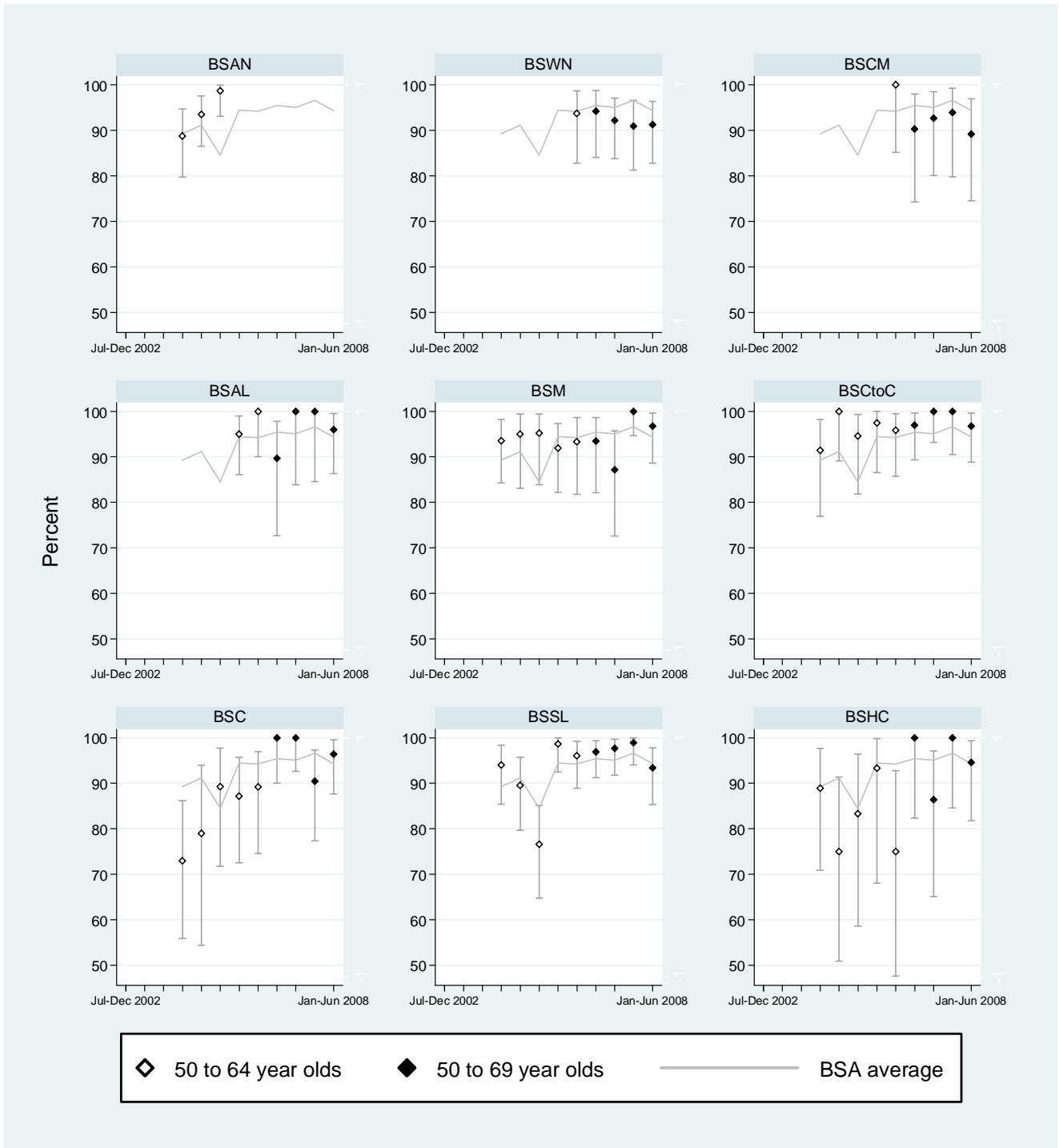xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 2h.a: Percentage of women with a preoperative diagnosis of cancer (DCIS and invasive), 6 months

Figure 2h.b: Percentage of women with a preoperative diagnosis of cancer (DCIS and invasive), 2 years
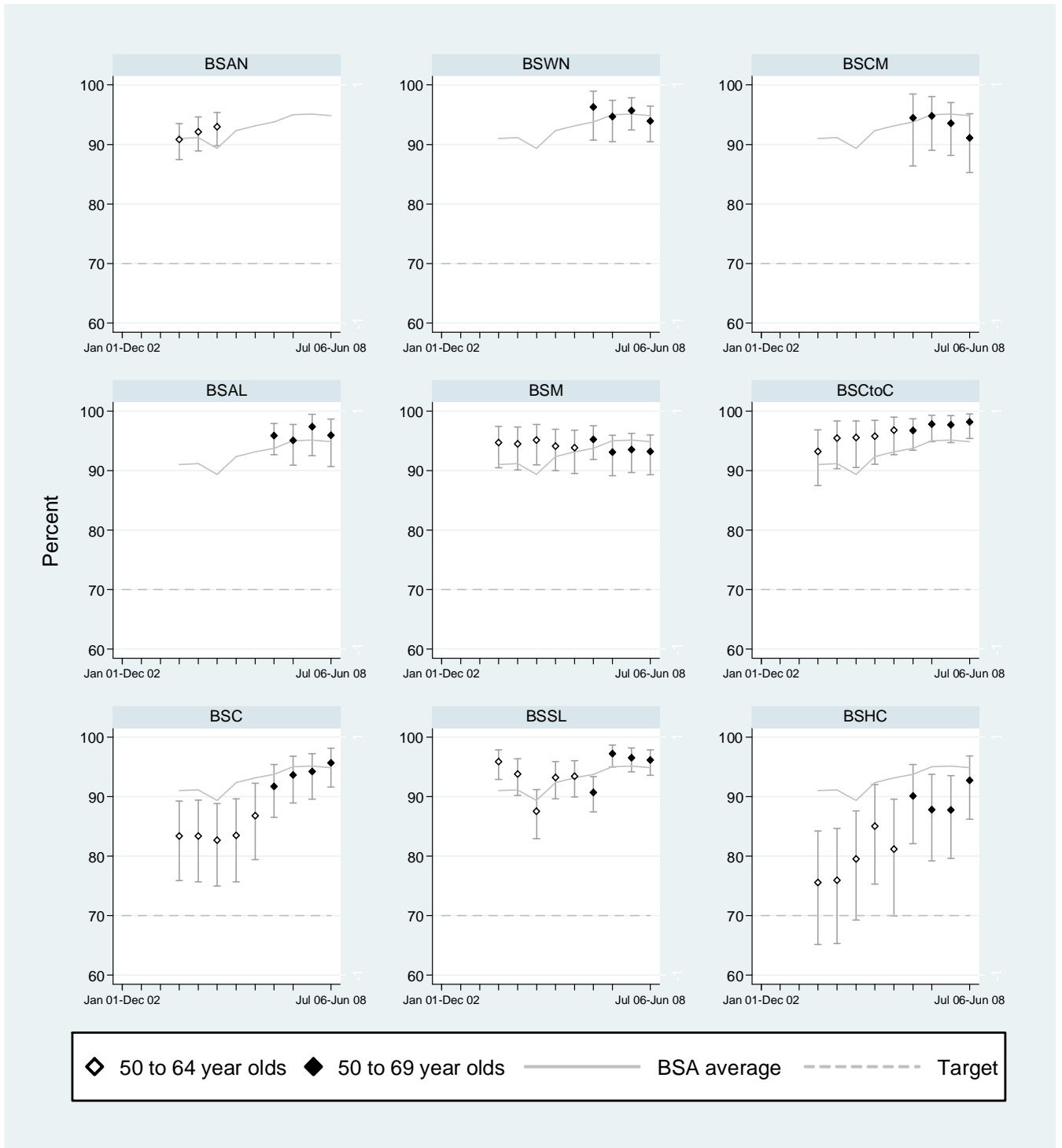
2.l. Specificity
Description:
Specificity is the proportion of women without breast cancer at screening who have a negative screen result. This is estimated by expressing the number of women who have a negative screen result as a percentage of all women screened excluding the women screened positive with cancer.
This is calculated as: number with true negative screening results as a percentage of this number plus the number with false positive screening results. (NB: Interval cancers excluded)
Target:
> 93 %

2.l.1. Specificity, 6 months

Table 2l.1: Estimated specificity of BSA by Lead Provider, 6 months

	Initial			Subsequent		
	Negative screens (RRS from Screen)	Negative screen plus False Positives	% (95% CI)	Negative screens (RRS from Screen)	Negative screen plus False Positives	% (95% CI)
45-49 years						
BSWN	2,533	2,777	91.2 (90.1-92.2)	931	974	95.6 (94.1-96.8)
BSCM	1,280	1,414	90.5 (88.9-92.0)	74	77	96.1 (89.0-99.2)
BSAL	1,100	1,178	93.4 (91.8-94.7)	651	680	95.7 (93.9-97.1)
BSM	1,113	1,232	90.3 (88.6-91.9)	973	1,020	95.4 (93.9-96.6)
BSCtoC	1,530	1,628	94.0 (92.7-95.1)	1,040	1,066	97.6 (96.4-98.4)
BSC	1,209	1,315	91.9 (90.3-93.4)	914	951	96.1 (94.7-97.2)
BSSL	3,156	3,368	93.7 (92.8-94.5)	3,169	3,276	96.7 (96.1-97.3)
BSHC	1,128	1,305	86.4 (84.5-88.2)	633	651	97.2 (95.7-98.4)
BSA Total	13,049	14,217	91.8 (91.3-92.2)	8,385	8,695	96.4 (96.0-96.8)
50-69 years						
BSWN	1,960	2,171	90.3 (89.0-91.5)	9,737	10,000	97.4 (97.0-97.7)
BSCM	1,094	1,198	91.3 (89.6-92.9)	4,258	4,367	97.5 (97.0-97.9)
BSAL	844	917	92.0 (90.1-93.7)	6,261	6,415	97.6 (97.2-98.0)
BSM	872	954	91.4 (89.4-93.1)	7,998	8,250	96.9 (96.6-97.3)
BSCtoC	1,092	1,159	94.2 (92.7-95.5)	8,945	9,054	98.8 (98.5-99.0)
BSC	781	865	90.3 (88.1-92.2)	7,864	8,080	97.3 (97.0-97.7)
BSSL	1,049	1,103	95.1 (93.7-96.3)	15,363	15,701	97.8 (97.6-98.1)
BSHC	779	871	89.4 (87.2-91.4)	5,780	5,891	98.1 (97.7-98.4)
BSA Total	8,471	9,238	91.7 (91.1-92.3)	66,206	67,758	97.7 (97.6-97.8)

Exact binomial 95% Confidence Intervals presented
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2.l.2. Specificity, 2 years

Description:

Specificity is the proportion of women without breast cancer (DCIS and invasive) at screening who have a negative screen result. This is estimated by expressing the number of women who have a negative screen result as a percentage of all women screened excluding the women screened positive with cancer.

This is calculated as: number with true negative screening results as a percentage of this number plus the number with false positive screening results. (NB: Interval cancers excluded)

Target:

> 93 %

Table 2l.2: Estimated specificity of BSA by Lead Provider, 2years

	Initial					Subsequent				
	Negative screens (RRS from Screen)	Negative screen plus False Positives	% (95% CI)			Negative screens (RRS from Screen)	Negative screen plus False Positives	% (95% CI)		
45-49 years										
BSWN	11,266	12,252	92.0 (91.5-92.4)			1,629	1,704	95.6 (94.5-96.5)		
BSCM	6,290	6,945	90.6 (89.9-91.2)			302	312	96.8 (94.2-98.5)		
BSAL	4,942	5,276	93.7 (93.0-94.3)			945	979	96.5 (95.2-97.6)		
BSM	6,039	6,613	91.3 (90.6-92.0)			2,998	3,133	95.7 (94.9-96.4)		
BSCtoC	6,551	6,999	93.6 (93.0-94.2)			2,656	2,721	97.6 (97.0-98.2)		
BSC	5,379	5,841	92.1 (91.4-92.8)			2,263	2,354	96.1 (95.3-96.9)		
BSSL	15,014	15,918	94.3 (94.0-94.7)			5,976	6,200	96.4 (95.9-96.8)		
BSHC	3,790	4,255	89.1 (88.1-90.0)			1,904	1,971	96.6 (95.7-97.4)		
BSA Total	59,271	64,099	92.5 (92.3-92.7)			18,673	19,374	96.4 (96.1-96.6)		
50-69 years										
BSWN	8,948	9,743	91.8 (91.3-92.4)	✓	*	33,432	34,330	97.4 (97.2-97.6)	✓	*
BSCM	4,680	5,099	91.8 (91.0-92.5)	✓	*	17,046	17,470	97.6 (97.3-97.8)	✓	*
BSAL	3,771	4,036	93.4 (92.6-94.2)	✓	ns	15,896	16,256	97.8 (97.5-98.0)	✓✓	*
BSM	4,094	4,477	91.4 (90.6-92.2)	✓	*	33,704	34,721	97.1 (96.9-97.2)	✓	*
BSCtoC	4,696	5,020	93.5 (92.8-94.2)	✓	ns	32,699	33,172	98.6 (98.4-98.7)	✓✓	*
BSC	3,790	4,110	92.2 (91.4-93.0)	✓	ns	26,354	27,067	97.4 (97.2-97.6)	✓	*
BSSL	4,902	5,188	94.5 (93.8-95.1)	✓	*	59,795	61,026	98.0 (97.9-98.1)	✓✓	*
BSHC	2,269	2,537	89.4 (88.2-90.6)	✓	*	20,295	20,771	97.7 (97.5-97.9)	✓✓	*
BSA Total	37,150	40,210	92.4 (92.1-92.6)	✓	*	239,221	244,813	97.7 (97.7-97.8)	✓✓	*

Exact binomial 95% Confidence Intervals presented
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% confidence interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

2.m. Benign biopsy rate

2.m.1. Benign open biopsies, 2 years
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

Table 2m.2: Benign open biopsies, 2 years

	Initial					Subsequent				
	Benign open biopsies	Number of screens	Rate per 1,000 (95%CI)			Benign open biopsies	Number of screens	Rate per 1,000 (95%CI)		
45-49 years										
BSWN	18	11,994	1.5 (0.9-2.4)			2	1,710			
BSCM	9	6,934	1.3 (0.6-2.5)			0	314			
BSAL	12	5,027	2.4 (1.2-4.2)			3	981			
BSM	17	6,649	2.6 (1.5-4.1)			1	3,147			
BSCtoC	8	6,879	1.2 (0.5-2.3)			0	2,729			
BSC	3	5,639	0.5 (0.1-1.6)			3	2,364			
BSSL	13	15,296	0.8 (0.5-1.5)			5	6,212			
BSHC	13	4,241	3.1 (1.6-5.2)			1	1,980			
BSA Total	93	62,659	1.5 (1.2-1.8)			15	19,437			
50-69 years										
BSWN	23	9,453	2.4 (1.5-3.7)	✓	ns	25	32,823	0.8 (0.5-1.1)	✓✓✓	*
BSCM	9	5,070	1.8 (0.8-3.4)	✓✓✓	*	9	17,153	0.5 (0.2-1.0)	✓✓✓	*
BSAL	11	3,722	3.0 (1.5-5.3)	✓	ns	14	15,082	0.9 (0.5-1.6)	✓✓✓	*
BSM	10	4,506	2.2 (1.1-4.1)	✓	ns	23	34,881	0.7 (0.4-1.0)	✓✓✓	*
BSCtoC	4	4,909	0.8 (0.2-2.1)	✓✓✓	*	9	32,056	0.3 (0.1-0.5)	✓✓✓	*
BSC	8	3,924	2.0 (0.9-4.0)	✓	ns	13	26,162	0.5 (0.3-0.8)	✓✓✓	*
BSSL	3	5,012	0.6 (0.1-1.7)	✓✓✓	*	18	58,950	0.3 (0.2-0.5)	✓✓✓	*
BSHC	15	2,527	5.9 (3.3-9.8)	✓	ns	13	20,250	0.6 (0.3-1.1)	✓✓✓	*
BSA Total	83	39,123	2.1 (1.7-2.6)	✓✓✓	*	124	237,357	0.5 (0.4-0.6)	✓✓✓	*

Poisson 95% Confidence Intervals presented
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
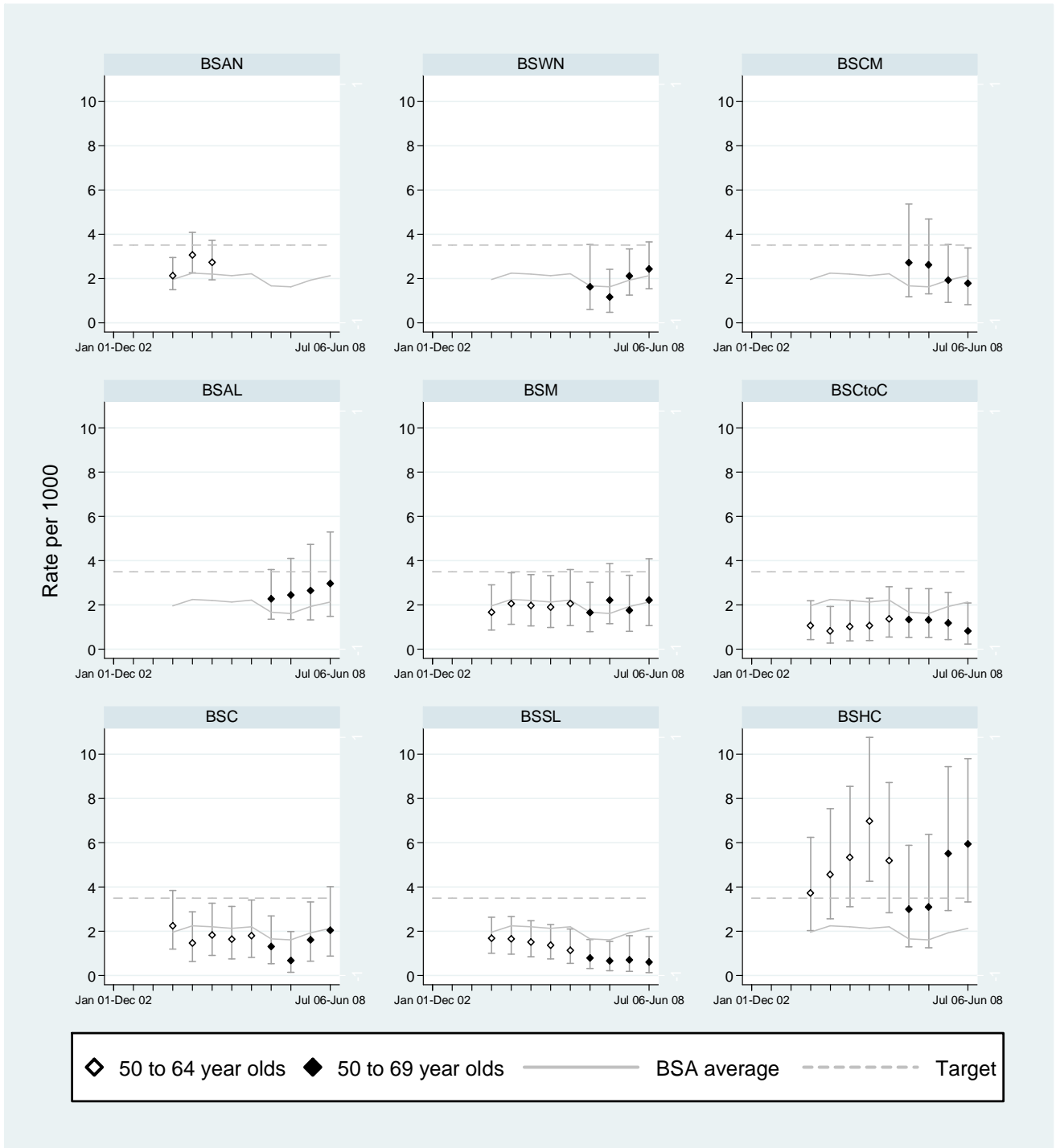✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 2m2: Benign open biopsy rate for initial screens, 2 years

Figure 2m2: Benign open biopsy rate for subsequent screens, 2 years
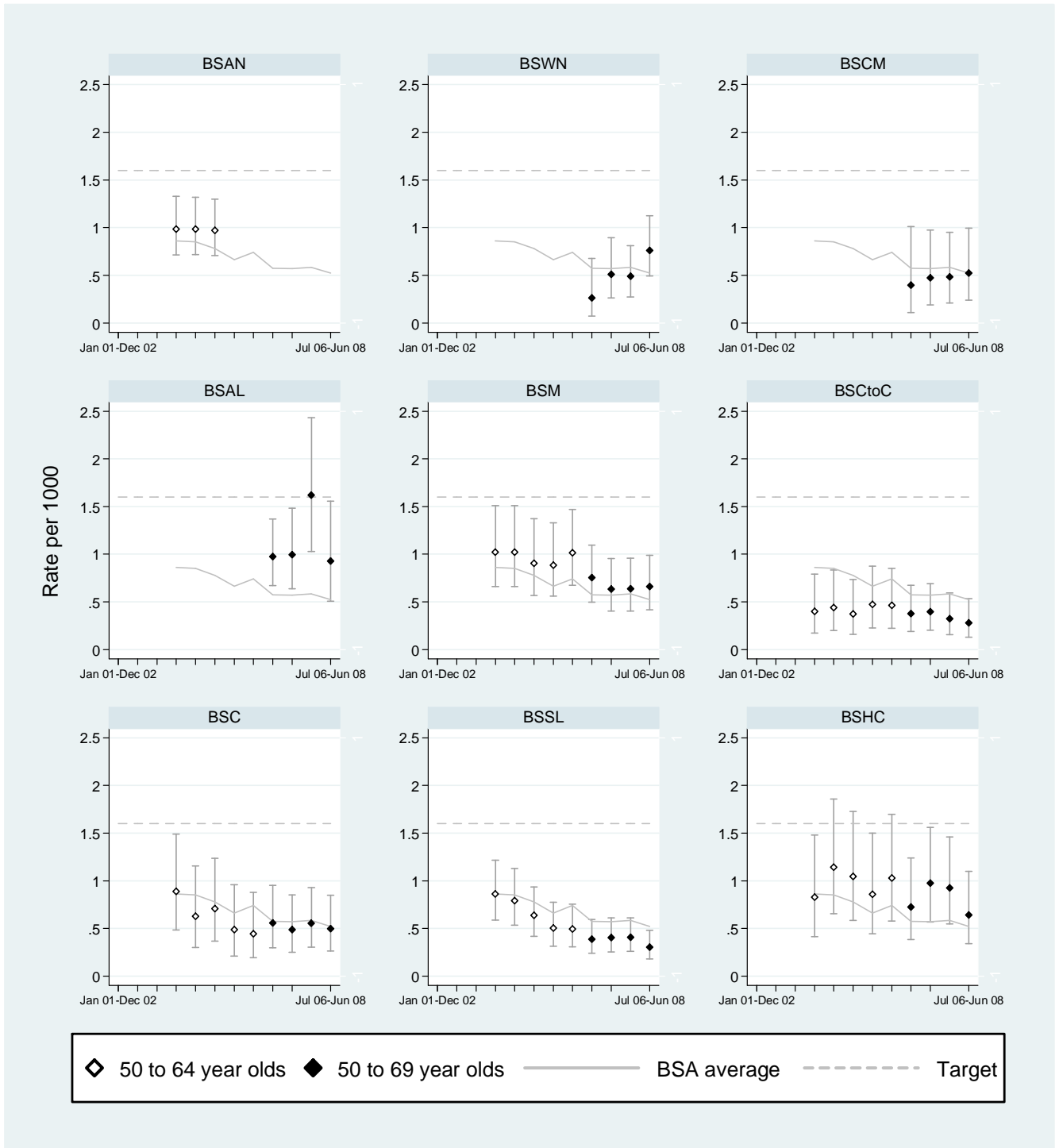
3. EARLY DETECTION OF DCIS OR INVASIVE BREAST CANCER

3.a.1. DCIS and invasive cancer, 6 months

Description:

The number of women who have ductal carcinoma *in situ* and/or invasive breast cancer detected within BSA, expressed as a rate per 1000 women screened.

This is influenced by the background incidence of cancer in the population in the absence of screening. All other things being equal, the higher the cancer incidence, the higher the cancer detection rate will be.

The cancer detection targets now relate to invasive cancers only, however, total (DCIS and invasive) cancer detection rates will continue to be reported.

Table 3a.1: Detection rate of DCIS and invasive breast cancer per 1,000 women screened, 6 months

	Initial			Subsequent		
	Number	Women screened	Rate per 1000 (95%CI)	Number	Women screened	Rate per 1000 (95%CI)
45-49 years						
BSWN	13	2,794	4.7 (2.5-8.0)	2	976	2.0 (0.2-7.4)
BSCM	7	1,426	4.9 (2.0-10.1)	0	77	0.0 (0.0-47.9)
BSAL	9	1,189	7.6 (3.5-14.4)	2	682	2.9 (0.4-10.6)
BSM	4	1,236	3.2 (0.9-8.3)	5	1,025	4.9 (1.6-11.4)
BSCtoC	11	1,641	6.7 (3.3-12.0)	1	1,070	0.9 (0.0-5.2)
BSC	3	1,319	2.3 (0.5-6.6)	5	957	5.2 (1.7-12.2)
BSSL	12	3,381	3.5 (1.8-6.2)	7	3,283	2.1 (0.9-4.4)
BSHC	4	1,314	3.0 (0.8-7.8)	5	657	7.6 (2.5-17.8)
BSA Total	63	14,300	4.4 (3.4-5.6)	27	8,727	3.1 (2.0-4.5)
50-69 years						
BSWN	23	2,200	10.5 (6.6-15.7)	57	10,060	5.7 (4.3-7.3)
BSCM	14	1,217	11.5 (6.3-19.3)	23	4,392	5.2 (3.3-7.9)
BSAL	13	932	13.9 (7.4-23.9)	37	6,454	5.7 (4.0-7.9)
BSM	13	967	13.4 (7.2-23.0)	48	8,306	5.8 (4.3-7.7)
BSCtoC	11	1,179	9.3 (4.7-16.7)	51	9,113	5.6 (4.2-7.4)
BSC	5	871	5.7 (1.9-13.4)	51	8,138	6.3 (4.7-8.2)
BSSL	7	1,111	6.3 (2.5-13.0)	69	15,770	4.4 (3.4-5.5)
BSHC	5	880	5.7 (1.8-13.3)	32	5,926	5.4 (3.7-7.6)
BSA Total	91	9,357	9.7 (7.8-11.9)	368	68,159	5.4 (4.9-6.0)

Poisson 95% Confidence Intervals presented

3a.2. DCIS and invasive cancer, 2 years

Description:

The number of women who have invasive breast cancer detected within BSA, expressed as a rate per 1000 women screened.

This is influenced by the background incidence of cancer in the population in the absence of screening. All other things being equal, the higher the cancer incidence, the higher the cancer detection rate will be.

Table 3a.2: Detection rate of DCIS and invasive breast cancer per 1,000 women screened, 2 years

	Initial			Subsequent		
	Number	Women screened	Rate per 1,000 (95%CI)	Number	Women screened	Rate per 1,000 (95%CI)
45-49 years						
BSWN	59	11,994	4.9 (3.7-6.3)	5	1,710	2.9 (0.9-6.8)
BSCM	31	6,934	4.5 (3.0-6.3)	2	314	6.4 (0.8-23.0)
BSAL	45	5,027	9.0 (6.5-12.0)	2	981	2.0 (0.2-7.4)
BSM	38	6,649	5.7 (4.0-7.8)	12	3,147	3.8 (2.0-6.7)
BSCtoC	28	6,879	4.1 (2.7-5.9)	5	2,729	1.8 (0.6-4.3)
BSC	21	5,639	3.7 (2.3-5.7)	13	2,364	5.5 (2.9-9.4)
BSSL	55	15,296	3.6 (2.7-4.7)	13	6,212	2.1 (1.1-3.6)
BSHC	15	4,241	3.5 (2.0-5.8)	7	1,980	3.5 (1.4-7.3)
BSA Total	292	62,659	4.7 (4.1-5.2)	59	19,437	3.0 (2.3-3.9)
50-69 years						
BSWN	91	9,453	9.6 (7.8-11.8)	189	32,823	5.8 (5.0-6.6)
BSCM	52	5,070	10.3 (7.7-13.4)	94	17,153	5.5 (4.4-6.7)
BSAL	39	3,722	10.5 (7.5-14.3)	83	15,082	5.5 (4.4-6.8)
BSM	38	4,506	8.4 (6.0-11.6)	211	34,881	6.0 (5.3-6.9)
BSCtoC	43	4,909	8.8 (6.3-11.8)	175	32,056	5.5 (4.7-6.3)
BSC	30	3,924	7.6 (5.2-10.9)	153	26,162	5.8 (5.0-6.9)
BSSL	57	5,012	11.4 (8.6-14.7)	303	58,950	5.1 (4.6-5.8)
BSHC	15	2,527	5.9 (3.3-9.8)	95	20,250	4.7 (3.8-5.7)
BSA Total	365	39,123	9.3 (8.4-10.3)	1,303	237,357	5.5 (5.2-5.8)

Poisson 95% Confidence Intervals presented

Figure 3a: Detection rate of DCIS and invasive breast cancer, initial screens, 2 years

Figure 3a: Detection rate of DCIS and invasive breast cancer, subsequent screens, 2 years
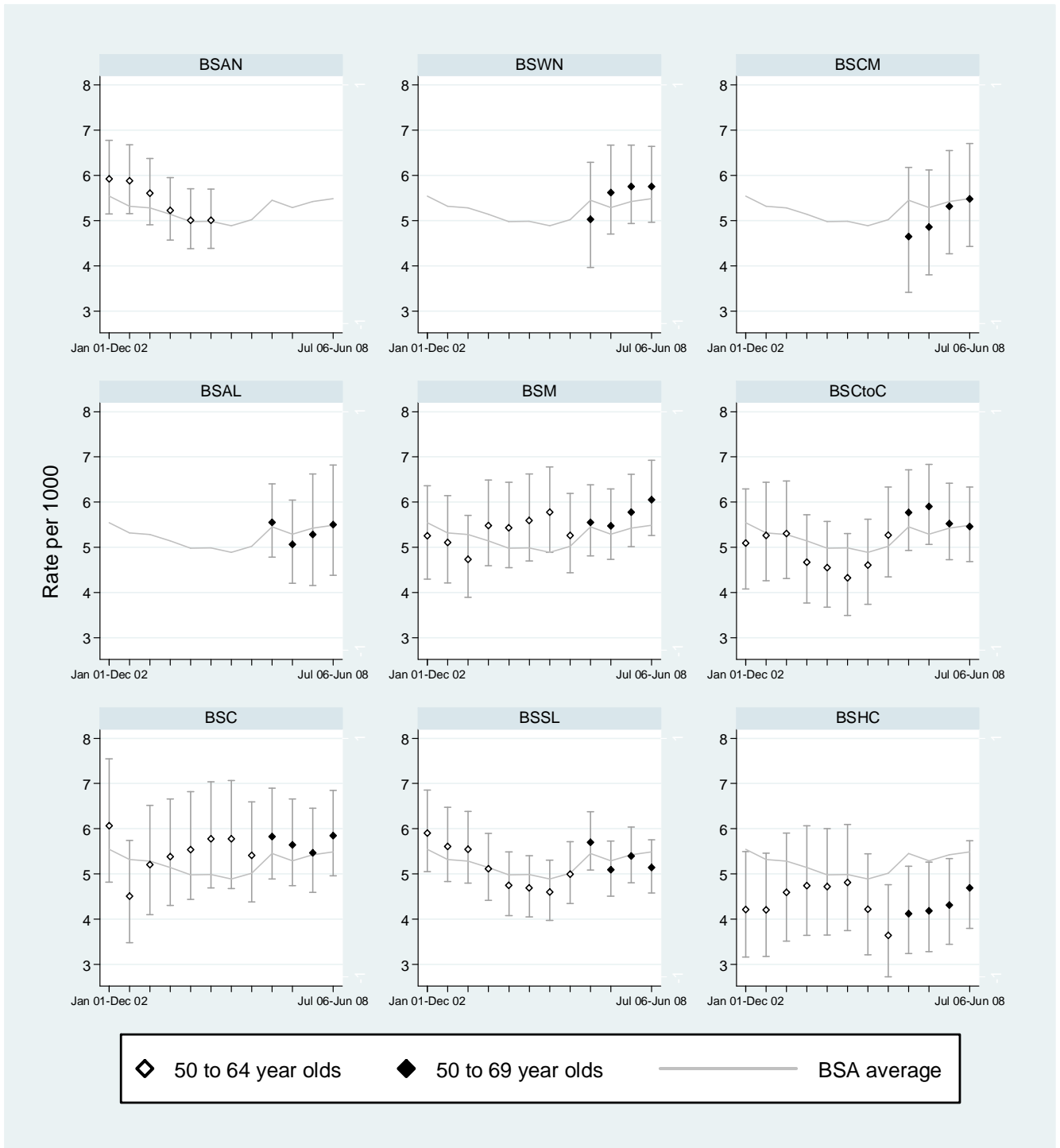
3.a.2b. Invasive cancer detection, 6 months and 2 years

Description:

The number of women who have invasive breast cancer detected within BSA, expressed as a rate per 1000 women screened.
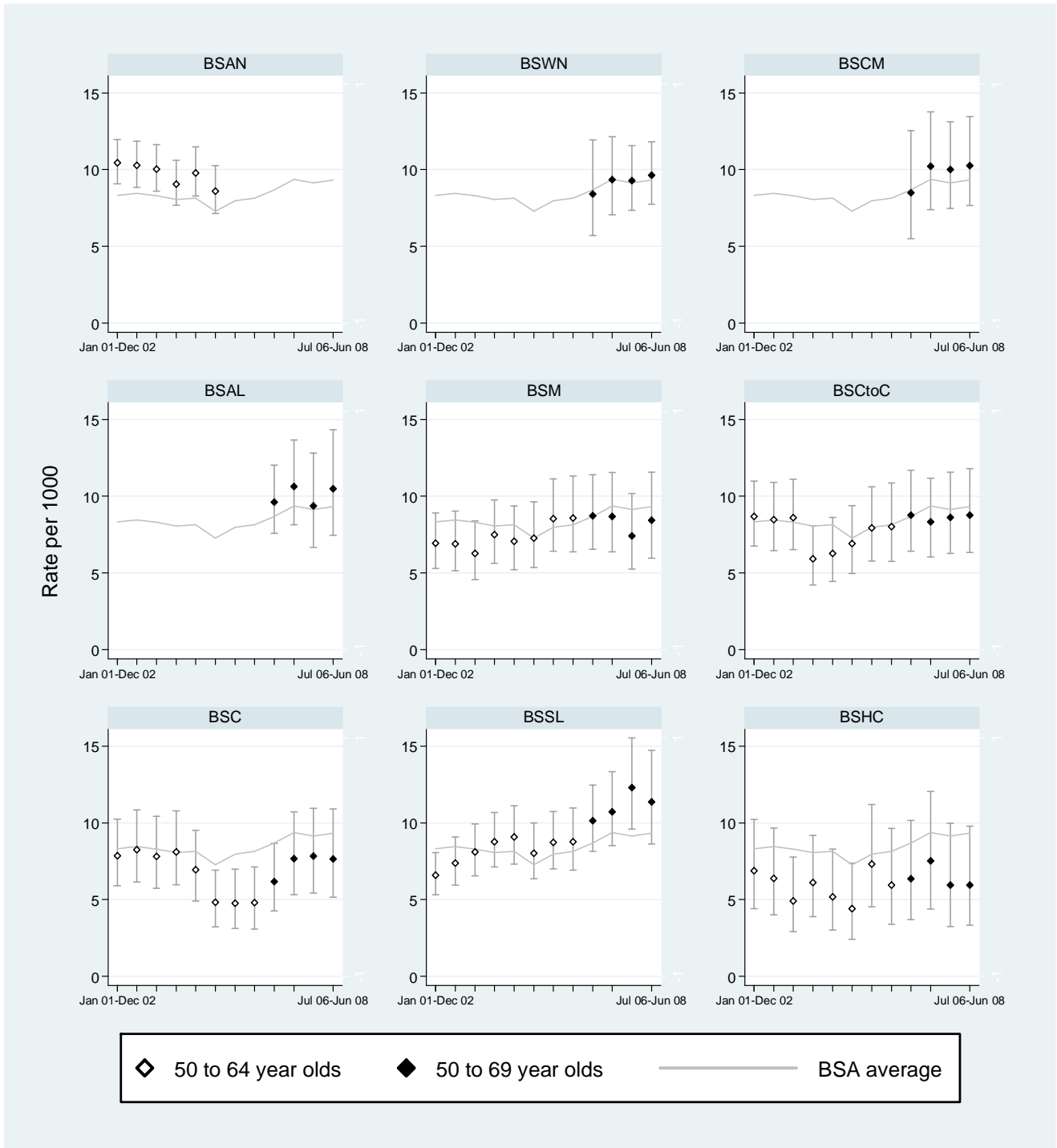
This is influenced by the background incidence of cancer in the population in the absence of screening. All other things being equal, the higher the cancer incidence, the higher the cancer detection rate will be.

Target:

Initial (Prevalent) round: ≥ 6.1 per 1000 women screened
Subsequent (Incident) round: ≥ 3.45 per 1000 women screened.

Table 3a.2b: Invasive cancers for initial and subsequent screens, women 45-69 years, 6 months

	Initial			Subsequent		
	Number	Women screened	Rate per 1,000 (95%CI)	Number	Women screened	Rate per 1,000 (95%CI)
45-49 years						
BSWN	9	2,794	3.2 (1.5-6.1)	2	976	2.0 (0.2-7.4)
BSCM*	3	1,426	2.1 (0.4-6.1)	0	77	0.0 (0.0-47.9)
BSAL*	3	1,189	2.5 (0.5-7.4)	1	682	1.5 (0.0-8.2)
BSM*	3	1,236	2.4 (0.5-7.1)	4	1,025	3.9 (1.1-10.0)
BSCtoC	5	1,641	3.0 (1.0-7.1)	1	1,070	0.9 (0.0-5.2)
BSC	1	1,319	0.8 (0.0-4.2)	2	957	2.1 (0.3-7.5)
BSSL	9	3,381	2.7 (1.2-5.1)	4	3,283	1.2 (0.3-3.1)
BSHC	4	1,314	3.0 (0.8-7.8)	4	657	6.1 (1.7-15.6)
BSA Total	37	14,300	2.6 (1.8-3.6)	18	8,727	2.1 (1.2-3.3)
50-69 years						
BSWN	15	2,200	6.8 (3.8-11.2)	40	10,060	4.0 (2.8-5.4)
BSCM	8	1,217	6.6 (2.8-13.0)	16	4,392	3.6 (2.1-5.9)
BSAL	9	932	9.7 (4.4-18.3)	25	6,454	3.9 (2.5-5.7)
BSM	11	967	11.4 (5.7-20.4)	25	8,306	3.0 (1.9-4.4)
BSCtoC	8	1,179	6.8 (2.9-13.4)	43	9,113	4.7 (3.4-6.4)
BSC	3	871	3.4 (0.7-10.1)	33	8,138	4.1 (2.8-5.7)
BSSL	6	1,111	5.4 (2.0-11.8)	50	15,770	3.2 (2.4-4.2)
BSHC	4	880	4.5 (1.2-11.6)	25	5,926	4.2 (2.7-6.2)
BSA Total	64	9,357	6.8 (5.3-8.7)	257	68,159	3.8 (3.3-4.3)

Poisson 95% Confidence Intervals presented

Table 3a.2b: Invasive cancers for initial and subsequent screens, women 45-69 years, 2 years

	Initial					Subsequent				
	Number	Women screened	Rate per 1,000 (95%CI)			Number	Women screened	Rate per 1,000 (95%CI)		
45-49 years										
BSWN	41	11,994	3.4 (2.5-4.6)			3	1,710	1.8 (0.4-5.1)		
BSCM	20	6,934	2.9 (1.8-4.5)			2	314	6.4 (0.8-23.0)		
BSAL	26	5,027	5.2 (3.4-7.6)			1	981	1.0 (0.0-5.7)		
BSM	29	6,649	4.4 (2.9-6.3)			7	3,147	2.2 (0.9-4.6)		
BSCtoC	17	6,879	2.5 (1.4-4.0)			5	2,729	1.8 (0.6-4.3)		
BSC	16	5,639	2.8 (1.6-4.6)			10	2,364	4.2 (2.0-7.8)		
BSSL	32	15,296	2.1 (1.4-3.0)			8	6,212	1.3 (0.6-2.5)		
BSHC	12	4,241	2.8 (1.5-4.9)			6	1,980	3.0 (1.1-6.6)		
BSA Total	193	62,659	3.1 (2.7-3.5)			42	19,437	2.2 (1.6-2.9)		
50-69 years										
BSWN	68	9,453	7.2 (5.6-9.1)	✓	ns	133	32,823	4.1 (3.4-4.8)	✓	ns
BSCM	33	5,070	6.5 (4.5-9.1)	✓	ns	68	17,153	4.0 (3.1-5.0)	✓	ns
BSAL	25	3,722	6.7 (4.3-9.9)	✓	ns	50	15,082	3.3 (2.5-4.4)	✓	ns
BSM	32	4,506	7.1 (4.9-10.0)	✓	ns	159	34,881	4.6 (3.9-5.3)	✓✓✓	*
BSCtoC	32	4,909	6.5 (4.5-9.2)	✓	ns	144	32,056	4.5 (3.8-5.3)	✓✓✓	*
BSC	20	3,924	5.1 (3.1-7.9)	✓	ns	105	26,162	4.0 (3.3-4.9)	✓	ns
BSSL	46	5,012	9.2 (6.7-12.2)	✓✓✓	*	225	58,950	3.8 (3.3-4.3)	✓	ns
BSHC	13	2,527	5.1 (2.7-8.8)	✓	ns	72	20,250	3.6 (2.8-4.5)	✓	ns
BSA Total	269	39,123	6.9 (6.1-7.7)	✓	ns	956	237,357	4.0 (3.8-4.3)	✓✓✓	*

Poisson 95% Confidence Intervals presented
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

3.a Summary of referral to assessment, specificity, false positives and detection rate of DCIS and invasive cancer

Table 3.a: Summary of referral to assessment, specificity, false positives and detection rate of DCIS and invasive cancer, women 50-69 years

	Referral to assessment as % of women screened	Estimated specificity	Positive Predictive Value	DCIS and invasive cancer detection rate per 1,000 women screened
6 months				
Initial round				
BSWN	10.9 (9.6-12.4)	90.3 (89.0-91.5)	9.6 (6.2-14.0)	10.5 (6.6-15.7)
BSCM	10.1 (8.4-12.1)	91.3 (89.6-92.9)	11.4 (6.4-18.4)	11.5 (6.3-19.3)
BSAL	9.4 (7.6-11.6)	92.0 (90.1-93.7)	14.8 (8.1-23.9)	13.9 (7.4-23.9)
BSM	9.8 (7.9-12.0)	91.4 (89.4-93.1)	13.7 (7.5-22.3)	13.4 (7.2-23.0)
BSCtoC	7.4 (5.9-9.1)	94.2 (92.7-95.5)	12.6 (6.5-21.5)	9.3 (4.7-16.7)
BSC	10.3 (8.3-12.7)	90.3 (88.1-92.2)	5.6 (1.8-12.5)	5.7 (1.9-13.4)
BSSL	5.6 (4.3-7.2)	95.1 (93.7-96.3)	11.3 (4.7-21.9)	6.3 (2.5-13.0)
BSHC	11.5 (9.3-13.9)	89.4 (87.2-91.4)	5.0 (1.6-11.2)	5.7 (1.8-13.3)
BSA Total	9.5 (8.9-10.1)	91.7 (91.1-92.3)	10.3 (8.4-12.5)	9.7 (7.8-11.9)
Subsequent round				
BSWN	3.2 (2.9-3.6)	97.4 (97.0-97.7)	17.6 (13.6-22.3)	5.7 (4.3-7.3)
BSCM	3.1 (2.6-3.6)	97.5 (97.0-97.9)	17.2 (11.2-24.6)	5.2 (3.3-7.9)
BSAL	3.0 (2.6-3.4)	97.6 (97.2-98.0)	19.2 (13.9-25.4)	5.7 (4.0-7.9)
BSM	3.7 (3.3-4.1)	96.9 (96.6-97.3)	15.6 (11.7-20.1)	5.8 (4.3-7.7)
BSCtoC	1.8 (1.6-2.1)	98.8 (98.5-99.0)	30.4 (23.5-37.9)	5.6 (4.2-7.4)
BSC	3.4 (3.0-3.8)	97.3 (97.0-97.7)	18.6 (14.2-23.7)	6.3 (4.7-8.2)
BSSL	2.6 (2.3-2.8)	97.8 (97.6-98.1)	17.0 (13.4-21.0)	4.4 (3.4-5.5)
BSHC	2.5 (2.1-2.9)	98.1 (97.7-98.4)	21.9 (15.5-29.5)	5.4 (3.7-7.6)
BSA Total	2.9 (2.7-3.0)	97.7 (97.6-97.8)	18.8 (17.1-20.6)	5.4 (4.9-6.0)
2 years				
Initial round				
BSWN	9.6 (9.0-10.3)	91.8 (91.3-92.4)	10.0 (8.1-12.1)	9.6 (7.8-11.8)
BSCM	9.6 (8.8-10.5)	91.8 (91.0-92.5)	10.7 (8.1-13.7)	10.3 (7.7-13.4)
BSAL	8.5 (7.6-9.5)	93.4 (92.6-94.2)	12.4 (9.0-16.5)	10.5 (7.5-14.3)
BSM	9.4 (8.6-10.4)	91.4 (90.6-92.2)	8.9 (6.4-12.1)	8.4 (6.0-11.6)
BSCtoC	7.9 (7.1-8.7)	93.5 (92.8-94.2)	11.1 (8.2-14.7)	8.8 (6.3-11.8)
BSC	8.9 (8.0-9.9)	92.2 (91.4-93.0)	8.5 (5.8-12.0)	7.6 (5.2-10.9)
BSSL	6.9 (6.2-7.7)	94.5 (93.8-95.1)	16.5 (12.7-20.8)	11.4 (8.6-14.7)
BSHC	11.6 (10.3-13.0)	89.4 (88.2-90.6)	5.1 (2.9-8.3)	5.9 (3.3-9.8)
BSA Total	9.0 (8.7-9.3)	92.4 (92.1-92.6)	10.4 (9.4-11.4)	9.3 (8.4-10.3)
Subsequent round				
BSWN	3.4 (3.2-3.6)	97.4 (97.2-97.6)	17.1 (14.9-19.4)	5.8 (5.0-6.6)
BSCM	3.1 (2.8-3.3)	97.6 (97.3-97.8)	17.9 (14.7-21.5)	5.5 (4.4-6.7)
BSAL	3.1 (2.8-3.4)	97.8 (97.5-98.0)	17.9 (14.5-21.7)	5.5 (4.4-6.8)
BSM	3.6 (3.4-3.8)	97.1 (96.9-97.2)	17.0 (14.9-19.2)	6.0 (5.3-6.9)
BSCtoC	2.1 (1.9-2.2)	98.6 (98.4-98.7)	26.2 (22.9-29.8)	5.5 (4.7-6.3)
BSC	3.4 (3.2-3.6)	97.4 (97.2-97.6)	17.3 (14.9-20.0)	5.8 (5.0-6.9)
BSSL	2.6 (2.5-2.7)	98.0 (97.9-98.1)	19.7 (17.8-21.8)	5.1 (4.6-5.8)
BSHC	2.9 (2.6-3.1)	97.7 (97.5-97.9)	16.4 (13.5-19.6)	4.7 (3.8-5.7)
BSA Total	2.9 (2.9-3.0)	97.7 (97.7-97.8)	18.6 (17.7-19.5)	5.5 (5.2-5.8)

3.b. Detection of invasive cancers ≤ 10 mm

Description:

Proportion and rate of invasive breast cancer of diameter ≤ 10 mm.

Target:

Initial (Prevalent) round: ≥ 25%, which gives a rate of ≥ 15.2 per 10,000 screens

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

Table 3b.1: Proportion of invasive cancers less than or equal to 10 mm, 2 years, women aged 50-69 years

	Initial					Subsequent				
	Invasive cancers ≤10 mm	Total invasive cancers	% (95%CI)			Invasive cancers ≤10 mm	Total invasive cancers	% (95%CI)		
BSWN	16	68	23.5 (14.1-35.4)	✓	ns	59	133	44.4 (35.8-53.2)	✓✓✓	*
BSCM	9	33	27.3 (13.3-45.5)	✓	ns	24	68	35.3 (24.1-47.8)	✓	ns
BSAL	12	25	48.0 (27.8-68.7)	✓✓✓	*	20	50	40.0 (26.4-54.8)	✓	ns
BSM	4	32	12.5 (3.5-29.0)	✓	ns	73	159	45.9 (38.0-54.0)	✓✓✓	*
BSCtoC	5	32	15.6 (5.3-32.8)	✓	ns	46	144	31.9 (24.4-40.2)	✓	ns
BSC	4	20	20.0 (5.7-43.7)	✓	ns	47	105	44.8 (35.0-54.8)	✓✓✓	*
BSSL	18	46	39.1 (25.1-54.6)	✓✓✓	*	87	226	38.5 (32.1-45.2)	✓✓✓	*
BSHC	4	13	30.8 (9.1-61.4)	✓	ns	32	72	44.4 (32.7-56.6)	✓✓✓	*
BSA Total	72	269	26.8 (21.6-32.5)	✓	ns	388	957	40.5 (37.4-43.7)	✓✓✓	*

Exact Binomial 95% Confidence Intervals presented

* Statistically different from target value, ns Not significant

✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from target

✓✓ Difference of 5-9% magnitude better than target value and statistically significant

✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant

xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant

xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Table 3b.2: Invasive cancers, less than or equal to 10 mm per 10,000 screens, 2 years, women aged 50-69 years

	Initial					Subsequent				
	Invasive cancers ≤10 mm	Women screened	Rate per 10,000 (95%CI)			Invasive cancers ≤10 mm	Women screened	Rate per 10,000 (95%CI)		
BSWN	16	9,453	16.9 (9.7-27.5)	✓	ns	59	32,823	18.0 (13.7-23.2)	✓✓✓	*
BSCM	9	5,070	17.8 (8.1-33.7)	✓	ns	24	17,153	14.0 (9.0-20.8)	✓	ns
BSAL	12	3,722	32.2 (16.7-56.3)	✓✓✓	*	20	15,082	13.3 (8.1-20.5)	✓	ns
BSM	4	4,506	8.9 (2.4-22.7)	✓	ns	73	34,881	20.9 (16.4-26.3)	✓✓✓	*
BSCtoC	5	4,909	10.2 (3.3-23.8)	✓	ns	46	32,056	14.3 (10.5-19.1)	✓✓✓	*
BSC	4	3,924	10.2 (2.8-26.1)	✓	ns	47	26,162	18.0 (13.2-23.9)	✓✓✓	*
BSSL	18	5,012	35.9 (21.3-56.8)	✓✓✓	*	87	58,950	14.8 (11.8-18.2)	✓✓✓	*
BSHC	4	2,527	15.8 (4.3-40.5)	✓	ns	32	20,250	15.8 (10.8-22.3)	✓✓✓	*
BSA Total	72	39,123	18.4 (14.4-23.2)	✓	ns	388	237,357	16.3 (14.8-18.1)	✓✓✓	*

Poisson 95% Confidence Intervals presented

* Statistically different from target value, ns Not significant

✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from target

✓✓ Difference of 5-9% magnitude better than target value and statistically significant

✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant

xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant

xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

3.c. Detection of invasive cancers <15 mm

Description:

Proportion and rate of invasive breast cancer of diameter <15 mm

Target:

Initial (Prevalent) round: >50%, which gives a rate of >30.5 per 10,000 screens

Subsequent (Incident) round: >50%, which gives a rate of >17.3 per 10,000 screens

3.c.1. Proportion of invasive cancers <15 mm, women aged 50-69 years

Table 3c.1: Proportion of invasive cancers <15 mm, 2 years, women aged 50-69 years

	Initial					Subsequent				
	Invasive cancers <15 mm	Total invasive cancers	% (95%CI)			Invasive cancers <15 mm	Total invasive cancers	% (95%CI)		
BSWN	28	68	41.2 (29.4-53.8)	✓	ns	82	133	61.7 (52.8-69.9)	✓✓✓	*
BSCM	12	33	36.4 (20.4-54.9)	✓	ns	36	68	52.9 (40.4-65.2)	✓	ns
BSAL	15	25	60.0 (38.7-78.9)	✓	ns	30	50	60.0 (45.2-73.6)	✓	ns
BSM	7	32	21.9 (9.3-40.0)	✗✗✗	*	97	159	61.0 (53.0-68.6)	✓✓✓	*
BSCtoC	9	32	28.1 (13.7-46.7)	✗✗✗	*	84	144	58.3 (49.8-66.5)	✓	ns
BSC	7	20	35.0 (15.4-59.2)	✓	ns	70	105	66.7 (56.8-75.6)	✓✓✓	*
BSSL	29	46	63.0 (47.5-76.8)	✓	ns	144	226	63.7 (57.1-70.0)	✓✓✓	*
BSHC	5	13	38.5 (13.9-68.4)	✓	ns	40	72	55.6 (43.4-67.3)	✓	ns
BSA Total	112	269	41.6 (35.7-47.8)	✗✗✗	*	583	957	60.9 (57.7-64.0)	✓✓✓	*

Exact Binomial 95% Confidence Intervals presented

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xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant

xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Table 3c.2: Invasive cancers, <15 mm, per 10,000 screens, 2 years, women aged 50-69 years

	Initial					Subsequent				
	Invasive cancers <15 mm	Women screened	Rate per 10,000 (95%CI)			Invasive cancers <15 mm	Women screened	Rate per 10,000 (95%CI)		
BSWN	28	9,453	29.6 (19.7-42.8)	✓	ns	82	32,823	25.0 (19.9-31.0)	✓✓✓	*
BSCM	12	5,070	23.7 (12.2-41.3)	✓	ns	36	17,153	21.0 (14.7-29.1)	✓	ns
BSAL	15	3,722	40.3 (22.6-66.5)	✓	ns	30	15,082	19.9 (13.4-28.4)	✓	ns
BSM	7	4,506	15.5 (6.2-32.0)	✓	ns	97	34,881	27.8 (22.6-33.9)	✓✓✓	*
BSCtoC	9	4,909	18.3 (8.4-34.8)	✓	ns	84	32,056	26.2 (20.9-32.4)	✓✓✓	*
BSC	7	3,924	17.8 (7.2-36.8)	✓	ns	70	26,162	26.8 (20.9-33.8)	✓✓✓	*
BSSL	29	5,012	57.9 (38.8-83.1)	✓✓✓	*	144	58,950	24.4 (20.6-28.8)	✓✓✓	*
BSHC	5	2,527	19.8 (6.4-46.2)	✓	ns	40	20,250	19.8 (14.1-26.9)	✓	ns
BSA Total	112	39,123	28.6 (23.6-34.4)	✓	ns	583	237,357	24.6 (22.6-26.6)	✓✓✓	*

Poisson 95% Confidence Intervals presented

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xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant

xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 3c.1: Proportion invasive cancers <15mm, initial screens, 2 years
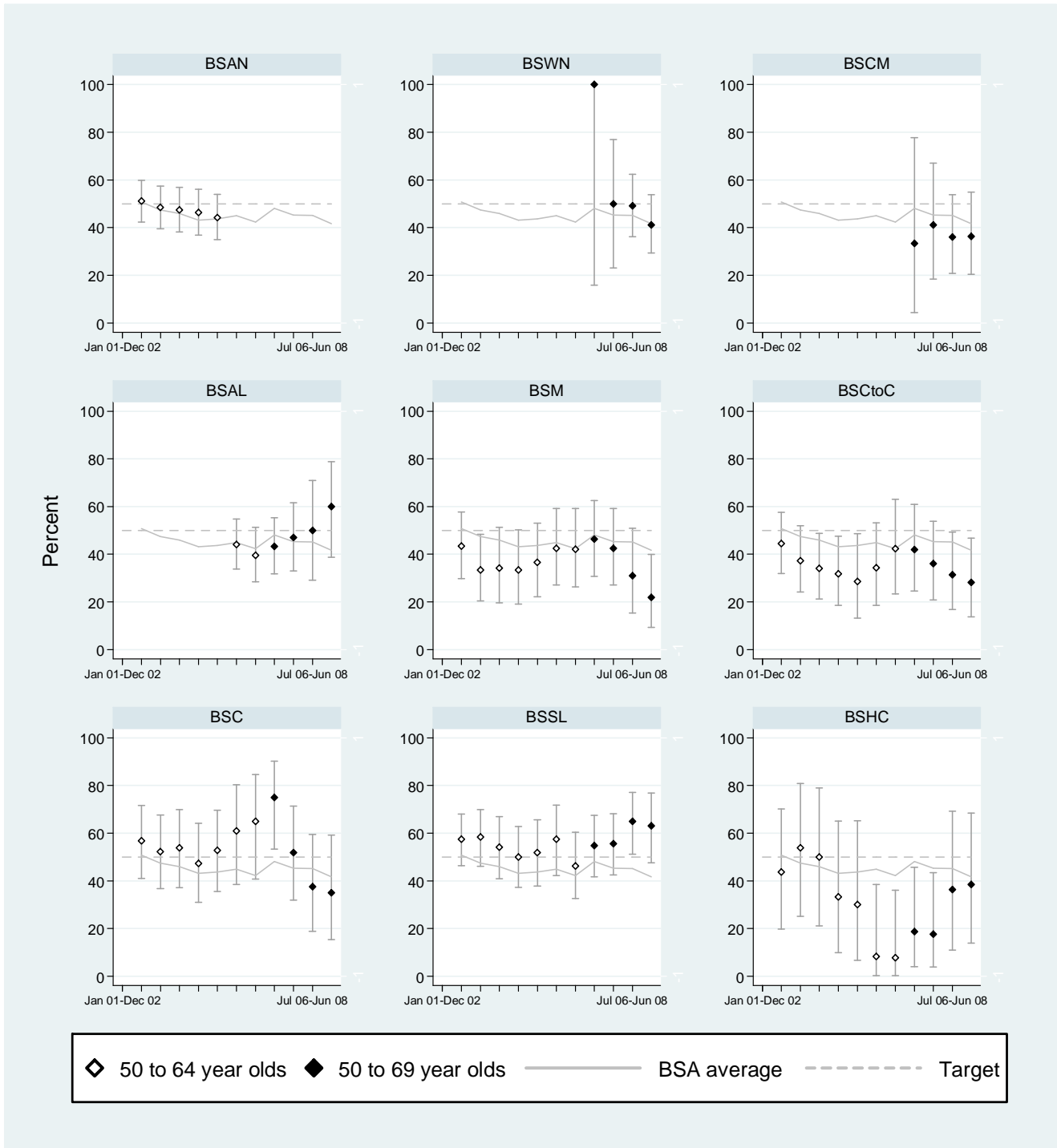
Figure 3c.1: Proportion invasive cancers <15mm, subsequent screens, 2 years
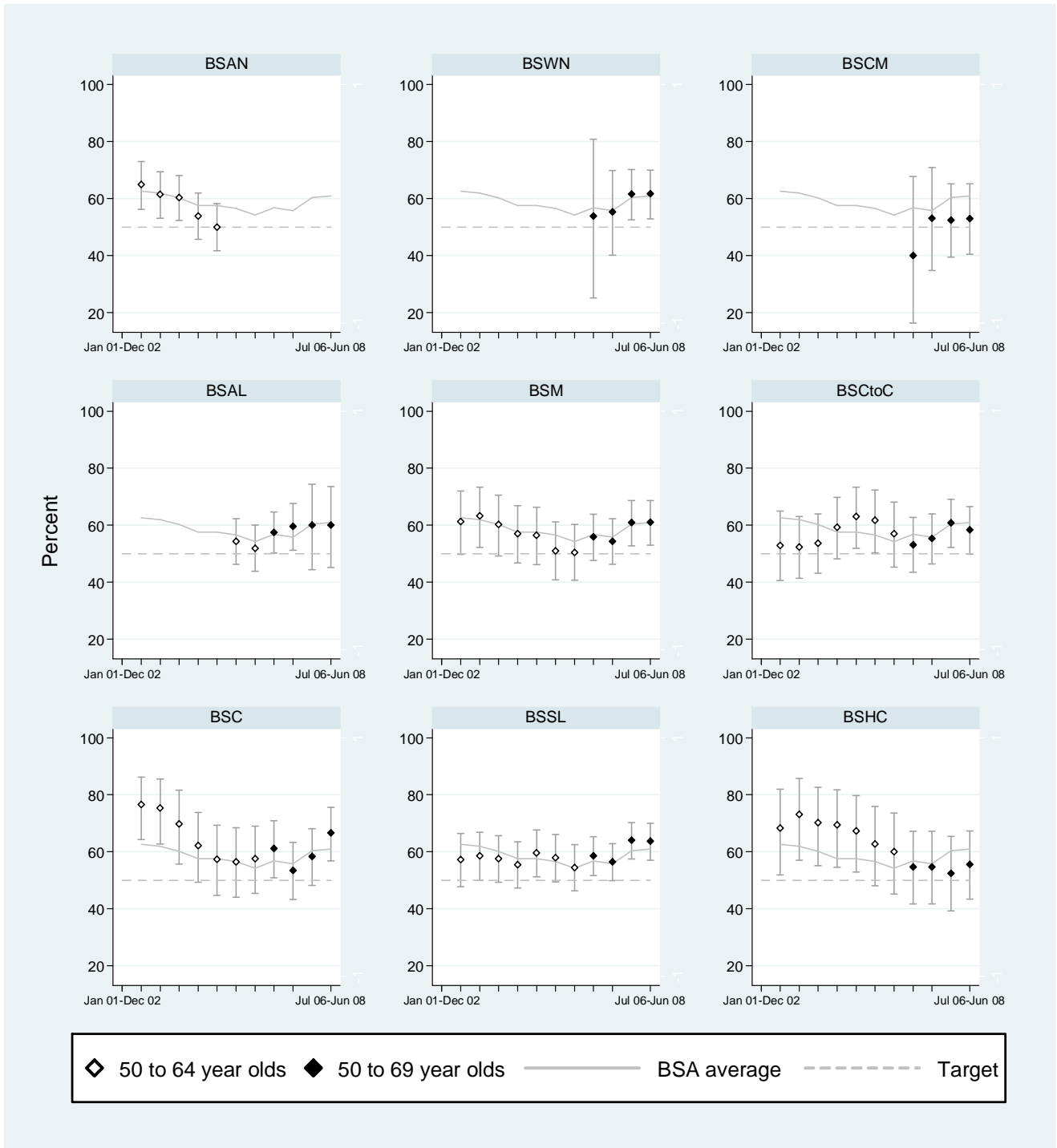
Figure 3c.2: Invasive cancers <15mm per 10,000 women screened, initial screens, 2 years
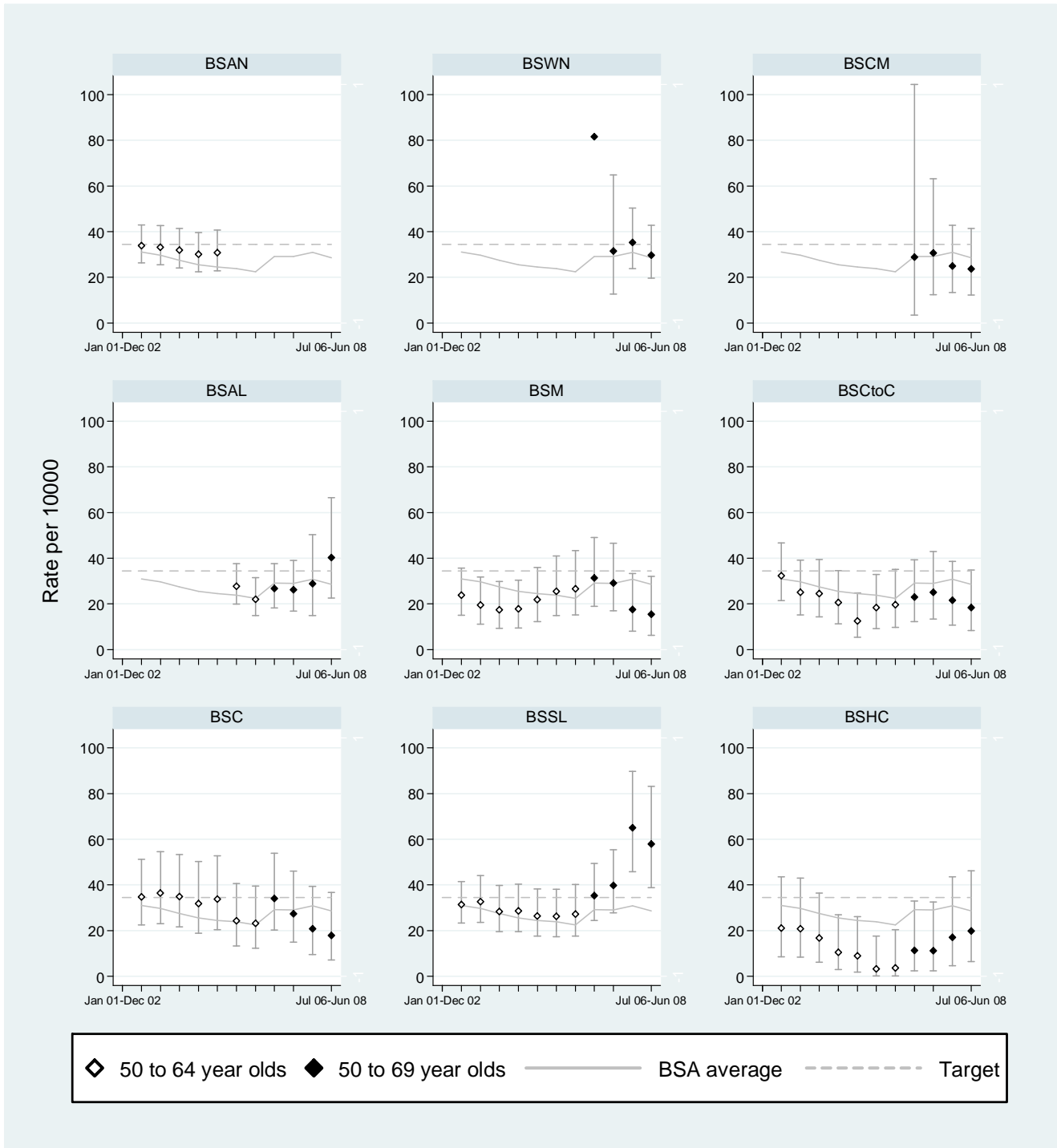
Note: 95%CI for BSWN estimate for Jan 05-Dec 06 is not shown to retain scale of 100 per 10,000 screened. Invasive cancer detection rate <15mm per 10,000 screens for BSWN is 81.6 (95%CI 9.9- 294.9).

Figure 3c.2: Invasive cancers <15mm per 10,000 women screened, subsequent screens, 2 years
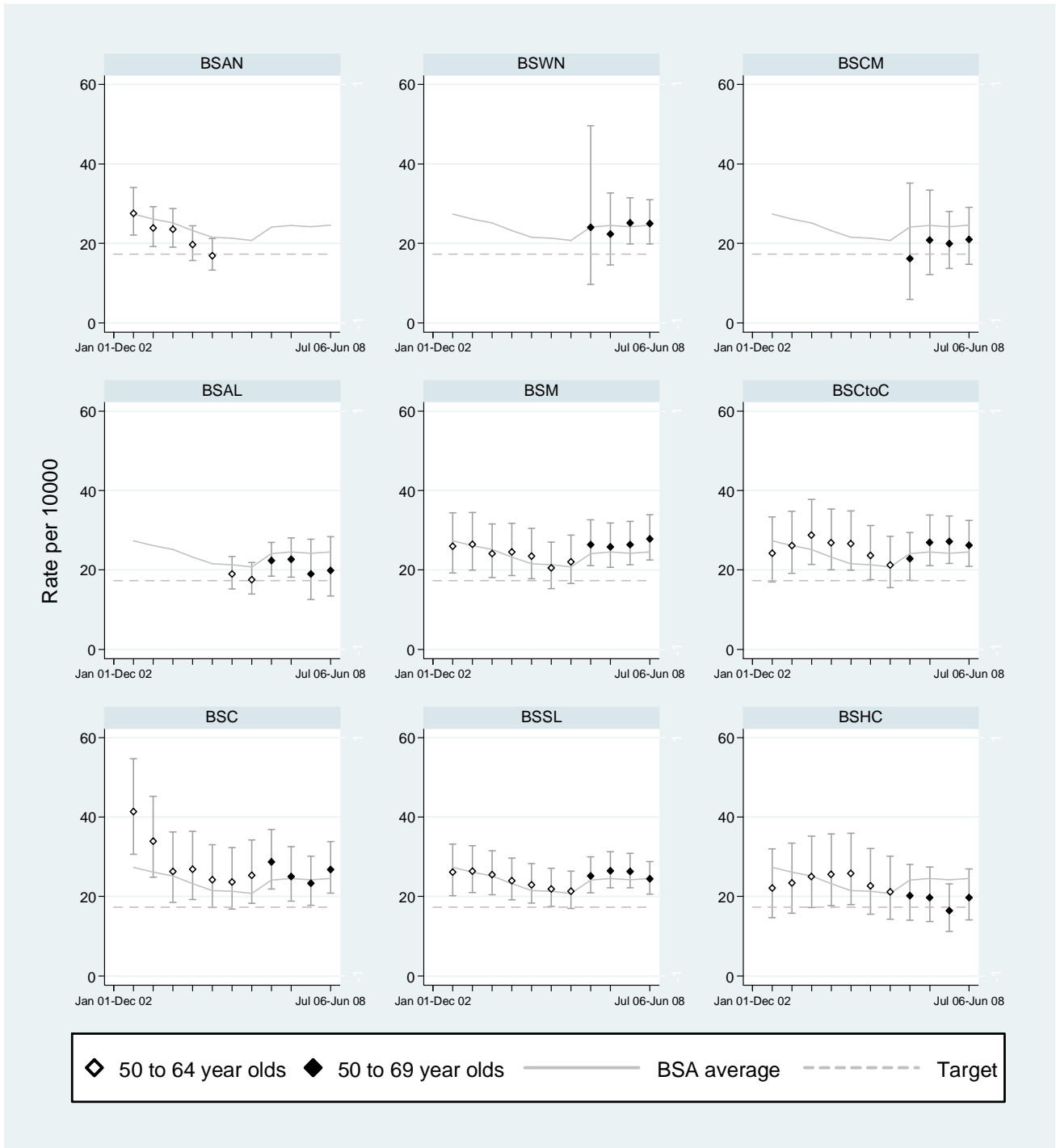
3.d. Nodal involvement

Description:

The proportion of women with invasive screen detected breast cancer who do not have nodal involvement.

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

Target:

Initial (Prevalent) round: >70%

Subsequent (Incident) round: >75%

3.d. Proportion of node negative invasive cancers women aged 50-69 years

Table 3d: Proportion of node negative invasive cancers, women aged 50-69 years, 2 years

	Initial					Subsequent				
	Invasive cancers, node negative	Total invasive cancers	% (95%CI)			Invasive cancers, node negative	Total invasive cancers	% (95%CI)		
BSWN	58	68	85.3 (74.6-92.7)	✓✓✓	*	115	133	86.5 (79.5-91.8)	✓✓✓	*
BSCM	26	33	78.8 (61.1-91.0)	✓	ns	56	68	82.4 (71.2-90.5)	✓	ns
BSAL	19	25	76.0 (54.9-90.6)	✓	ns	42	50	84.0 (70.9-92.8)	✓	ns
BSM	20	32	62.5 (43.7-78.9)	✓	ns	125	159	78.6 (71.4-84.7)	✓	ns
BSCtoC	18	32	56.3 (37.7-73.6)	✓	ns	110	144	76.4 (68.6-83.1)	✓	ns
BSC	15	20	75.0 (50.9-91.3)	✓	ns	85	105	81.0 (72.1-88.0)	✓	ns
BSSL	35	46	76.1 (61.2-87.4)	✓	ns	176	226	77.9 (71.9-83.1)	✓	ns
BSHC	9	13	69.2 (38.6-90.9)	✓	ns	55	72	76.4 (64.9-85.6)	✓	ns
BSA Total	200	269	74.3 (68.7-79.5)	✓	ns	764	957	79.8 (77.1-82.3)	✓✓	*

Exact Binomial 95% Confidence Intervals presented

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xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant

xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

3.e. DCIS diagnosis

Description:

The percentage of all women with screen detected cancer, who are diagnosed as having ductal carcinoma *in situ* (DCIS) as their primary lesion.

Target:

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

3.e. DCIS, women aged 50-69 years

Table 3e: Women with DCIS as a percentage of all screen detected cancers, 2 years

	DCIS	Total cancers	% (95%CI)
BSWN	60	261	23.0 (18.0-28.6)
BSCM	36	137	26.3 (19.1-34.5)
BSAL	30	105	28.6 (20.2-38.2)
BSM	50	241	20.7 (15.8-26.4)
BSCtoC	40	216	18.5 (13.6-24.4)
BSC	43	168	25.6 (19.2-32.9)
BSSL	79	351	22.5 (18.2-27.2)
BSHC	19	104	18.3 (11.4-27.1)
BSA Total	357	1,583	22.6 (20.5-24.7)

Note: The number of invasive cancers noted in Staging and Grading and Treatment indicator tables may differ from earlier tables in the screening and assessment section. Only completed treatment data is included in the Staging and Grading / Treatment section of this report. Some data maybe incomplete at report date, or some woman diagnosed with cancer may decline treatment and therefore will not be included in staging and grading data.

Exact Binomial 95% Confidence Intervals presented

Figure 3e: Women with DCIS as a percentage of all screen detected cancers, 2 years

| ◇ 50 to 64 year olds | ◆ 50 to 69 year olds | ——— BSA average | - - - - - Target |
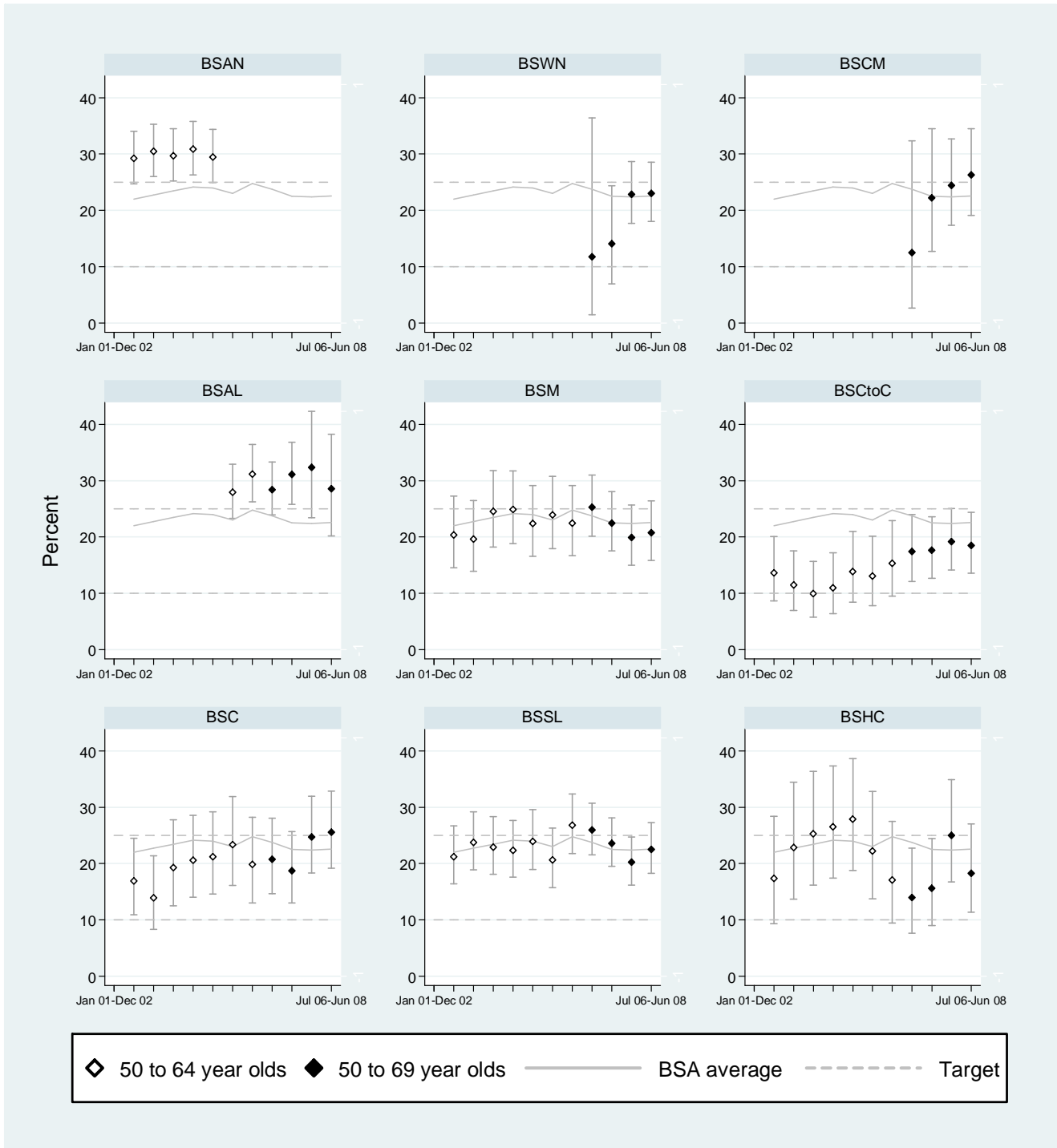
5. PROVISION OF AN APPROPRIATE AND ACCEPTABLE SERVICE

5.a. Time taken for provision of screening results

Description:
The time since screening that it takes for a woman to be sent the results of her mammogram.
Target:
≥ 90% notified within 10 working days (expected).
≥ 95% notified within 10 working days (desirable).

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

	6 months					2 years				
	Women notified within 10 working days	Women screened	% (95%CI)			Women notified within 10 working days	Women screened	% (95%CI)		
45-49 years										
BSWN	3,595	3,770	95.4 (94.6-96.0)			12,421	13,704	90.6 (90.1-91.1)		
BSCM	1,445	1,503	96.1 (95.0-97.1)			6,824	7,248	94.2 (93.6-94.7)		
BSAL	1,730	1,871	92.5 (91.2-93.6)			5,493	6,008	91.4 (90.7-92.1)		
BSM	2,154	2,261	95.3 (94.3-96.1)			9,312	9,796	95.1 (94.6-95.5)		
BSCtoC	2,704	2,711	99.7 (99.5-99.9)			9,540	9,608	99.3 (99.1-99.5)		
BSC	2,182	2,276	95.9 (95.0-96.6)			7,554	8,003	94.4 (93.9-94.9)		
BSSL	6,586	6,664	98.8 (98.5-99.1)			21,173	21,508	98.4 (98.3-98.6)		
BSHC	1,530	1,971	77.6 (75.7-79.4)			5,191	6,221	83.4 (82.5-84.4)		
BSA Total	21,926	23,027	95.2 (94.9-95.5)			77,508	82,096	94.4 (94.3-94.6)		
50-69 years										
BSWN	11,922	12,260	97.2 (96.9-97.5)	✓✓	*	39,579	42,276	93.6 (93.4-93.9)	✓	*
BSCM	5,359	5,609	95.5 (95.0-96.1)	✓✓	*	21,102	22,223	95.0 (94.7-95.2)	✓✓	*
BSAL	6,955	7,386	94.2 (93.6-94.7)	✓	*	17,818	18,804	94.8 (94.4-95.1)	✓✓	*
BSM	8,953	9,273	96.5 (96.2-96.9)	✓✓	*	37,929	39,387	96.3 (96.1-96.5)	✓✓	*
BSCtoC	10,275	10,292	99.8 (99.7-99.9)	✓✓✓	*	36,774	36,965	99.5 (99.4-99.6)	✓✓✓	*
BSC	8,777	9,009	97.4 (97.1-97.7)	✓✓	*	28,743	30,086	95.5 (95.3-95.8)	✓✓	*
BSSL	16,764	16,881	99.3 (99.2-99.4)	✓✓✓	*	63,406	63,962	99.1 (99.1-99.2)	✓✓✓	*
BSHC	5,744	6,806	84.4 (83.5-85.3)	✗✗	*	20,509	22,777	90.0 (89.6-90.4)	✓	ns
BSA Total	74,749	77,516	96.4 (96.3-96.6)	✓✓	*	265,860	276,480	96.2 (96.1-96.2)	✓✓	*

Exact Binomial 95% Confidence Intervals presented
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✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 5a: Percentage of women notified of screening results within 10 working days, 6 months
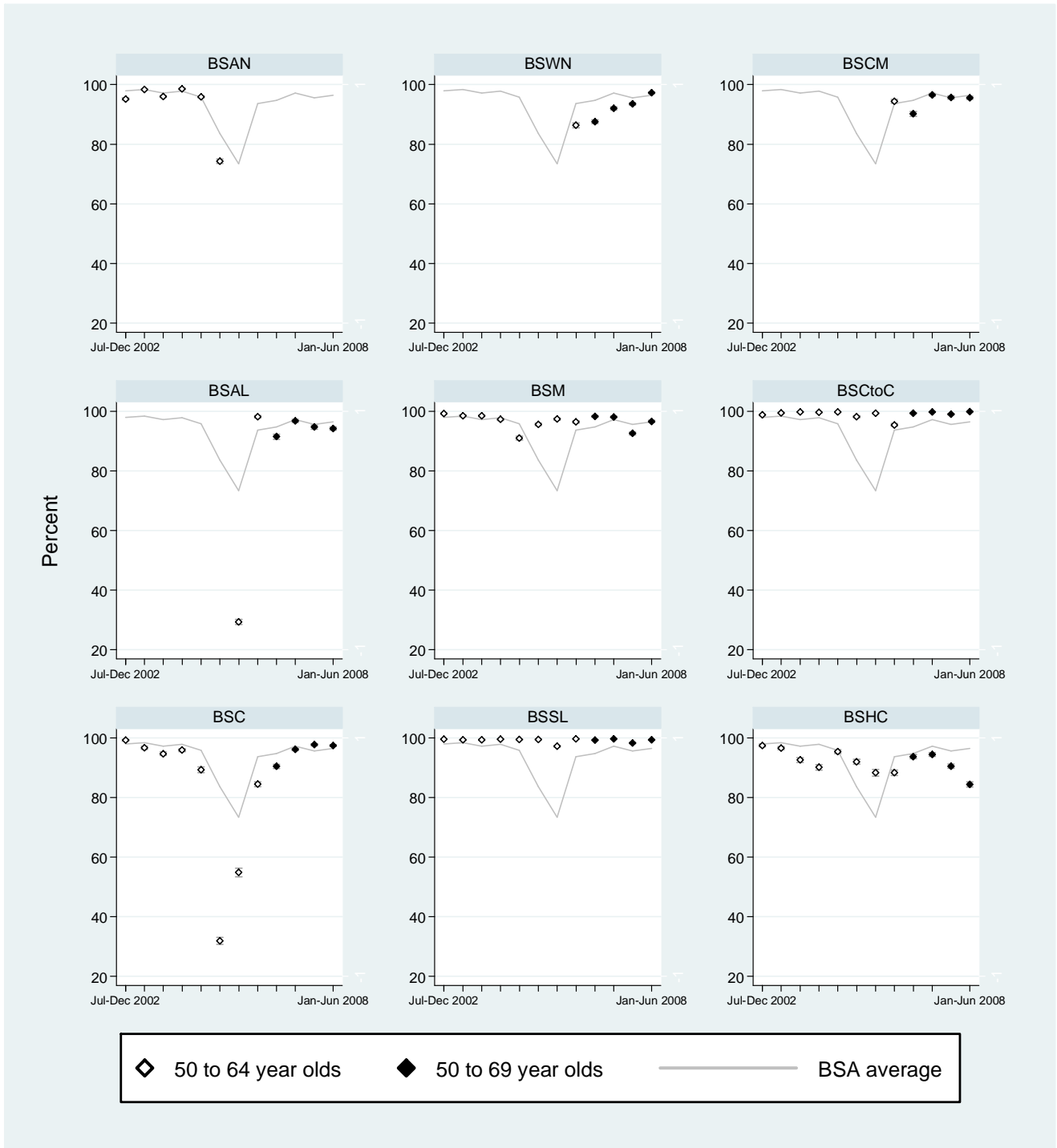
Figure 5a: Percentage of women notified of screening results within 10 working days, 2 years
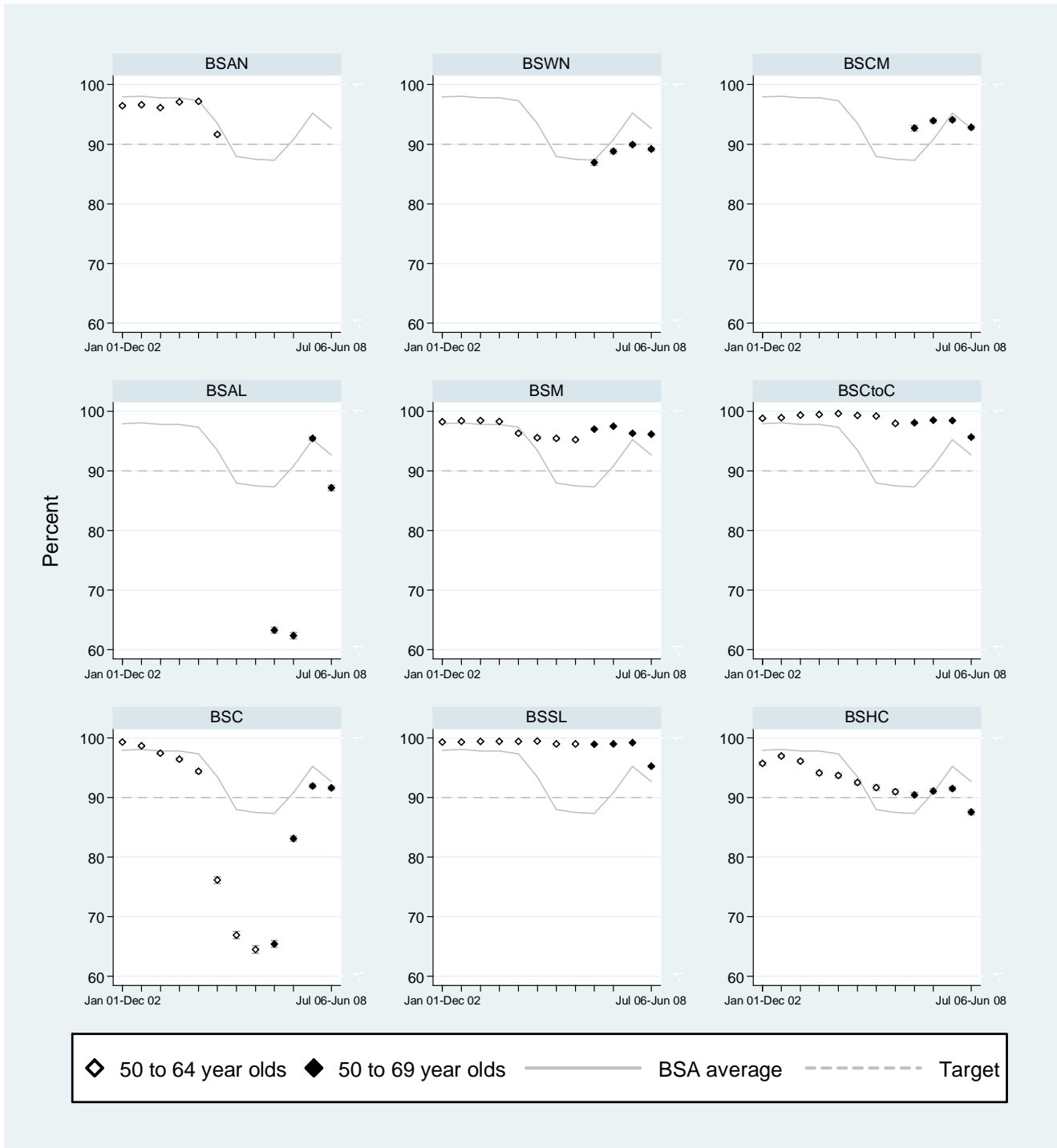
5.b. Time taken from screening visit to first offer of an assessment

Description:

The time between screening and the earliest appointment date the woman is offered for assessment. 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% offered an assessment appointment within 15 working days.

Table 5b: Percentage of women offered first assessment appointment within 15 working days

	6 months					2 years				
	Number offered assessment within 15 working days	Number referred to assessment	% (95%CI)			Number offered assessment within 15 working days	Number referred to assessment	% (95%CI)		
45-49 years										
BSWN	286	306	93.5 (90.1-96.0)			893	1,151	77.6 (75.1-80.0)		
BSCM	130	149	87.2 (80.8-92.1)			551	707	77.9 (74.7-80.9)		
BSAL	99	120	82.5 (74.5-88.8)			331	443	74.7 (70.4-78.7)		
BSM	154	175	88.0 (82.2-92.4)			678	766	88.5 (86.0-90.7)		
BSCtoC	131	141	92.9 (87.3-96.5)			504	561	89.8 (87.0-92.2)		
BSC	143	153	93.5 (88.3-96.8)			531	595	89.2 (86.5-91.6)		
BSSL	332	339	97.9 (95.8-99.2)			1,157	1,198	96.6 (95.4-97.5)		
BSHC	60	210	28.6 (22.6-35.2)			180	568	31.7 (27.9-35.7)		
BSA Total	1,335	1,593	83.8 (81.9-85.6)			4,825	5,989	80.6 (79.5-81.6)		
50-69 years										
BSWN	529	563	94.0 (91.7-95.8)	✓	*	1,532	2,015	76.0 (74.1-77.9)	xxx	*
BSCM	210	257	81.7 (76.4-86.2)	xx	*	726	1,012	71.7 (68.9-74.5)	xxx	*
BSAL	221	281	78.6 (73.4-83.3)	xxx	*	634	778	81.5 (78.6-84.2)	xx	*
BSM	342	403	84.9 (81.0-88.2)	xx	*	1,434	1,669	85.9 (84.2-87.6)	✓	*
BSCtoC	245	255	96.1 (92.9-98.1)	✓✓	*	919	1,053	87.3 (85.1-89.2)	✓	*
BSC	328	364	90.1 (86.6-93.0)	✓	ns	1,091	1,233	88.5 (86.6-90.2)	✓	ns
BSSL	454	469	96.8 (94.8-98.2)	✓✓	*	1,805	1,882	95.9 (94.9-96.8)	✓✓	*
BSHC	68	247	27.5 (22.1-33.6)	xxx	*	370	874	42.3 (39.0-45.7)	xxx	*
BSA Total	2,397	2,839	84.4 (83.0-85.7)	xx	*	8,511	10,516	80.9 (80.2-81.7)	xxx	*

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xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant

xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 5b: Percentage of women offered first assessment appointment within 15 working days, 6 months.
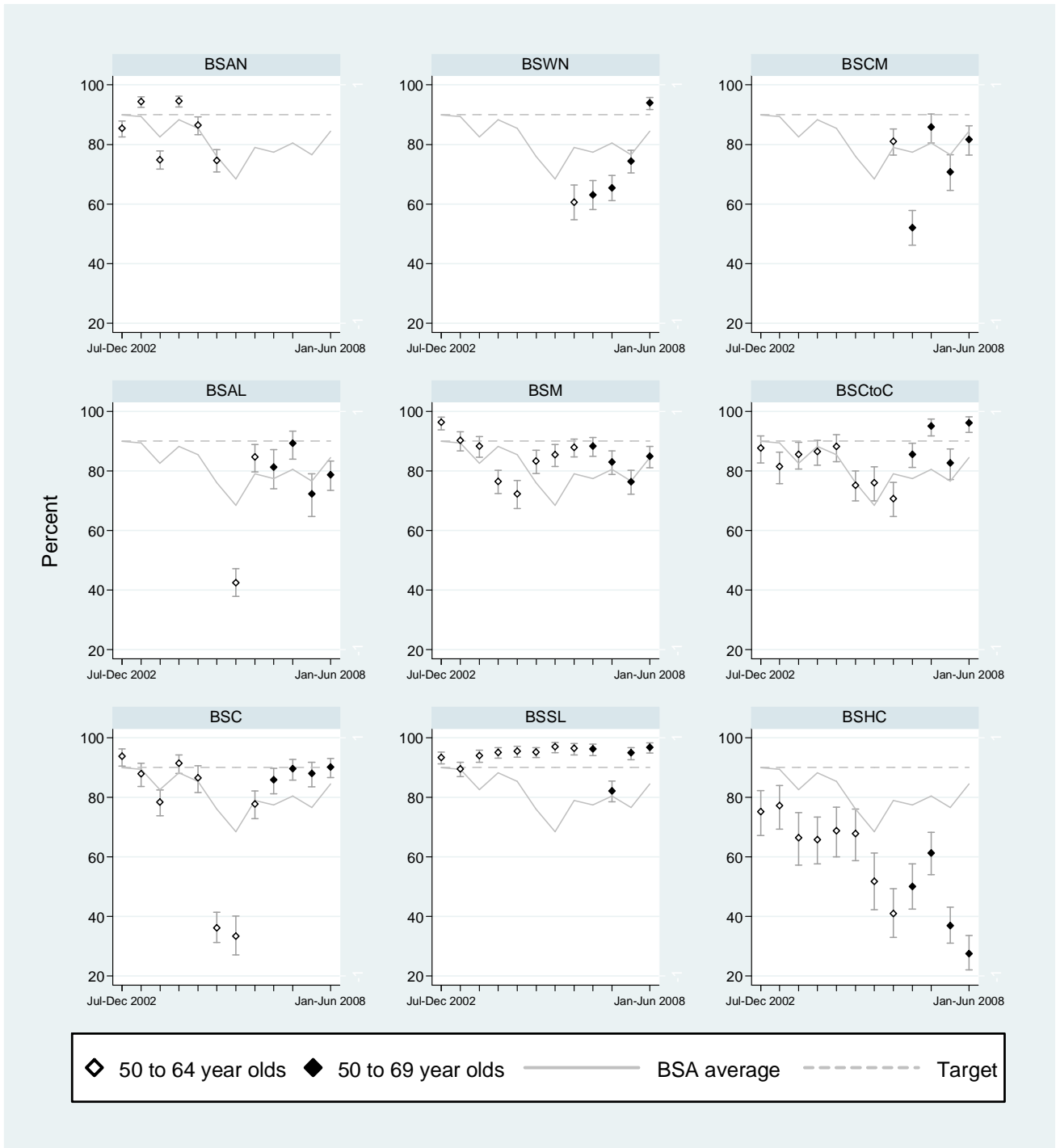
Figure 5b: Percentage of women offered first assessment appointment within 15 working days, 2 years
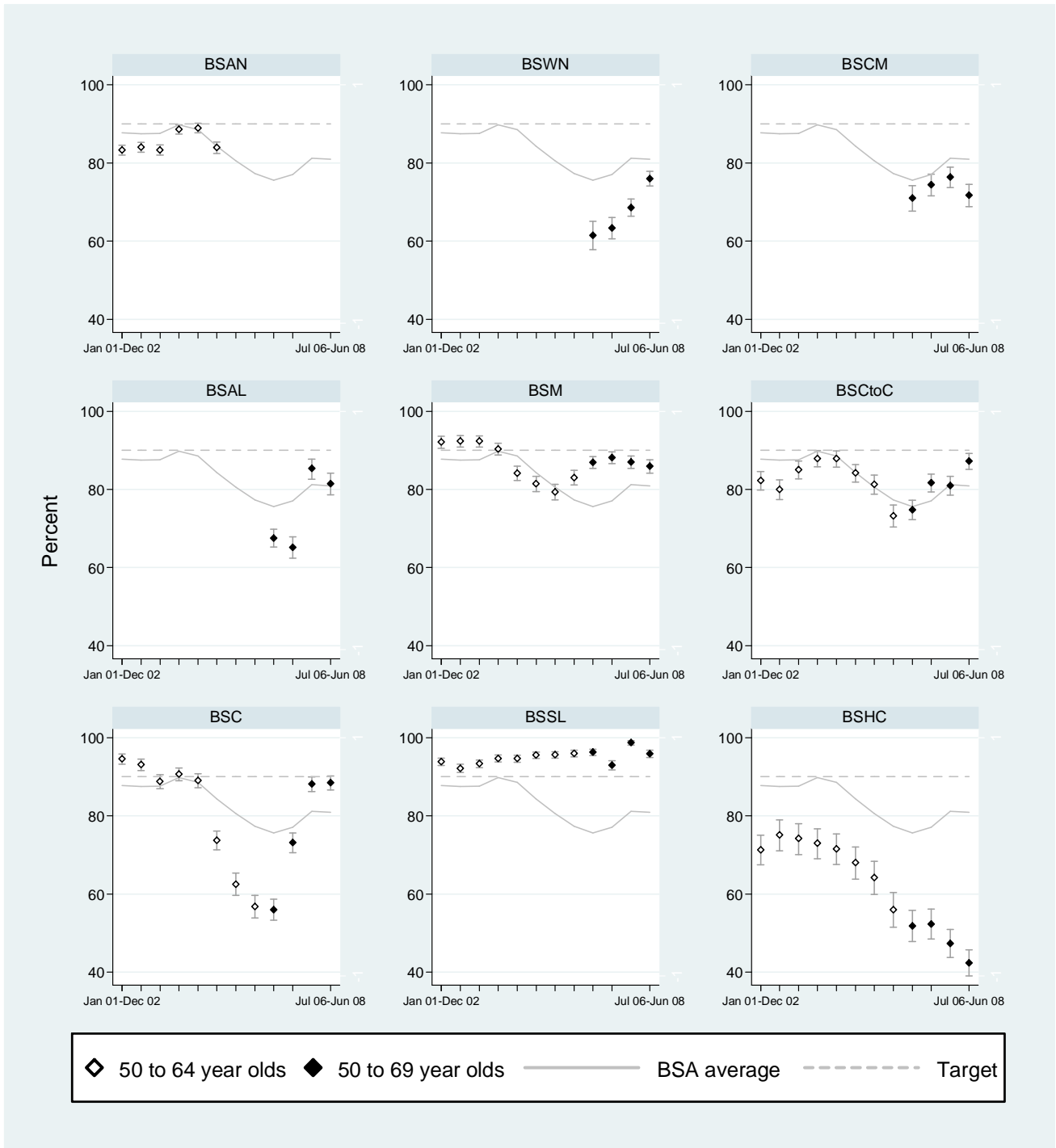
5.c. Time taken from assessment to final diagnostic biopsy

Description:
The time between first level assessment and the final assessment procedure producing a diagnosis.
Target:
At least 90% of women requiring needle biopsy have that procedure completed within five working days of their assessment.
At least 90% of women requiring open biopsy should have this performed within 15 working days of being notified of the need for this operation.

5.c.1. Women receiving Needle Biopsy within 5 working days of assessment

Table 5c.1: Women receiving needle biopsy within 5 working days of assessment

	6 months					2 years				
	Needle biopsies within 5 working days of assessment	Total needle biopsies	% (95%CI)			Needle biopsies within 5 working days of assessment	Total needle biopsies	% (95%CI)		
45-49 years										
BSWN	80	82	97.6 (91.5-99.7)			311	319	97.5 (95.1-98.9)		
BSCM	47	54	87.0 (75.1-94.6)			214	236	90.7 (86.2-94.1)		
BSAL	31	38	81.6 (65.7-92.3)			159	182	87.4 (81.6-91.8)		
BSM	42	52	80.8 (67.5-90.4)			197	233	84.5 (79.3-88.9)		
BSCtoC	44	45	97.8 (88.2-99.9)			176	180	97.8 (94.4-99.4)		
BSC	37	40	92.5 (79.6-98.4)			131	139	94.2 (89.0-97.5)		
BSSL	70	81	86.4 (77.0-93.0)			278	334	83.2 (78.8-87.1)		
BSHC	50	51	98.0 (89.6-100.0)			116	125	92.8 (86.8-96.7)		
BSA Total	401	443	90.5 (87.4-93.1)			1,582	1,748	90.5 (89.0-91.8)		
50-69 years										
BSWN	202	205	98.5 (95.8-99.7)	✓✓	*	694	710	97.7 (96.4-98.7)	✓✓	*
BSCM	95	103	92.2 (85.3-96.6)	✓	ns	350	377	92.8 (89.8-95.2)	✓	ns
BSAL	103	117	88.0 (80.7-93.3)	✓	ns	276	321	86.0 (81.7-89.6)	✓	*
BSM	108	128	84.4 (76.9-90.2)	✓	ns	487	578	84.3 (81.0-87.1)	✗✗	*
BSCtoC	104	109	95.4 (89.6-98.5)	✓	ns	414	425	97.4 (95.4-98.7)	✓✓	*
BSC	91	103	88.3 (80.5-93.8)	✓	ns	312	342	91.2 (87.7-94.0)	✓	ns
BSSL	120	140	85.7 (78.8-91.1)	✓	ns	581	676	85.9 (83.1-88.5)	✓	*
BSHC	64	74	86.5 (76.5-93.3)	✓	ns	202	220	91.8 (87.4-95.1)	✓	ns
BSA Total	887	979	90.6 (88.6-92.4)	✓	ns	3,316	3,649	90.9 (89.9-91.8)	✓	ns

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xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 5c1: Proportion of women having a needle biopsy procedure within 5 working days, 2 years
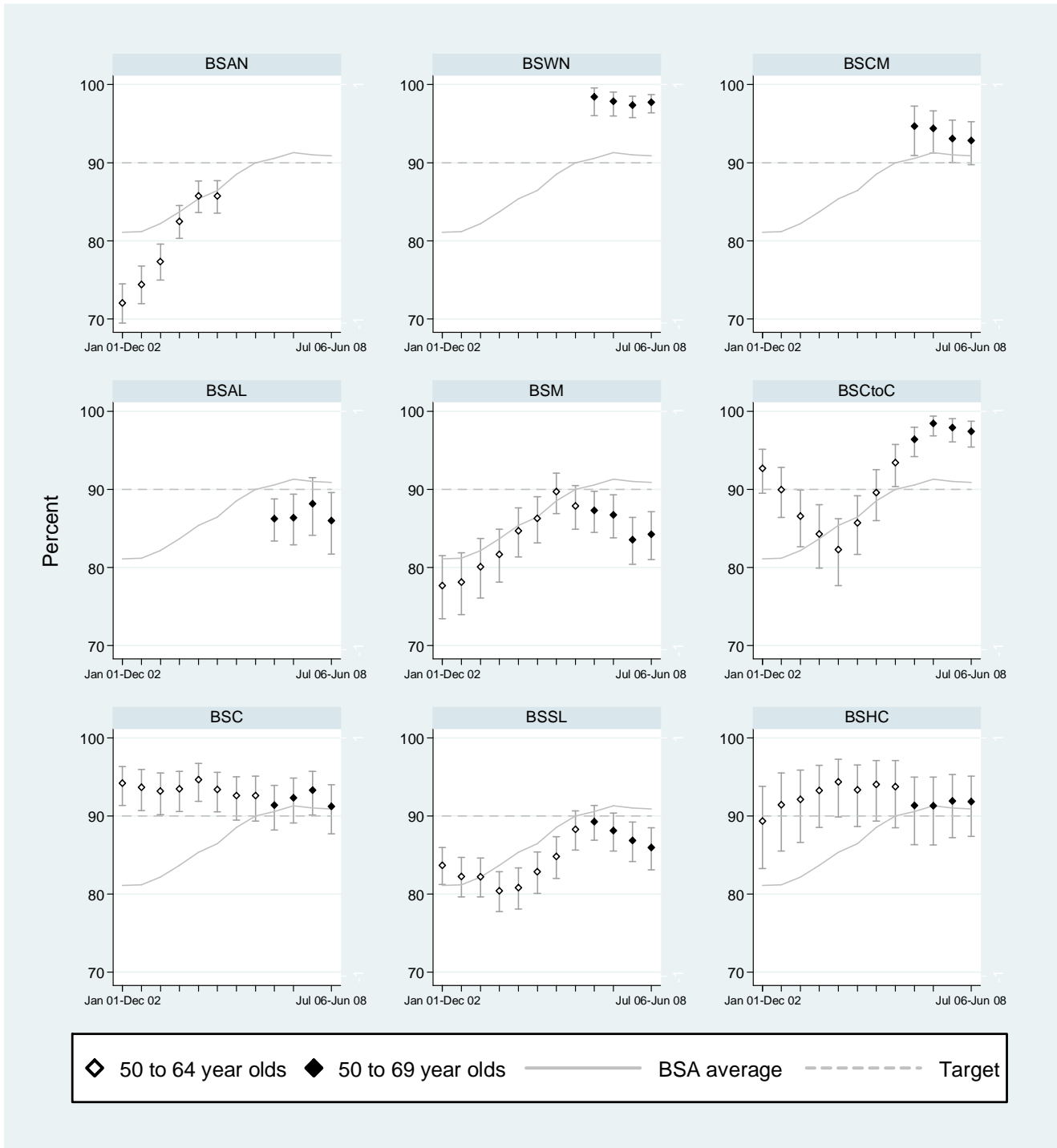
5.c.2. Women having Open Biopsy within 15 working days

At least 90% of women requiring open biopsy should have this performed within 15 working days of being notified of the need for this operation.

Table 5c.2: Proportion of women having an open biopsy procedure within 15 working days

	6 months			2 years				
	Open biopsies within 15 working days of notification	Total open biopsies	% (95%CI)	Open biopsies within 15 working days of notification	Total open biopsies	% (95%CI)		
45-49 years								
BSWN	4	8		13	24	54.2 (32.8-74.4)		
BSCM	1	1		11	11	100.0 (71.5-100.0)		
BSAL	5	6		14	17	82.4 (56.6-96.2)		
BSM	2	6		8	22	36.4 (17.2-59.3)		
BSCtoC	1	2		3	13	23.1 (5.0-53.8)		
BSC	1	3		3	7	42.9 (9.9-81.6)		
BSSL	4	4		20	21	95.2 (76.2-99.9)		
BSHC	2	3		14	17	82.4 (56.6-96.2)		
BSA Total	20	33	60.6 (42.1-77.1)	86	132	65.2 (56.4-73.2)		
50-69 years								
BSWN	10	24		37	66	56.1 (43.3-68.3)	×××	*
BSCM	9	9		31	31	100.0 (88.8-100.0)	✓	ns
BSAL	10	12		24	30	80.0 (61.4-92.3)	✓	ns
BSM	3	11		18	49	36.7 (23.4-51.7)	×××	*
BSCtoC	0	3		4	16	25.0 (7.3-52.4)	×××	*
BSC	4	5		15	27	55.6 (35.3-74.5)	×××	*
BSSL	8	8		29	33	87.9 (71.8-96.6)	✓	ns
BSHC	5	7		33	36	91.7 (77.5-98.2)	✓	ns
BSA Total	49	79	62.0 (50.4-72.7) ××× *	191	288	66.3 (60.5-71.8)	×××	*

Note: 6 monthly data for lead providers not shown due to small numbers.
Exact Binomial 95% Confidence Intervals presented
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 5c2: Proportion of women having an open biopsy procedure within 15 working days, 2 years
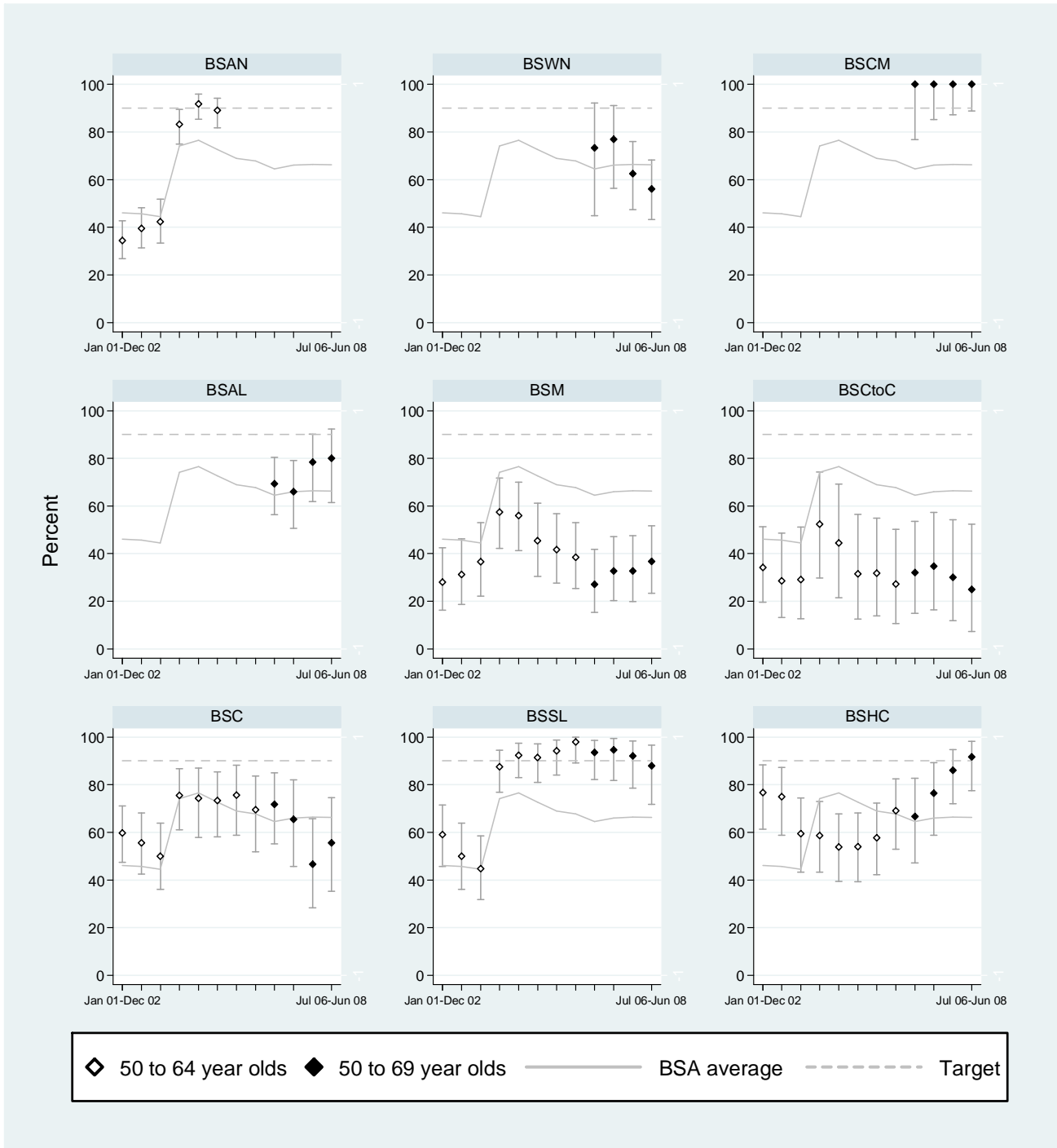
5.d. Time taken from final diagnostic biopsy to reporting assessment results

Description:
The time taken from the final biopsy procedure to reporting the diagnosis to the women.

Target:
Results reported to at least 90% of women within five working days of final diagnostic biopsy.

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

	6 months					2 years				
	Results reported within 5 working days of final biopsy	Number with final diagnostic biopsy	% (95%CI)			Results reported within 5 working days of final biopsy	Number with final diagnostic biopsy	% (95%CI)		
45-49 years										
BSWN	73	90	81.1 (71.5-88.6)			293	354	82.8 (78.4-86.6)		
BSCM	49	54	90.7 (79.7-96.9)			207	238	87.0 (82.0-91.0)		
BSAL	33	40	82.5 (67.2-92.7)			170	184	92.4 (87.6-95.8)		
BSM	41	52	78.8 (65.3-88.9)			177	236	75.0 (69.0-80.4)		
BSCtoC	42	44	95.5 (84.5-99.4)			165	181	91.2 (86.0-94.9)		
BSC	35	40	87.5 (73.2-95.8)			123	140	87.9 (81.3-92.8)		
BSSL	81	84	96.4 (89.9-99.3)			334	343	97.4 (95.1-98.8)		
BSHC	43	51	84.3 (71.4-93.0)			113	134	84.3 (77.0-90.0)		
BSA Total	397	455	87.3 (83.8-90.2)			1,582	1,810	87.4 (85.8-88.9)		
BSWN	165	212	77.8 (71.6-83.2)	✗✗✗	*	596	749	79.6 (76.5-82.4)	✗✗✗	*
BSCM	90	104	86.5 (78.4-92.4)	✓	ns	328	382	85.9 (82.0-89.2)	✓	*
BSAL	102	120	85.0 (77.3-90.9)	✓	ns	287	329	87.2 (83.1-90.6)	✓	ns
BSM	97	130	74.6 (66.2-81.8)	✗✗✗	*	452	587	77.0 (73.4-80.3)	✗✗✗	*
BSCtoC	103	108	95.4 (89.5-98.5)	✓	ns	377	426	88.5 (85.1-91.4)	✓	ns
BSC	100	109	91.7 (84.9-96.2)	✓	ns	308	351	87.7 (83.9-91.0)	✓	ns
BSSL	138	147	93.9 (88.7-97.2)	✓	ns	660	686	96.2 (94.5-97.5)	✓✓	*
BSHC	67	77	87.0 (77.4-93.6)	✓	ns	201	233	86.3 (81.2-90.4)	✓	ns
BSA Total	862	1007	85.6 (83.3-87.7)	✓	*	3,209	3,743	85.7 (84.6-86.8)	✓	*

Exact Binomial 95% Confidence Intervals presented
* Statistically different from target value, ns Not significant
✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from the target
✓✓ Difference of 5-9% magnitude better than target value and statistically significant
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Figure 5d: Percentage of women receiving final diagnostic biopsy results within 5 working days, 2 years
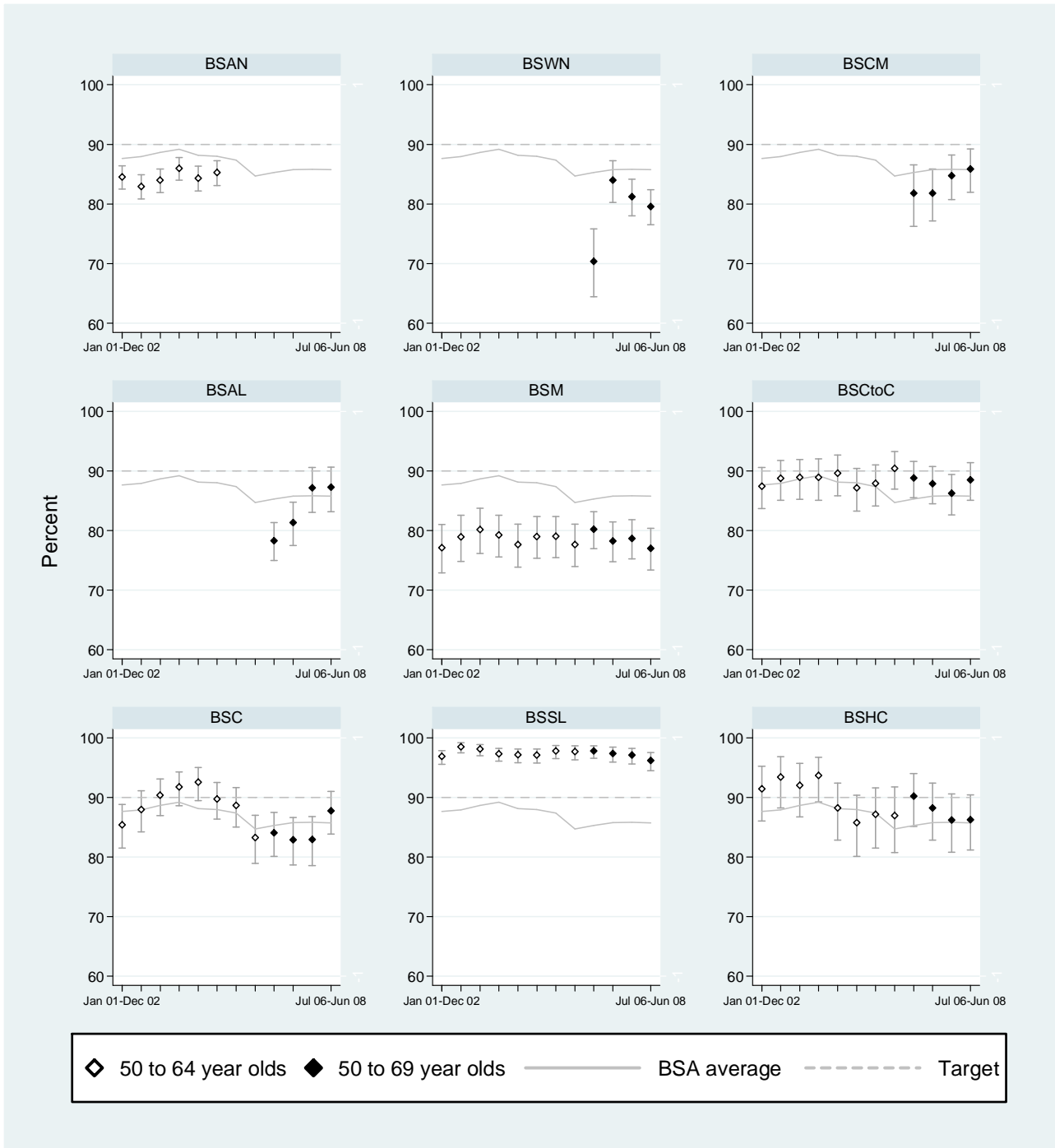
APPENDIX A: POPULATION DENOMINATORS BY AGE-GROUP

Year	Lead Provider	Reporting period	Annual Census projection estimates						Smoothed 6 monthly population estimates					
			45-49	50-54	55-59	60-64	65-69	50-69*	45-49	50-54	55-59	60-64	65-69	50-69*
2008	BSWN	Jan-Jun, 2008	26115	21765	19655	16165	13010	70595	26543	22093	19715	16625	13293	71725
2007	BSWN	Jul-Dec, 2007	26115	21765	19655	16165	13010	70595	26115	21765	19655	16165	13010	70595
2007	BSWN	Jan-Jun,2007	25260	21110	19535	15245	12445	68335	25688	21438	19595	15705	12728	69465
2006	BSWN	Jul-Dec, 2006	25260	21110	19535	15245	12445	68335	25260	21110	19535	15245	12445	68335
2006	BSWN	Jan-Jun, 2006		20530	19010	14790		54330		20530	19010	14790		54330
2008	BSAL	Jan-Jun, 2008	15940	13290	11070	8340	6690	39390	16225	13435	11105	8590	6855	39985
2007	BSAL	Jul-Dec, 2007	15940	13290	11070	8340	6690	39390	15940	13290	11070	8340	6690	39390
2007	BSAL	Jan-Jun, 2007	15370	13000	11000	7840	6360	38200	15655	13145	11035	8090	6525	38795
2006	BSAL	Jul-Dec, 2006	15370	13000	11000	7840	6360	38200	15370	13000	11000	7840	6360	38200
2006	BSAL	Jan-Jun, 2006		12610	10670	7610		30890		12610	10670	7610		30890
2005	BSAL	Jul-Dec, 2005		12685	11295	8625		32605		12685	11295	8625		32605
2008	BSCM	Jan-Jun, 2008	15965	13275	11820	9485	7490	42070	16320	13423	11895	9740	7718	42775
2007	BSCM	Jul-Dec, 2007	15965	13275	11820	9485	7490	42070	15965	13275	11820	9485	7490	42070
2007	BSCM	Jan-Jun, 2007	15255	12980	11670	8975	7035	40660	15610	13128	11745	9230	7263	41365
2006	BSCM	Jul-Dec, 2006	15255	12980	11670	8975	7035	40660	15255	12980	11670	8975	7035	40660
2006	BSCM	Jan-Jun, 2006		12685	11295	8625		32605		12685	11295	8625		32605
2005	BSCM	Jul-Dec, 2005		12685	11295	8625		32605		12685	11295	8625		32605
2005	BSAN	Jan-Jun, 2005		44870	39290	30050		114210		45135	39703	30323		115160
2004	BSAN	Jul-Dec, 2004		44870	39290	30050		114210		44870	39290	30050		114210
2004	BSAN	Jan-Jun, 2004		43810	37640	28960		110410		44340	38465	29505		112310
2003	BSAN	Jul-Dec, 2003		43810	37640	28960		110410		43810	37640	28960		110410
2003	BSAN	Jan-Jun, 2003		44338	36540	28258		109135		43317	35964	27926		107206
2002	BSAN	Jul-Dec, 2002		42824	34287	26891		104002		42824	34287	26891		104002
2008	BSM	Jan-Jun, 2008	24285	21400	18945	15900	13680	69925	24633	21810	18943	16323	13935	71010
2007	BSM	Jul-Dec, 2007	24285	21400	18945	15900	13680	69925	24285	21400	18945	15900	13680	69925
2007	BSM	Jan-Jun,2007	23590	20580	18950	15055	13170	67755	23938	20990	18948	15478	13425	67755
2006	BSM	Jul-Dec, 2006	23590	20580	18950	15055	13170	67755	23590	20580	18950	15055	13170	67755
2006	BSM	Jan-Jun, 2006		20025	18305	15005		53335		20303	18628	15030		53960
2005	BSM	Jul-Dec, 2005		20025	18305	15005		53335		20025	18305	15005		53335
2005	BSM	Jan-Jun, 2005		19495	17485	14595		51575		19760	17895	14800		52455
2004	BSM	Jul-Dec, 2004		19495	17485	14595		51575		19495	17485	14595		51575
2004	BSM	Jan-Jun, 2004		18900	16800	14190		49890		19198	17143	14393		50733
2003	BSM	Jul-Dec, 2003		18900	16800	14190		49890		18900	16800	14190		49890
2003	BSM	Jan-Jun, 2003		18713	16175	13935		48823		18765	16246	13960		48971
2002	BSM	Jul-Dec, 2002		18629	15692	13730		48051		18629	15692	13730		48051

*Note: 45-69 populations presented from Jul-Dec, 2006 following programme age extension. For previous 6 month periods 50-64 year populations are presented.

			Annual Census projection estimates						Smoothed 6 monthly population estimates					
Year	Lead Provider	Reporting period	45-49	50-54	55-59	60-64	65-69	50-69*	45-49	50-54	55-59	60-64	65-69	50-69*
2008	BSCtoC	Jan-Jun, 2008	20525	17965	16155	13220	11565	58905	20770	18230	16138	13538	11783	59688
2007	BSCtoC	Jul-Dec, 2007	20525	17965	16155	13220	11565	58905	20525	17965	16155	13220	11565	58905
2007	BSCtoC	Jan-Jun,2007	20035	17435	16190	12585	11130	57340	20280	17700	16173	12903	11348	57340
2006	BSCtoC	Jul-Dec, 2006	20035	17435	16190	12585	11130	57340	20035	17435	16190	12585	11130	57340
2006	BSCtoC	Jan-Jun, 2006		17090	15565	12465		45120		17263	15878	12525		45665
2005	BSCtoC	Jul-Dec, 2005		17090	15565	12465		45120		17090	15565	12465		45120
2005	BSCtoC	Jan-Jun, 2005		16810	14990	12375		44175		16950	15278	12420		44648
2004	BSCtoC	Jul-Dec, 2004		16810	14990	12375		44175		16810	14990	12375		44175
2004	BSCtoC	Jan-Jun, 2004		16525	14365	12135		43025		16668	14678	12255		43600
2003	BSCtoC	Jul-Dec, 2003		16525	14365	12135		43025		16525	14365	12135		43025
2003	BSCtoC	Jan-Jun, 2003		16795	13935	12013		42743		16353	13756	11800		41909
2002	BSCtoC	Jul-Dec, 2002		16181	13146	11465		40792		16181	13146	11465		40792
2008	BSC	Jan-Jun, 2008	17545	14525	13150	10335	8495	46505	17843	14675	13125	10605	8655	47060
2007	BSC	Jul-Dec, 2007	17545	14525	13150	10335	8495	46505	17545	14525	13150	10335	8495	46505
2007	BSC	Jan-Jun,2007	16950	14225	13200	9795	8175	45395	17248	14375	13175	10065	8335	45950
2006	BSC	Jul-Dec, 2006	16950	14225	13200	9795	8175	37220	16950	14225	13200	9795	8175	45395
2006	BSC	Jan-Jun, 2006		13920	12905	9675		36500		14073	13053	9735		36860
2005	BSC	Jul-Dec, 2005		13920	12905	9675		36500		13920	12905	9675		36500
2005	BSC	Jan-Jun, 2005		13725	12460	9475		35660		13823	12683	9575		36080
2004	BSC	Jul-Dec, 2004		13725	12460	9475		35660		13725	12460	9475		35660
2004	BSC	Jan-Jun, 2004		13690	11820	9320		34830		13708	12140	9398		35245
2003	BSC	Jul-Dec, 2003		13690	11820	9320		34830		13690	11820	9320		34830
2003	BSC	Jan-Jun, 2003		13723	11293	8913		33928		13560	11248	8940		33747
2002	BSC	Jul-Dec, 2002		13430	10675	8559		32664		13430	10675	8559		32664
2008	BSSL	Jan-Jun, 2008	26955	23845	22045	17675	14780	78345	27288	24120	22095	18160	15105	79480
2007	BSSL	Jul-Dec, 2007	26955	23845	22045	17675	14780	78345	26955	23845	22045	17675	14780	78345
2007	BSSL	Jan-Jun, 2007	26290	23295	21945	16705	14130	76075	26623	23570	21995	17190	14455	77210
2006	BSSL	Jul-Dec, 2006	26290	23295	21945	16705	14130	76075	26290	23295	21945	16705	14130	76075
2006	BSSL	Jan-Jun, 2006		22660	21435	16295		60390		22978	21690	16500		61168
2005	BSSL	Jul-Dec, 2005		22660	21435	16295		60390		22660	21435	16295		60390
2005	BSSL	Jan-Jun, 2005		22435	20435	15925		58795		22548	20935	16110		59593
2004	BSSL	Jul-Dec, 2004		22435	20435	15925		58795		22435	20435	15925		58795
2004	BSSL	Jan-Jun, 2004		22240	19300	15530		57070		22338	19868	15728		57933
2003	BSSL	Jul-Dec, 2003		22240	19300	15530		57070		22240	19300	15530		57070
2003	BSSL	Jan-Jun, 2003		22320	18390	15250		55960		22059	18366	15147		55572
2002	BSSL	Jul-Dec, 2002		21878	17432	14764		54074		21878	17432	14764		54074
2008	BSHC	Jan-Jun, 2008	11180	9535	8765	7055	6235	31590	11325	9585	8768	7248	6368	31968
2007	BSHC	Jul-Dec, 2007	11180	9535	8765	7055	6235	31590	11180	9535	8765	7055	6235	31590
2007	BSHC	Jan-Jun, 2007	10890	9435	8760	6670	5970	30835	11035	9485	8763	6863	6103	31213
2006	BSHC	Jul-Dec, 2006	10890	9435	8760	6670	5970	30835	10890	9435	8760	6670	5970	30835
2006	BSHC	Jan-Jun, 2006		9160	8520	6745		24425		9298	8640	6708		24645
2005	BSHC	Jul-Dec, 2005		9160	8520	6745		24425		9160	8520	6745		24425
2005	BSHC	Jan-Jun, 2005		8975	8265	6625		23865		9068	8393	6685		24145
2004	BSHC	Jul-Dec, 2004		8975	8265	6625		23865		8975	8265	6625		23865
2004	BSHC	Jan-Jun, 2004		8950	7850	6600		23400		8963	8058	6613		23633
2003	BSHC	Jul-Dec, 2003		8950	7850	6600		23400		8950	7850	6600		23400
2003	BSHC	Jan-Jun, 2003		9085	7405	6383		22873		8967	7433	6409		22808
2002	BSHC	Jul-Dec, 2002		8983	7015	6217		22215		8983	7015	6217		22215

*Note: 45-69 populations presented from Jul-Dec, 2006 following programme age extension. For previous 6 month periods 50-64 year populations are presented.

			Annual Census projection estimates						Smoothed 6 monthly population estimates					
Year	Lead Provider	Reporting period	45-49	50-54	55-59	60-64	65-69	50-69*	45-49	50-54	55-59	60-64	65-69	50-69*
2008	BSA Total	Jan-Jun, 2008	158510	135600	121605	98175	81945	437325	160945	137370	121783	10082	83710	443690
2007	BSA Total	Jul-Dec, 2007	158510	135600	121605	98175	81945	437325	158510	135600	121605	98175	81945	437325
2007	BSA Total	Jan-Jun, 2007	153640	132060	121250	92870	78415	424595	156075	133830	121428	95523	80180	430960
2006	BSA Total	Jul-Dec, 2006	153640	132060	121250	92870	78415	424595	153640	132060	121250	92870	78415	424595
2006	BSA Total	Jan-Jun, 2006		128680	117705	91210		337595		130370	119478	92040		341888
2005	BSA Total	Jul-Dec, 2005		128680	117705	91210		337595		128680	117705	91210		337595
2005	BSA Total	Jan-Jun, 2005		126310	112925	89045		328280		127283	114885	89913		332080
2004	BSA Total	Jul-Dec, 2004		126310	112925	89045		328280		126310	112925	89045		328280
2004	BSA Total	Jan-Jun, 2004		124115	107775	86735		318625		125213	110350	87890		323453
2003	BSA Total	Jul-Dec, 2003		124115	107775	86735		318625		124115	107775	86735		318625
2003	BSA Total	Jan-Jun, 2003		124973	103738	84750		313460		123020	103011	84181		310212
2002	BSA Total	Jul-Dec, 2002		121925	98247	81626		301798		121925	98247	81626		301798

*Note: 45-69 populations presented from Jul-Dec, 2006 following programme age extension. For previous 6 month periods 50-64 year populations are presented.

APPENDIX B: POPULATION DENOMINATORS BY ETHNIC GROUP

Year	Lead Provider	Report period	Annual Census projection estimates 45-49			50-69*			Smoothed 6 monthly population estimates 45-49			50-69*		
			Maori	Pacific	Other	Maori	Pacific	Other	Maori	Pacific	Other	Maori	Pacific	Other
2008	BSWN	Jan-Jun, 2008	3200	1145	21770	6430	2445	61720	3290	1178	22075	6555	2515	62655
2007	BSWN	Jul-Dec, 2007	3200	1145	21770	6430	2445	61720	3200	1145	21770	6430	2445	61720
2007	BSWN	Jan-Jun,2007	3020	1080	21160	6180	2305	59850	3110	1113	21465	6180	2305	59850
2006	BSWN	Jul-Dec, 2006	3020	1080	21160	6180	2305	59850	3020	1080	21160	6180	2305	59850
2006	BSWN	Jan-Jun, 2006				8730	3195	78490				8730	3195	78490
2008	BSAL	Jan-Jun, 2008	1100	1630	13210	2450	3450	33490	1115	1670	13440	2495	3495	33995
2007	BSAL	Jul-Dec, 2007	1100	1630	13210	2450	3450	33490	1100	1630	13210	2450	3450	33490
2007	BSAL	Jan-Jun, 2007	1070	1550	12750	2360	3360	32480	1085	1590	12980	2360	3360	32480
2006	BSAL	Jul-Dec, 2006	1070	1550	12750	2360	3360	32480	1070	1550	12750	2360	3360	32480
2006	BSAL	Jan-Jun, 2006				3300	4780	43800				3300	4780	43800
2005	BSAL	Jul-Dec, 2005				3540	4275	24790				3540	4275	24790
2008	BSCM	Jan-Jun, 2008	2220	2525	11220	4550	5510	32010	2275	2605	11440	4660	5625	32490
2007	BSCM	Jul-Dec, 2007	2220	2525	11220	4550	5510	32010	2220	2525	11220	4550	5510	32010
2007	BSCM	Jan-Jun, 2007	2110	2365	10780	4330	5280	31050	2165	2445	11000	4330	5280	31050
2006	BSCM	Jul-Dec, 2006	2110	2365	10780	4330	5280	2365	2110	2365	10780	4330	5280	31050
2006	BSCM	Jan-Jun, 2006				6120	7290	40530				6120	7290	40530
2005	BSCM	Jul-Dec, 2005				1890	2690	26310				1890	2690	26310
2005	BSAN	Jan-Jun, 2005				9820	8500	95890				9933	8590	96640
2004	BSAN	Jul-Dec, 2004				9820	8500	95890				9820	8500	95890
2004	BSAN	Jan-Jun, 2004				9370	8140	92890				9595	8320	94390
2003	BSAN	Jul-Dec, 2003				9370	8140	92890				9370	8140	92890
2003	BSAN	Jan-Jun, 2003				9210	7010	92915				9115	7398	91188
2002	BSAN	Jul-Dec, 2002				8860	6655	89485				8860	6655	89485
2008	BSM	Jan-Jun, 2008	5010	345	18930	10620	715	58590	5090	358	19185	10905	730	59375
2007	BSM	Jul-Dec, 2007	5010	345	18930	10620	715	58590	5010	345	18930	10620	715	58590
2007	BSM	Jan-Jun, 2007	4850	320	18420	10050	685	57020	4930	333	18675	10050	685	57020
2006	BSM	Jul-Dec, 2006	4850	320	18420	10050	685	57020	4850	320	18420	10050	685	57020
2006	BSM	Jan-Jun, 2006				8080	545	44710				8185	550	45040
2005	BSM	Jul-Dec, 2005				8080	545	44710				8080	545	44710
2005	BSM	Jan-Jun, 2005				7660	525	43390				7870	535	44050
2004	BSM	Jul-Dec, 2004				7660	525	43390				7660	525	43390
2004	BSM	Jan-Jun, 2004				7300	530	42090				7480	528	42740
2003	BSM	Jul-Dec, 2003				7300	530	42090				7300	530	42090
2003	BSM	Jan-Jun, 2003				7090	518	41215				7180	507	41483
2002	BSM	Jul-Dec, 2002				7060	483	40875				7060	483	40875

*Note: 45-69 populations presented from Jul-Dec, 2006 following programme age extension. For previous 6 month periods 50-64 year populations are presented.

Year	Lead Provider	Report period	Annual Census projection estimates						Smoothed 6 monthly population estimates					
			45-49			50-69*			45-49			50-69*		
			Maori	Pacific	Other	Maori	Pacific	Other	Maori	Pacific	Other	Maori	Pacific	Other
2008	BSCtoC	Jan-Jun, 2008	3845	310	16370	8010	590	50305	3953	318	16500	8170	605	50913
2007	BSCtoC	Jul-Dec, 2007	3845	310	16370	8010	590	50305	3845	310	16370	8010	590	50305
2007	BSCtoC	Jan-Jun, 2007	3630	295	16110	7690	560	49090	3738	303	16240	7690	560	49090
2006	BSCtoC	Jul-Dec, 2006	3630	295	16110	7690	560	49090	3630	295	16110	7690	560	49090
2006	BSCtoC	Jan-Jun, 2006				6155	455	38510				6206	455	38695
2005	BSCtoC	Jul-Dec, 2005				6155	455	38510				6155	455	38510
2005	BSCtoC	Jan-Jun, 2005				5950	455	37770				6053	455	38140
2004	BSCtoC	Jul-Dec, 2004				5950	455	37770				5950	455	37770
2004	BSCtoC	Jan-Jun, 2004				5725	405	36900				5838	430	37335
2003	BSCtoC	Jul-Dec, 2003				5725	405	36900				5725	405	36900
2003	BSCtoC	Jan-Jun, 2003				5705	363	36675				5473	372	35998
2002	BSCtoC	Jul-Dec, 2002				5220	338	35095				5220	338	35095
2008	BSC	Jan-Jun, 2008	1905	930	14710	3470	2285	40750	1965	943	14935	3575	2300	41155
2007	BSC	Jul-Dec, 2007	1905	930	14710	3470	2285	40750	1905	930	14710	3470	2285	40750
2007	BSC	Jan-Jun,2007	1785	905	14260	3260	2195	39940	1845	918	14485	3260	2195	39940
2006	BSC	Jul-Dec, 2006	1785	905	14260	3260	2195	39940	1785	905	14260	3260	2195	39940
2006	BSC	Jan-Jun, 2006				2740	1790	31970				2770	1808	32133
2005	BSC	Jul-Dec, 2005				2740	1790	31970				2740	1790	31970
2005	BSC	Jan-Jun, 2005				2620	1720	31320				2680	1755	31645
2004	BSC	Jul-Dec, 2004				2620	1720	31320				2620	1720	31320
2004	BSC	Jan-Jun, 2004				2495	1670	30630				2558	1695	30975
2003	BSC	Jul-Dec, 2003				2495	1670	30630				2495	1670	30630
2003	BSC	Jan-Jun, 2003				2440	1568	29920				2413	1584	29928
2002	BSC	Jul-Dec, 2002				2330	1498	29225				2330	1498	29225
2008	BSSL	Jan-Jun, 2008	1505	280	25170	2860	545	74940	1565	293	25430	2860	563	75990
2007	BSSL	Jul-Dec, 2007	1505	280	25170	2860	545	74940	1505	280	25170	2860	545	74940
2007	BSSL	Jan-Jun,2007	1385	255	24650	2725	510	72840	1445	268	24910	2725	510	72840
2006	BSSL	Jul-Dec, 2006	1385	255	24650	2725	510	72840	1385	255	24650	2725	510	72840
2006	BSSL	Jan-Jun, 2006				2215	405	57770				2235	409	58145
2005	BSSL	Jul-Dec, 2005				2215	405	57770				2215	405	57770
2005	BSSL	Jan-Jun, 2005				2135	390	56270				2175	398	57020
2004	BSSL	Jul-Dec, 2004				2135	390	56270				2135	390	56270
2004	BSSL	Jan-Jun, 2004				2010	380	54680				2073	385	55475
2003	BSSL	Jul-Dec, 2003				2010	380	54680				2010	380	54680
2003	BSSL	Jan-Jun, 2003				2203	398	53360				2060	373	53163
2002	BSSL	Jul-Dec, 2002				2110	365	51645				2110	365	51645

*Note: 45-69 populations presented from Jul-Dec, 2006 following programme age extension. For previous 6 month periods 50-64 year populations are presented.

Year	Lead Provider	Report period	Annual Census projection estimates						Smoothed 6 monthly population estimates					
			45-49			50-69*			45-49			50-69*		
			Maori	Pacific	Other	Maori	Pacific	Other	Maori	Pacific	Other	Maori	Pacific	Other
2008	BSHC	Jan-Jun, 2008	670	80	10430	1225	145	30220	698	83	10545	1253	140	30575
2007	BSHC	Jul-Dec, 2007	670	80	10430	1225	145	30220	670	80	10430	1225	145	30220
2007	BSHC	Jan-Jun, 2007	615	75	10200	1170	155	29510	643	78	10315	1170	155	29510
2006	BSHC	Jul-Dec, 2006	615	75	10200	1170	155	29510	615	75	10200	1170	155	29510
2006	BSHC	Jan-Jun, 2006				985	130	23310				995	130	23440
2005	BSHC	Jul-Dec, 2005				985	130	23310				985	130	23310
2005	BSHC	Jan-Jun, 2005				945	130	22790				965	130	23050
2004	BSHC	Jul-Dec, 2004				945	130	22790				945	130	22790
2004	BSHC	Jan-Jun, 2004				880	115	22390				913	123	22590
2003	BSHC	Jul-Dec, 2003				880	115	22390				880	115	22390
2003	BSHC	Jan-Jun, 2003				1005	113	21755				915	114	21828
2002	BSHC	Jul-Dec, 2002				950	113	21265				950	113	21265
2008	BSA Total	Jan-Jun, 2008	19455	7245	131810	39615	15685	382025	19950	7445	133550	40540	16003	387148
2007	BSA Total	Jul-Dec, 2007	19455	7245	131810	39615	15685	382025	19455	7245	131810	39615	15685	382025
2007	BSA Total	Jan-Jun, 2007	18465	6845	128330	37765	15050	371780	18960	7045	130070	37765	15050	371780
2006	BSA Total	Jul-Dec, 2006	18465	6845	128330	37765	15050	371780	18465	6845	128330	37765	15050	371780
2006	BSATotal	Jan-Jun, 2006				30445	12150	295000				30661	12176	296183
2005	BSATotal	Jul-Dec, 2005				30445	12150	295000				30445	12150	295000
2005	BSATotal	Jan-Jun, 2005				29130	11720	287430				29675	11863	290545
2004	BSATotal	Jul-Dec, 2004				29130	11720	287430				29130	11720	287430
2004	BSATotal	Jan-Jun, 2004				27780	11240	279580				28455	11480	283505
2003	BSATotal	Jul-Dec, 2003				27780	11240	279580				27780	11240	279580
2003	BSATotal	Jan-Jun, 2003				27653	9968	275840				27155	10346	273585
2002	BSATotal	Jul-Dec, 2002				26530	9452	267590				26530	9452	267590

*Note: 45-69 populations presented from Jul-Dec, 2006 following programme age extension. For previous 6 month periods 50-64 year populations are presented.

APPENDIX C: GLOSSARY OF TERMS

Assessment
Follow-up investigations if something of concern is seen on a mammogram.

Assessment rate
Number of women referred to assessment as a percentage of all women screened

Asymptomatic
Women who do not have symptoms of breast cancer

Axillary dissection
A formal dissection of the axilla that removes lymph nodes for examination in the staging of breast cancer to determine if further treatment is required.

Biopsy
A sample of a breast abnormality, or the whole abnormality, is removed and examined under a microscope by a pathologist to determine whether it is cancer

Benign biopsy weight
The weight of the open biopsy specimen presented to the pathologist

Benign biopsy rate
Number of open biopsies that turn out to be benign lesions, expressed as a proportion of women screened

BSA
BreastScreen Aotearoa

Coverage
Population-based measure of the percentage of women in the target age group (45-49, 50-69 years) who have had a screening mammogram in the programme

Initial screen
A woman's first screening mammogram at any BSA Lead Provider

False negative
A negative screening test result in a woman who does have cancer at the time the screening is conducted.

False positive result
The proportion of women who are recalled to assessment, but after assessment are found not to have cancer

High risk invasive breast cancer
Having at least one of the following features:
    a.   pT>2cm (pathological tumour size
and/or
    b.   Grade 2-3 (histologic and/or nuclear grade)

Lead Provider
A service provider who contracts with the National Screening Unit to provide services purchased as a result of the *Request for Proposal*. This term encompasses those individuals or organisations who act as a nominee, agent or subcontracted provider to a Lead Provider.

Positive predictive value
The proportion of women screened positive who are ultimately diagnosed as having cancer

Pre-operative diagnosis rate
Number of women in which a needle biopsy provides the definitive diagnosis (pre-operative diagnosis), as a percentage of all women diagnosed with breast cancer in the programme

Rescreen
A screening mammogram undertaken two years after the previous screen. In this report, rescreen refers to women who returned for screening within 27 months following their previous screen.

Sensitivity
The proportion of truly diseased persons in the screened population who are identified as diseased by the screening test. Sensitivity is a measure of the probability of correctly diagnosing a case, or the probability that any given case will be identified by the test.

Specificity
The proportion of women without breast cancer at screening who have a negative screen result. This is estimated by expressing the number of women who have a negative screen result as a percentage of all women screened excluding the women screened positive with cancer.

Subsequent screen
A woman's screening mammogram at a BSA Lead Provider when she has previously attended BSA.

Technical recall rate
Number of women who have to return to a screening unit (either Fixed or Mobile) for further films to complete their screening episode, expressed as a percentage of the number screened

Technical reject rate
Number of films rejected as a percentage of the number of films taken, calculated separately for women who are screened in a fixed unit and a mobile unit

APPENDIX D: Map of BSA Lead Provider Regions

BSA