

BREASTSCREEN AOTEAROA
INDEPENDENT MONITORING REPORT:

SCREENING AND ASSESSMENT REPORT OF WOMEN ATTENDING BSA
(WOMEN SCREENED JANUARY 2009 TO DECEMBER 2010)

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EXECUTIVE SUMMARY

This report presents cross-sectional data for the period July-December 2010 (6 months) and January 2009 to December 2010 (2 years), and trend data from programme inception to December 2010 for all BreastScreen Aotearoa screening and assessment indicators. Treatment indicators are located in a companion 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 time-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. Both the magnitude of differences, and their statistical significance, are used to assess the relation of observed to target values. Differences of <5% in magnitude from the target value and/or differences which are not significantly different from the target value are considered 'on target' (see 'Technical notes for interpreting this report').

As the BSA screening program matures the proportion of visits for initial screening diminish and the proportion of subsequent visits increases, and age profile of new entrants to the program becomes younger. Since the breast cancer incidence rate in younger women is lower than older women, the cancer detection rate from screening will decrease as the age profile of the initial screens becomes younger. The above should be borne in mind when interpreting cancer detection rates from initial screens (see 'Technical notes for interpreting this report').

1. Coverage

BSA screened 114,065 women aged 45-69 years over the 6-month period from July to December 2010, of which 84,711 were aged between 50 and 69 years. For women in this age group, the biennial participation of 68.9% was not substantially different from the target of 70%. Of biennial screens, 10.3% were initial screens and 89.7% 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 Māori and Pacific populations (58.1% and 64.3% respectively), compared with the remaining ethnic groups (70.1%). However, biennial coverage in Māori and Pacific groups continues to show a sustained increase over time. Only BSSL and BSWN were above target for Māori and Pacific coverage. BSHC was above target for Pacific women only.

BSSL and BSHC continue to exceed the biennial coverage target of 70% reaching 82.4% and 75.0% respectively, and BSSL has consistently had higher biennial coverage relative compared to other lead providers. Biennial coverage for BSC, BSCtoC, and BSWN continues to increase and they are now on target. There are now 5 Lead Providers on or above target for overall coverage.

Re-screening proportion and timeliness

The proportion of women re-screened for the six-month period for women aged 50-69 years was 89.5% within 27 months (target >85%). Of those who attended for re-screen, 84.5% attended within 20-24 months (target >75%). The biennial re-screen rate (84.7%) for women returning for a mammogram within 27 months was also on target, with most Lead Providers meeting or exceeding the target value, with the exception of BSM and BSCM, with BSCM showing a declining biennial trend.

¹ Page A, Taylor R. BreastScreen Aotearoa: Independent Monitoring Report -Treatment of women with BSA detected cancers (women screened January 2008-December 2009). BreastScreen Aotearoa: Wellington 2011.

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 10.0% (target <10%) for initial screens, and 2.9% (target <5%) for subsequent screens. The 2 year referral to assessment rate for initial screens was significantly above the target range of <10% for BSWN (10.8%), and BSCM (11.8%).

False positives and positive predictive value

The proportion of false positives for women aged 50-69 years for the 6 month period was 8.1% for initial screens (target <9%), and 2.2% for subsequent screens (target <4%). The positive predictive value (PPV) for the programme for the 6 month reporting period was 11.2% for initial screens and 18.6% for subsequent screens, for women aged 50-69 years.

Technical recall

Technical recall rates for fixed sites for the 2-year period achieved the target of <0.5% for BSA and continue to show a satisfactory level trend overall - and for the majority of Lead Providers, with the exception of BSM. Technical recall rates for mobile sites exceeded the target value of <3% overall for BSA for the 2-year period (although has remained <4%), and showed increasing disparity between Lead Providers. The reason for high technical recalls for some Lead Providers should be investigated.

3. Early detection of DCIS or invasive breast cancer

DCIS and invasive cancer detection rate

A total of 480 cases of DCIS or invasive cancer (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 10.8 per 1,000 for initial screens and 5.1 per 1,000 women screened for subsequent screens.

The biennial cancer detection per 1,000 screens - invasive and DCIS combined - for women aged 50-69 years was 10.4 per 1,000 for initial screens and 5.4 per 1,000 for subsequent screens. This represented 1,950 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, although increasing trends are evident for BSC (both initial and subsequent screens), BSWN (initial screens) and BSCM (subsequent screens).

The proportion of DCIS of all cancers for women aged 50-69 over the biennium was 21.1%, ranging from 13.1% to 26.7% across Lead Providers. The proportion of DCIS of all cancers has shown a slight decline for BSA overall.

Invasive cancer detection rate

The BSA biennial invasive cancer detection for women aged 50-69 years was 8.1 per 1,000 women screened for initial screens (achieving the target of ≥ 6.1 per 1,000) and 4.2 per 1,000 for subsequent screens (achieving the target of ≥ 3.45 per 1,000). This represented 1,511 invasive cancers detected by BSA for the 2-year reporting period. The overall proportion of node negative cancers (of all invasive cancers) was 75.5% for initial screens (target >70%) and 79.7% for subsequent screens (target >75%).

Invasive cancer detected ≤ 10 mm

For women 50-69 years the overall proportion of screen detected invasive cancers ≤ 10 mm in size for the 2-year period was 27.0% for initial screens (target $\geq 25\%$) and 37.2% for subsequent screens (target $\geq 30\%$). The corresponding detection rates per 10,000 women screened for invasive cancers ≤ 10 mm were better than the target value at 21.9 for initial screens (target ≥ 15.2 per 10,000 screens) and 15.6 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 46.0% for initial screens (which continues to be below the target value of >50%) and 56.8% 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 37.3 for initial screens (target value >30.5 per 10,000 screens) and 23.9 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 98.4% for women 50-69 years, which was higher than the target value of $\geq 90\%$.

Assessment

The overall proportion of women offered a first assessment within 15 working days for the biennium for women 50-69 years was 88.9%, which approached the target value of 90%. Trend data for this indicator show continued increases in BSWN and BSCM (achieving the target value for the first time in this reporting period). BSHC also show a continued increasing trend, but remain below the target value. BSAL also remain below the target value for this indicator.

Time taken from assessment to final diagnostic biopsy

The proportion of women receiving an open biopsy within 20 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 66.7%. For the 6-month period the overall proportion receiving an open biopsy within 20 working days was 68.3% for women 50-69 years.

The proportion of women who received their final diagnostic biopsy results within 5 working days was 86.5% for 2 year data, which was on target for this indicator (target value 90%). The overall proportion for the 6-month period was also 86.2% for women aged 50-69 years. BSAL and BSM are below the target for 2 year data.

5. Specific summary comments for each Lead Provider

For the following summary comments, indicators for each Lead Provider are included where targets were significantly exceeded, and also for targets not achieved. Specifically, indicators are noted if: (i) Lead Providers significantly exceeded targets for biennial indicators (i.e. exceeded the target by $\geq 10\%$ and was statistically significant), or (ii) Lead Providers were below target ($\geq 5\%$ difference in magnitude, and statistically significant).

BreastScreen Waitemata and North (BSWN)

BSWN was either on target or exceeded targets for almost all biennial indicators for women in the age range of 50-69 years. In particular, BSWN significantly exceeded targets for referral to assessment as a percentage of women having a subsequent screen, the percentage of cancers from referral to assessment in women attending for a subsequent screen, invasive cancer detection for initial and subsequent screens, small cancer detection for subsequent screens (both $\leq 10\text{mm}$ and $< 15\text{mm}$), small invasive cancer (both $\leq 10\text{mm}$ and $< 15\text{mm}$) detection per 10,000 screens for initial and subsequent screens technical recall rates at fixed and mobile sites, the percentage of rejected films at fixed and mobile sites, benign open biopsy rates in women attending for initial and subsequent screens, false positive rates for subsequent screens, preoperative diagnosis of cancer and percentage of women notified of screening results within 10 working days. Following on sustained increases in coverage for Māori and Pacific women, BSWN continues to be on target for both these indicators. Targets were not achieved the percentage of women receiving an open biopsy within 20 working days (71.6%, target 90%), and referral to assessment for initial screens (10.8%, target $< 10\%$).

BreastScreen Counties Manukau (BSCM)

BSCM were either on target or exceeded targets for almost all biennial indicators for women in the age range of 50-69 years. In particular, BSCM significantly exceeded targets for referral to assessment as a percentage of women having a subsequent screen, the percentage of cancers from referral to assessment in women attending for a subsequent screen, technical recall at fixed and mobile sites, invasive cancer detection for subsequent screens, small invasive cancer detection (both $\leq 10\text{mm}$ and $< 15\text{mm}$) per 10,000 screens for subsequent screens, benign open biopsy rates in women attending for a subsequent screen, false positive rates for subsequent screens, pre-operative diagnosis of cancer, and the percentage of rejected films (fixed and mobile) sites. Targets were not achieved for overall

coverage (62.6%, target value 70%), Pacific coverage (63.5%, target value 70%) and Māori coverage (59.9%, target value 70%), and also the percentage of women eligible for re-screen who were re-screened within 27 months (73.8%, target 85%), percentage of women referred to assessment for initial screens (11.8, target value <10%), percentage of false positives for initial screens (10.2%, target value <9%), and percentage of women receiving an open biopsy within 20 working days (56.5%, target 90%).

BreastScreen Auckland Limited (BSAL)

BSAL was either on target or exceeded targets for almost all biennial indicators for women in the target age range of 50-69 years. In particular, BSAL significantly exceeded targets for referral to assessment as a percentage of women having a subsequent screen, the percentage of cancers from referral to assessment in women attending for a subsequent screen, invasive cancer detection for initial and subsequent screens, small cancer detection ($\leq 10\text{mm}$) per 10,000 screens for initial screens, the percentage of rejected films at fixed and mobile sites, technical recall rates for fixed sites, benign open biopsy rates for subsequent screens, preoperative diagnosis of cancer, false positive rates for subsequent screens, and percentage of women returning for a re-screen within 20-24 months. Targets were not achieved for overall coverage (57.8%, target value 70%), Pacific coverage (64.9%, target value 70%) and Māori coverage (50.3%, target value 70%), technical recall rates for mobile sites (4.4%, target value <3%), and the percentage of women offered first assessment within 15 working days (67.5%, target value 90%).

BreastScreen Midland (BSM)

BSM was either on target or exceeded targets for most biennial indicators for women in the target age range of 50-69 years. In particular, BSM significantly exceeded targets for referral to assessment as a percentage of women having a subsequent screen, the percentage of cancers from referral to assessment in women attending for a subsequent screen, invasive cancer detection for subsequent screens, small cancer detection ($\leq 10\text{mm}$) for subsequent screens, small invasive cancer (both $\leq 10\text{mm}$ and $< 15\text{mm}$) detection per 10,000 screens for subsequent screens the percentage of rejected films at fixed and mobile sites, preoperative diagnosis of cancer, false positive rates for subsequent screens, and benign open biopsies for initial and subsequent screens. Targets were not achieved for overall coverage (62.6%, target value 70%), Pacific coverage (58.8%, target value 70%) and Māori coverage (47.8%, target value 70%), technical recall rates for fixed sites (0.7%, target value <0.5%) and mobile sites (5.3%, target value <3%), the percentage of women receiving an open biopsy within 20 working days (60.7%, target 90%), and the proportion of women receiving final biopsy results within 5 working days (82.3%, target 90%). The percentage of women eligible for re-screen who were re-screened within 27 months was below target (76.2%, target 85%) and 20-24 months re-screen was also below target (56.2%, target 75%); although there is continued improvement in the proportion re-screened within 27 months for the most recent 6 months covered by this report.

BreastScreen Coast to Coast (BSCtoC)

BSCtoC was either on target or exceeded targets for almost all biennial indicators for women in the target age range of 50-69 years. In particular, BSCtoC significantly exceeded targets for referral to assessment as a percentage of all women screened (both initial and subsequent screens), the percentage of cancers from referral to assessment of all women screened (for both initial and subsequent screens), benign open biopsy rates for women attending a subsequent screen, technical recall rates at fixed sites, the percentage of rejected films at fixed and mobile sites, false positive rates, preoperative diagnosis of cancer and percentage of women notified of screening results within 10 working days. Biennial coverage BSCtoC continues to increase and is now on target. Targets were not achieved for Pacific coverage (59.7%, target value 70%) and Māori coverage (55.0%, target value 70%), technical recall rates for mobile sites (3.7%, target value <3%), and the percentage of women receiving an open biopsy within 20 working days (40.0%, target 90%).

BreastScreen Central (BSC)

BSC was either on target or exceeded targets for almost all biennial indicators for women in the target age range of 50-69 years. In particular, BSC significantly exceeded targets for referral to assessment as a percentage of women having a subsequent screen, the percentage of cancers from referral to assessment of all women screened (both initial and subsequent screens), invasive cancer detection, small invasive cancer (both $\leq 10\text{mm}$ and $< 15\text{mm}$) detection per 10,000 screens for subsequent screens, the percentage of women re-screened within 20-24 months, the percentage of rejected films at fixed and mobile sites, benign open biopsy rates in women attending for subsequent screens, preoperative diagnosis of cancer, false positive rates for subsequent screens and percentage of women notified of screening results within 10 working days. Biennial coverage in BSC continues to increase it is now on target. Targets were not achieved for Pacific coverage (54.6%, target value 70%) and Māori coverage (59.3%, target value

70%), technical recall rates for mobile sites (4.1%, target value <3%), and the percentage of women receiving an open biopsy within 20 working days (59.3%, target 90%).

BreastScreen South Limited (BSSL)

BSSL was either on target or exceeded targets for all biennial indicators for women in the target age range of 50-69 years. In particular, BSSL significantly exceeded targets for coverage (including coverage in both Māori and Pacific groups), the percentage of women re-screened within 20-24 months, referral to assessment as a percentage of all women screened (both initial and subsequent screens), the percentage of cancers from referral to assessment for subsequent screens, small cancer detection rates (both $\leq 10\text{mm}$ and $< 15\text{mm}$) for subsequent screens, small invasive cancer (both $\leq 10\text{mm}$ and $< 15\text{mm}$) detection per 10,000 screens for subsequent screens benign open biopsy rates in women attending for subsequent screens, technical recall rates at fixed and mobile sites and the percentage of rejected films for both mobile and fixed sites, false positive rates, preoperative diagnosis of cancer and percentage of women notified of screening results within 10 working days.

BreastScreen Health Care (BSHC)

BSHC were either on target or exceeded targets for most biennial indicators for women in the target age range of 50-69 years. In particular, BSHC significantly exceeded targets for referral to assessment as a percentage of women having a subsequent screen, the percentage of cancers from referral to assessment in women attending for a subsequent screen, the percentage of women re-screened within 20-24 months, technical recall rates for fixed sites, benign open biopsy rates for women attending for initial and subsequent screens, the percentage of rejected films for both mobile and fixed sites, false positive rates in subsequent screens, and preoperative diagnosis of breast cancer. Targets were not achieved for Māori coverage (60.0%, target value 70%), and the percentage of women offered first assessment within 15 working days (54.5%, target 90%).

6. 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%. Coverage rates lower than the target value can be attributed to the significantly lower coverage in Māori 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 Māori and Pacific groups (1a.7)
- Technical recall rates for mobile sites (2b.2)
- Percentage of women having receiving an open biopsy within 20 working days (5c.2)

BSA ADVISORY GROUP DRAFT COMMENTS AND RECOMMENDATIONS

1. Coverage

The BSA Advisory Group is pleased to note the sustained upward trend in overall coverage such that 5 Lead Providers are now on target.

There is also a continued upward trend in coverage for Māori women (BreastScreen Waitemata and North and BreastScreen South Limited on target) and Pacific women (BreastScreen Waitemata and North, BreastScreen South Limited, and BreastScreen Health Care on target). Nevertheless, the overall coverage is still below the target of 70% and coverage for Māori is less than 50% in two Lead Providers. Disparities in coverage for Māori and Pacific women still exist. It is encouraging that 2 out of 3 of the Lead Providers (BreastScreen Waitemata and North, BreastScreen Midland, BreastScreen Coast to Coast) with the greatest Māori populations (61% of the Māori population) are increasing coverage, and the Advisory Group looks forward to BreastScreen Midland achieving similar improvements.

The BSA Advisory Group recommends that Lead Providers continue to simplify their enrolment processes and reduce multiple points of contact with women.

2. Time from Screening to First Offered Assessment

The BSA Advisory Group notes the deterioration in time from screening to offer of assessment in BreastScreen Auckland Limited for the most recent available 6 month data and the two yearly data. BreastScreen Health Care also shows low proportions of 'on target' time from screening to offer of assessment, although there is recent improvement in 6 month and 2 yearly data. BSAL and BSHC are to provide explanations for next meeting.

3. Re-screening

The re-screen rate has remained on target overall. The re-screen rate is below target for 6 month and 2 yearly data for Breast Screen Counties Manukau and BreastScreen Midland, although recent declining trends have slowed in both Lead Providers with recent improvements in BreastScreen Midland. Reasons for these low re-screen rates require investigation.

4. Timeliness of Open Biopsy

The NSU has changed 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. However, only 3 Lead Providers are on target (BreastScreen Auckland Limited, BreastScreen South Limited, and BreastScreen Health Care) and the BSA total is below target, with no uniform improvement compared with previous data. Recent declines in this indicator have continued in BreastScreen Counties Manukau. Explanations from Lead Providers for these trends are required.

5. Technical recall rates, 50-69 years

Technical recall rates show a continued modest decline. Previous increasing trends in technical recall rates in BreastScreen Midland have been sustained in this report for the 2 year period, although technical recall rates for fixed and mobile sites showed a decline in the most recent 6 month period.

6. Percentage of women receiving final diagnostic biopsy results within 5 working days (2 year data)

BreastScreen Midlands shows an increasing trend in this indicator, after persistently low percentages with no trend for improvement. BreastScreen Auckland Limited is also below target for this indicator, with a continuing decreasing trend from previous reporting periods. Explanations from Lead Providers for these trends are required.

7. In response to the comments and recommendations above, the BSA Advisory Group will consider Lead Provider feedback on the report at the next meeting.

FOREWORD: BSA MONITORING PROCESS

Data are sent monthly from the eight BreastScreen Aotearoa Lead Providers (LPs) to the Information Directorate of the Ministry of Health. The data are checked by the Information Directorate, amalgamated into a single file, and sent to the National Screening Unit (NSU). The NSU runs further checks and produces performance indicator tables 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 New South Wales (UNSW), School of Public Health and Community Medicine (SPHCM), Sydney, 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 comment and a final version is produced. The NSU publishes the final report on the NSU website.

This BSA Independent Monitoring Report was reviewed by the BSA Advisory Group on 17 November 2011.

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 the reporting period Jan-Jan 2006. For the reporting period Jul-Dec 2006 onwards a new time series has been established for women aged 50-69 years. This time series 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 are 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 are not 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 Māori, she is counted as Māori.

Confidence Intervals (CIs)

95% CIs 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 $\geq 5\%$ 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 $\geq 10\%$ 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 0-4%, 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 are no long term trial data to indicate the achievable and optimal targets for this age group.

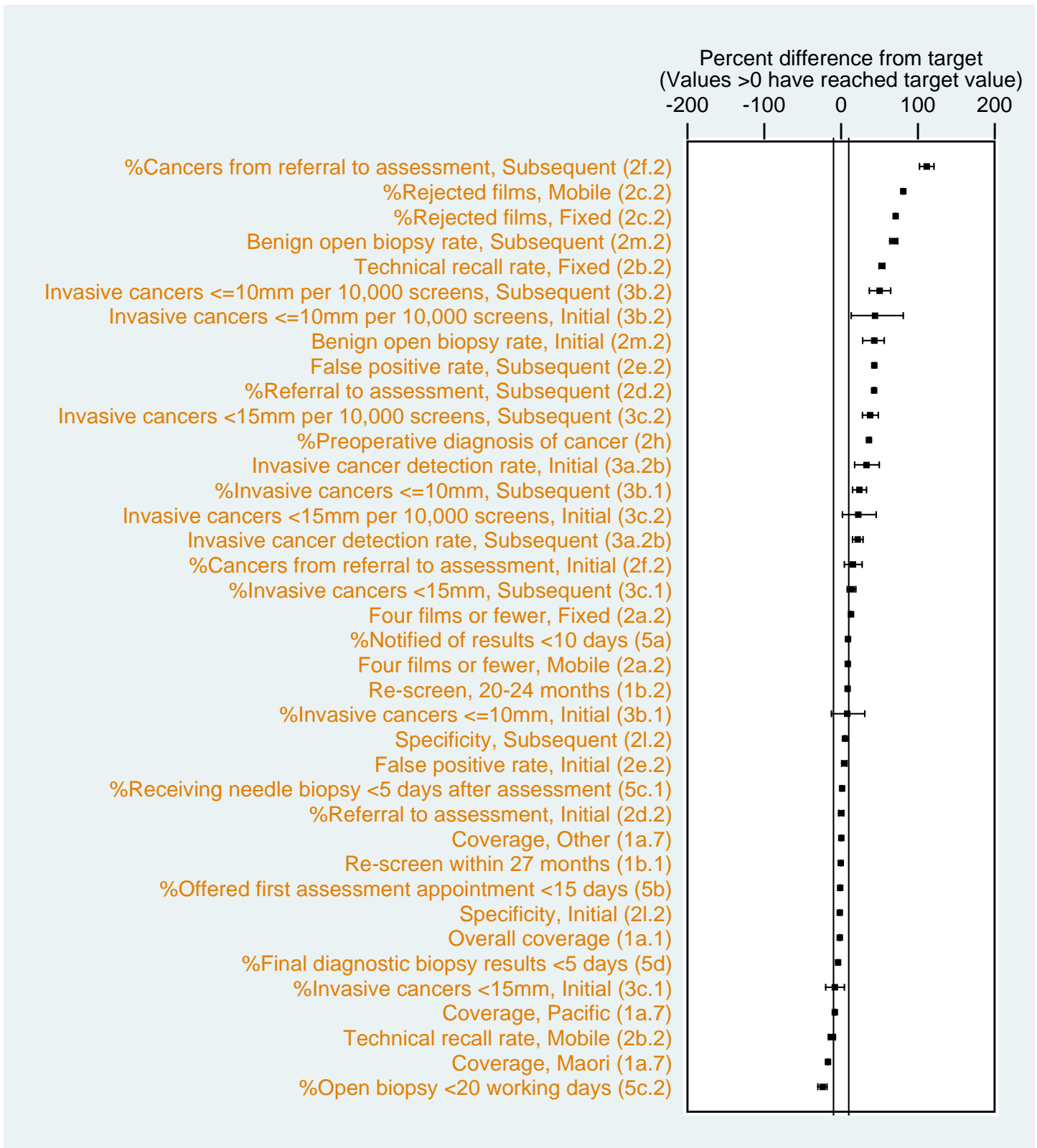
Target values relate only to biennial rates for women in the target age-group (50-69 years) for all indicators, and ticks and crosses for 6-month rates are not presented.

Initial cancer detection rates

As a mammographic screening programme matures the proportion of visits for initial screening diminish and the proportion of subsequent visits increase. During the most recent screening period for women 50-69 years, the proportion of initial screens are only 11%, whereas the subsequent screens are 89% (see table 1.a.2). As well as a reduction in absolute numbers with maturity (thus widening 95% CIs of rates), the age profile of women changes from all age groups 50-69 years at the beginning of the programme, to mostly younger age groups (new entrants to the programme) at maturity. Since the breast cancer incidence rate in younger women is lower than older women, the cancer detection rate from screening will decrease as the age profile of the initial screens becomes younger. The above should be borne in mind when interpreting cancer detection rates from initial screens.

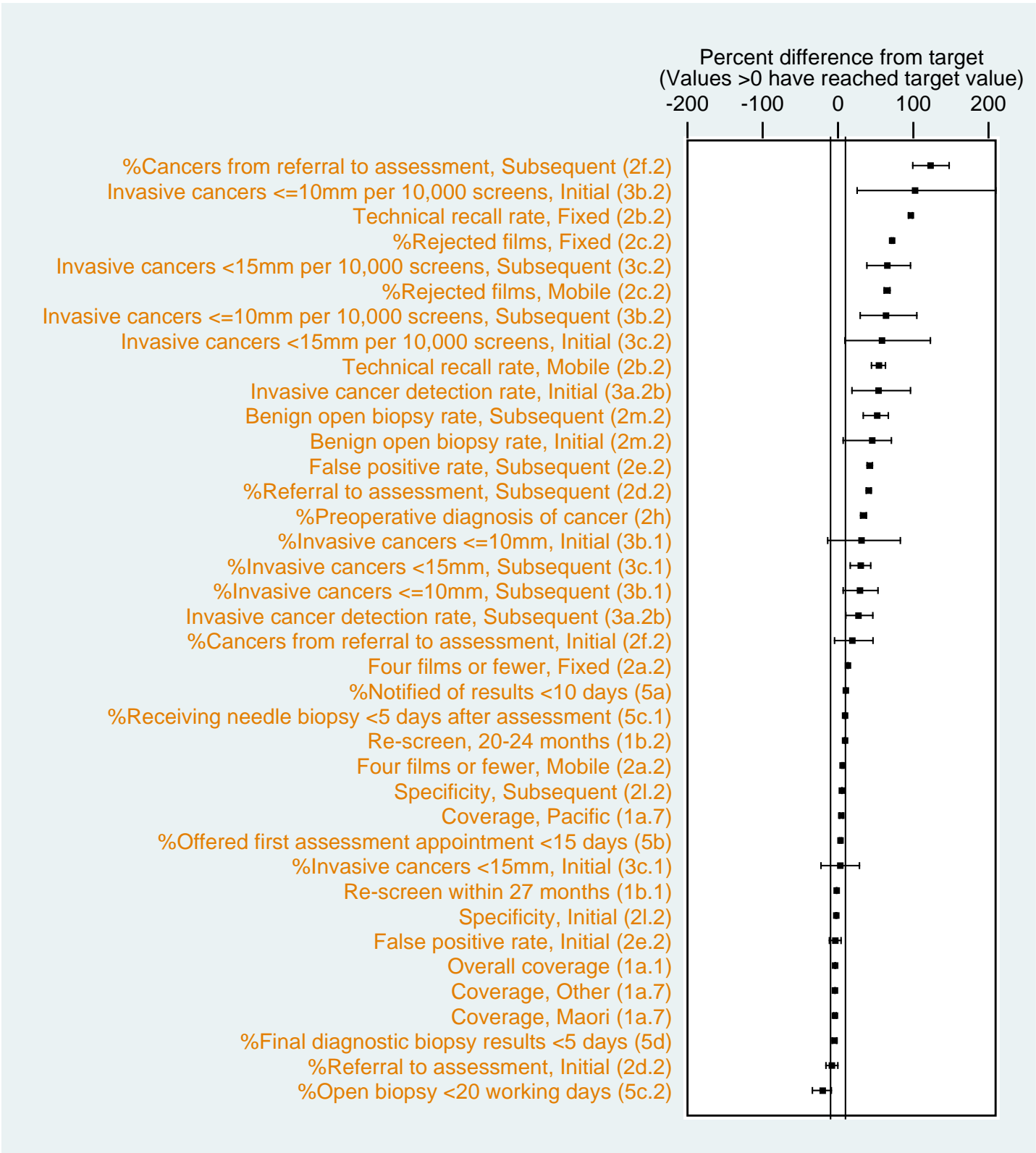
AT A GLANCE: BIENNIAL INDICATORS FOR WOMEN 50-69 YEARS

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 and 95% confidence intervals (Table reference in brackets)



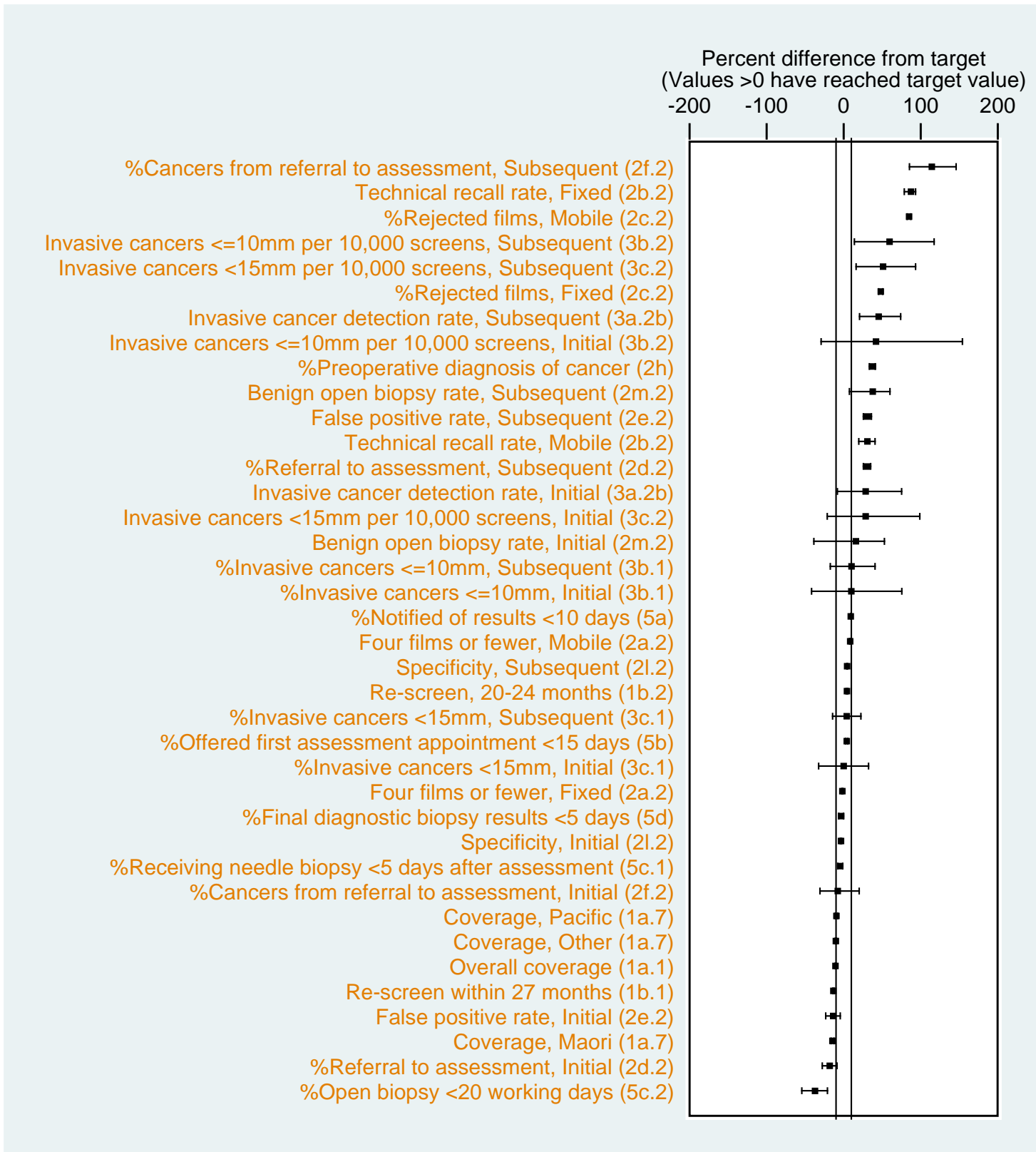
NB: The vertical line represent a $\pm 10\%$ difference between the observed value and the target value.

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 and 95% confidence intervals (Table reference in brackets).



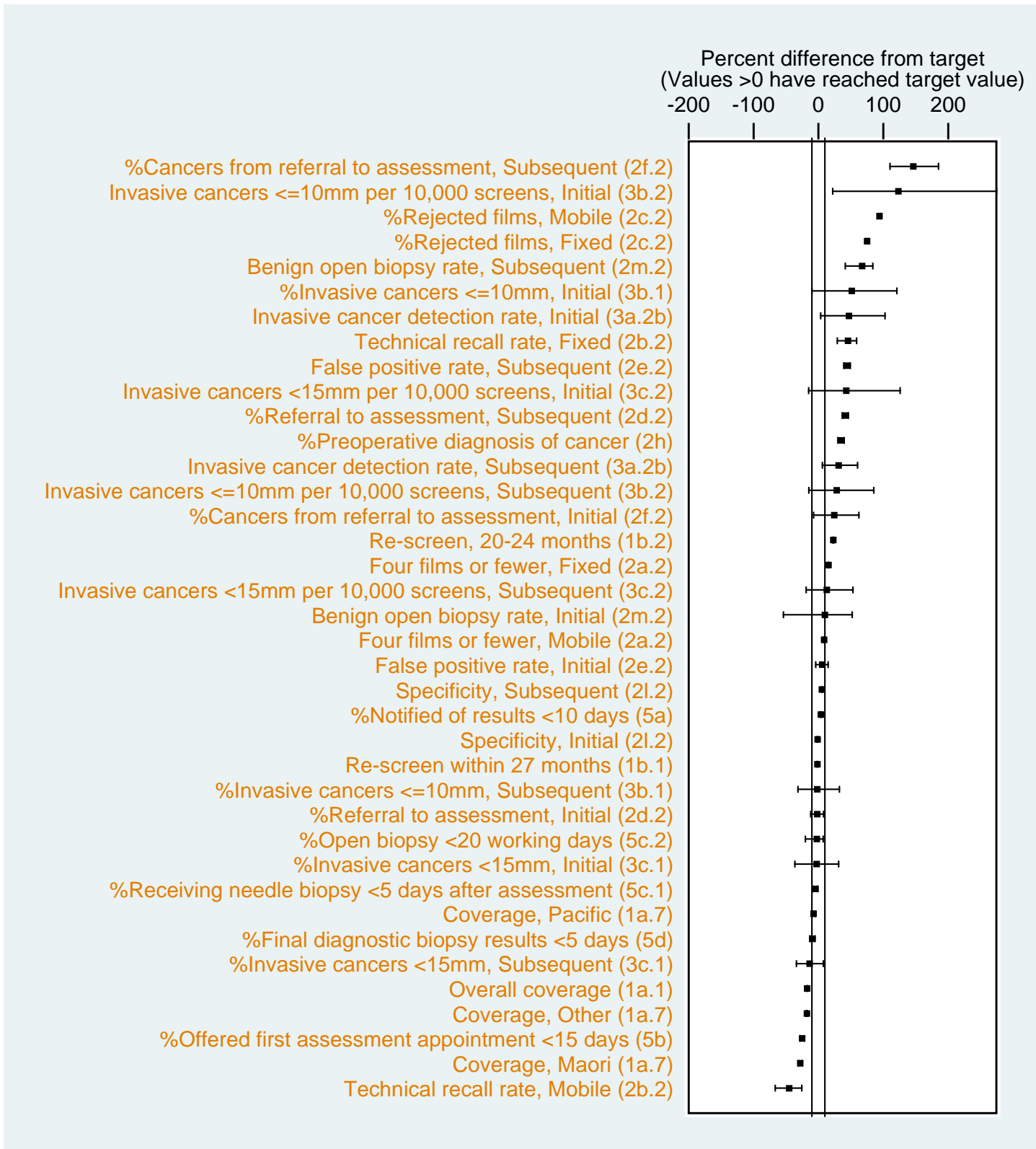
NB: The vertical line represent a $\pm 10\%$ difference between the observed value and the target value.

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 and 95% confidence intervals (Table reference in brackets).



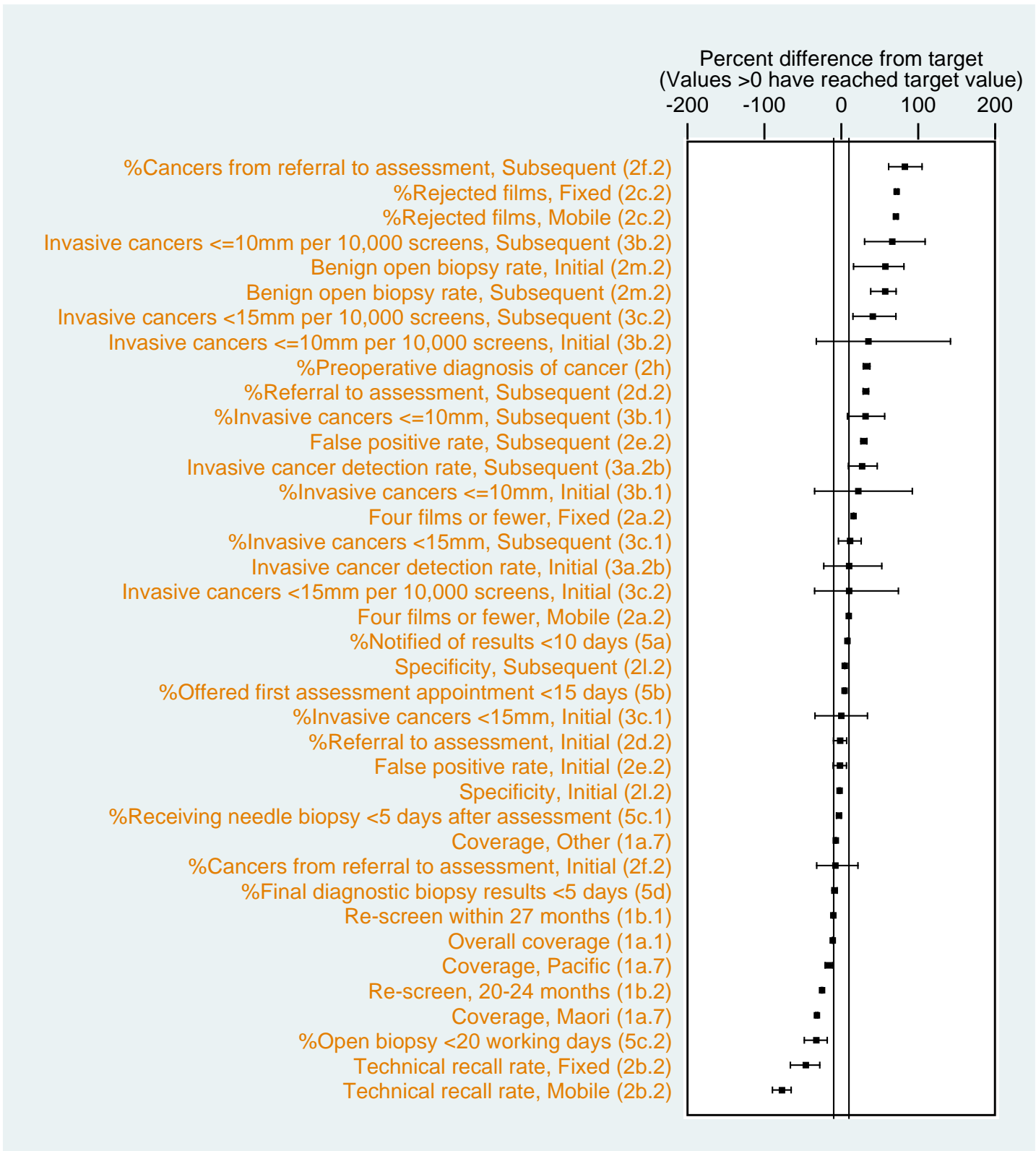
NB: The vertical line represent a $\pm 10\%$ difference between the observed value and the target value.

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 and 95% confidence intervals (Table reference in brackets).



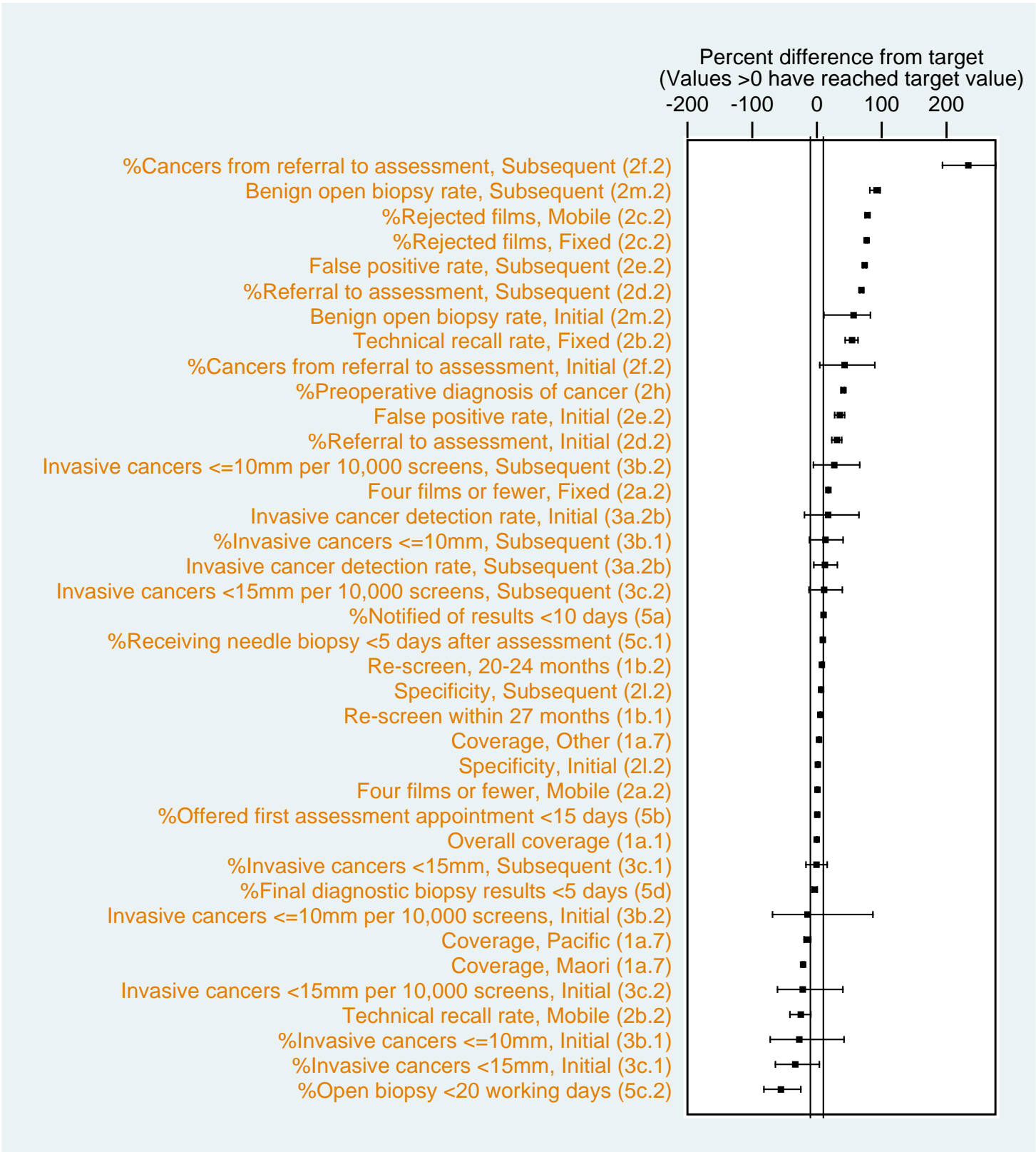
NB: The vertical line represent a $\pm 10\%$ difference between the observed value and the target value.

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 and 95% confidence intervals (Table reference in brackets)



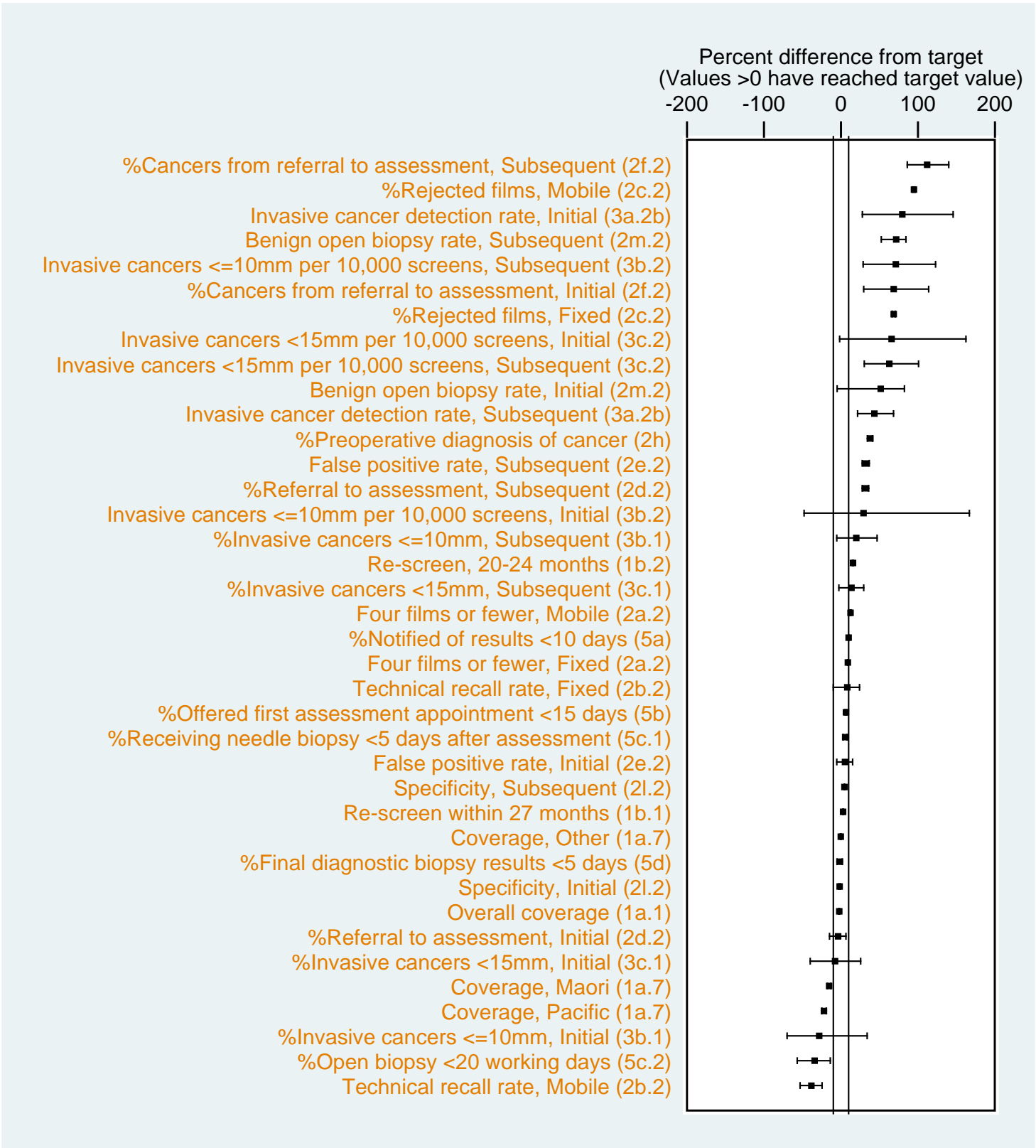
NB: The vertical line represent a $\pm 10\%$ difference between the observed value and the target value.

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 and 95% confidence intervals (Table reference in brackets)



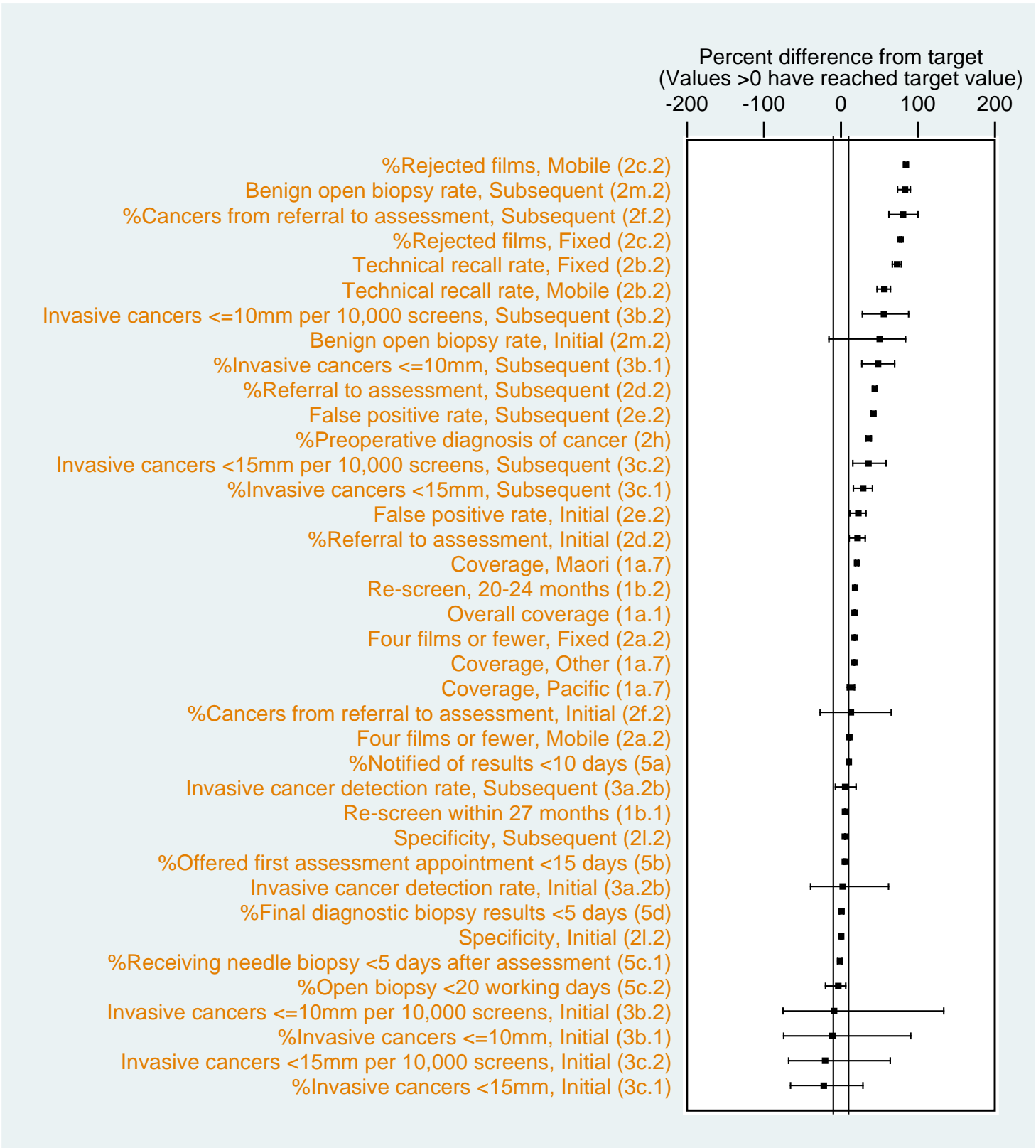
NB: The vertical line represent a $\pm 10\%$ difference between the observed value and the target value.

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 and 95% confidence intervals (Table reference in brackets)



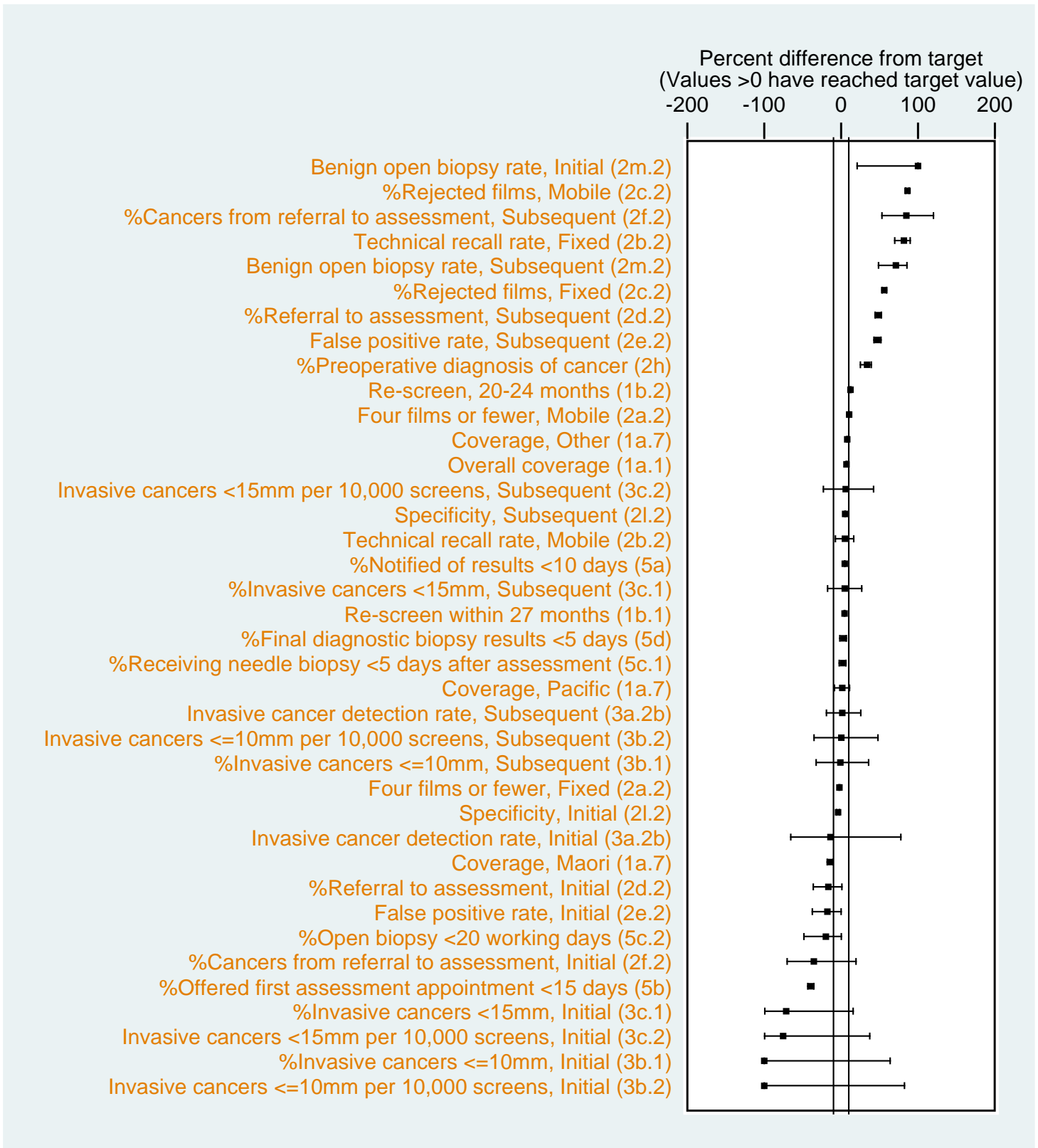
NB: The vertical line represent a $\pm 10\%$ difference between the observed value and the target value.

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 and 95% confidence intervals (Table reference in brackets)



NB: The vertical line represent a $\pm 10\%$ 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 and 95% confidence intervals (Table reference in brackets)



NB: The vertical line represent a $\pm 10\%$ 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)		
<i>45-49 years</i>								
BSWN	5,102	27,485	18.6 (18.1-19.0)	18,753	27,485	68.2 (67.7-68.8)		
BSCM	3,197	17,295	18.5 (17.9-19.1)	11,293	17,295	65.3 (64.6-66.0)		
BSAL	3,382	17,490	19.3 (18.8-19.9)	9,911	17,490	56.7 (55.9-57.4)		
BSM	3,268	24,720	13.2 (12.8-13.6)	13,631	24,720	55.1 (54.5-55.8)		
BSCtoC	3,529	20,410	17.3 (16.8-17.8)	13,364	20,410	65.5 (64.8-66.1)		
BSC	2,838	18,430	15.4 (14.9-15.9)	11,312	18,430	61.4 (60.7-62.1)		
BSSL	6,739	27,570	24.4 (23.9-25.0)	23,730	27,570	86.1 (85.7-86.5)		
BSHC	1,299	11,055	11.8 (11.2-12.4)	7,259	11,055	65.7 (64.8-66.5)		
BSA Total	29,354	164,455	17.8 (17.7-18.0)	109,253	164,455	66.4 (66.2-66.7)		
<i>50-69 years</i>								
BSWN	14,537	77,965	18.6 (18.4-18.9)	52,573	77,965	67.4 (67.1-67.8)	✓	*
BSCM	7,654	46,610	16.4 (16.1-16.8)	29,197	46,610	62.6 (62.2-63.1)	xxx	*
BSAL	7,334	43,440	16.9 (16.5-17.2)	25,127	43,440	57.8 (57.4-58.3)	xxx	*
BSM	12,659	76,470	16.6 (16.3-16.8)	47,569	76,470	62.2 (61.9-62.5)	xxx	*
BSCtoC	11,982	63,165	19.0 (18.7-19.3)	44,089	63,165	69.8 (69.4-70.2)	✓	ns
BSC	8,391	50,360	16.7 (16.3-17.0)	34,453	50,360	68.4 (68.0-68.8)	✓	*
BSSL	16,336	85,145	19.2 (18.9-19.5)	70,139	85,145	82.4 (82.1-82.6)	✓✓✓	*
BSHC	5,818	33,755	17.2 (16.8-17.6)	25,318	33,755	75.0 (74.5-75.5)	✓✓	*
BSA Total	84,711	476,910	17.8 (17.7-17.9)	328,465	476,910	68.9 (68.7-69.0)	✓	*

Note: Eligible populations are 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

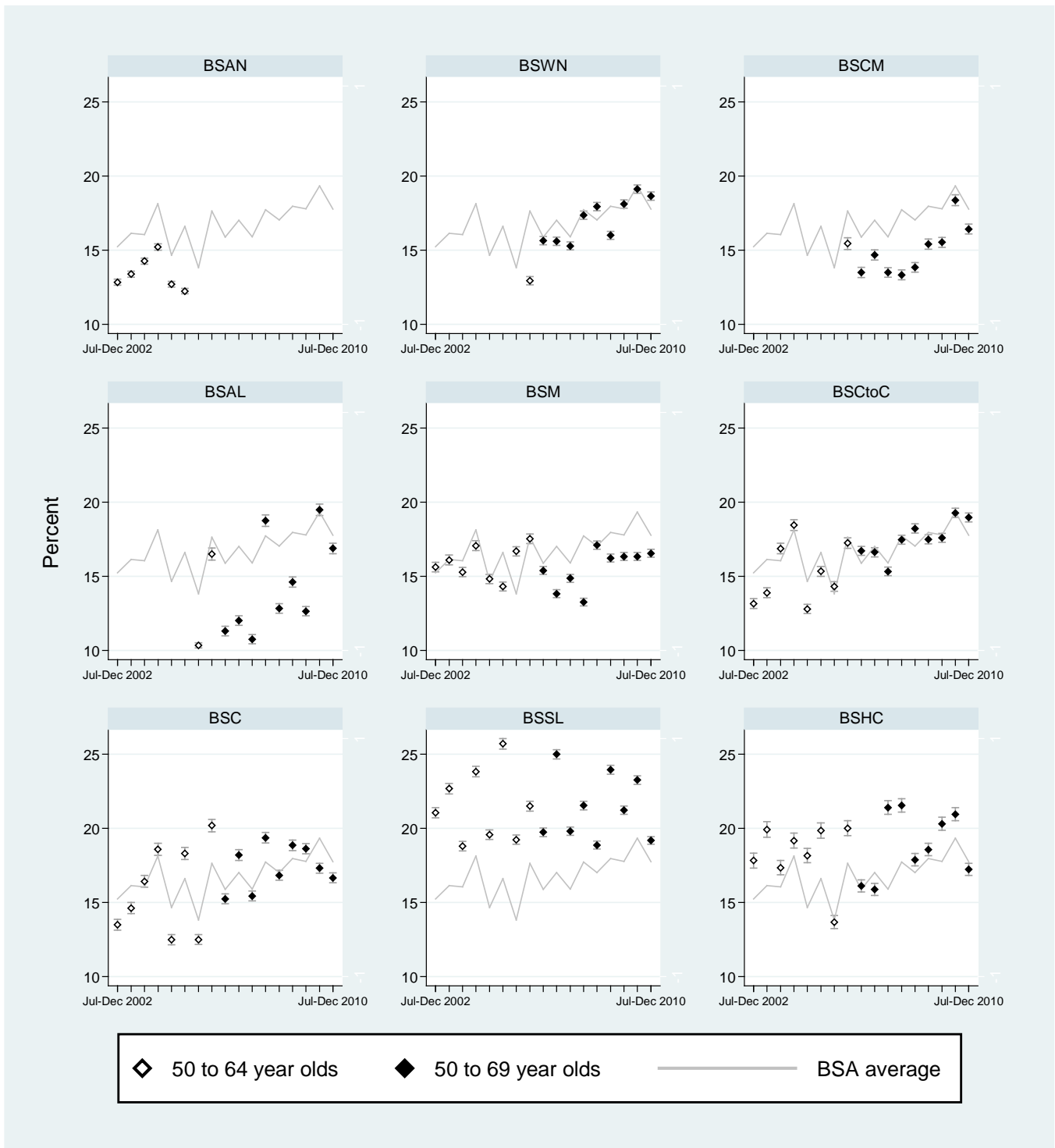
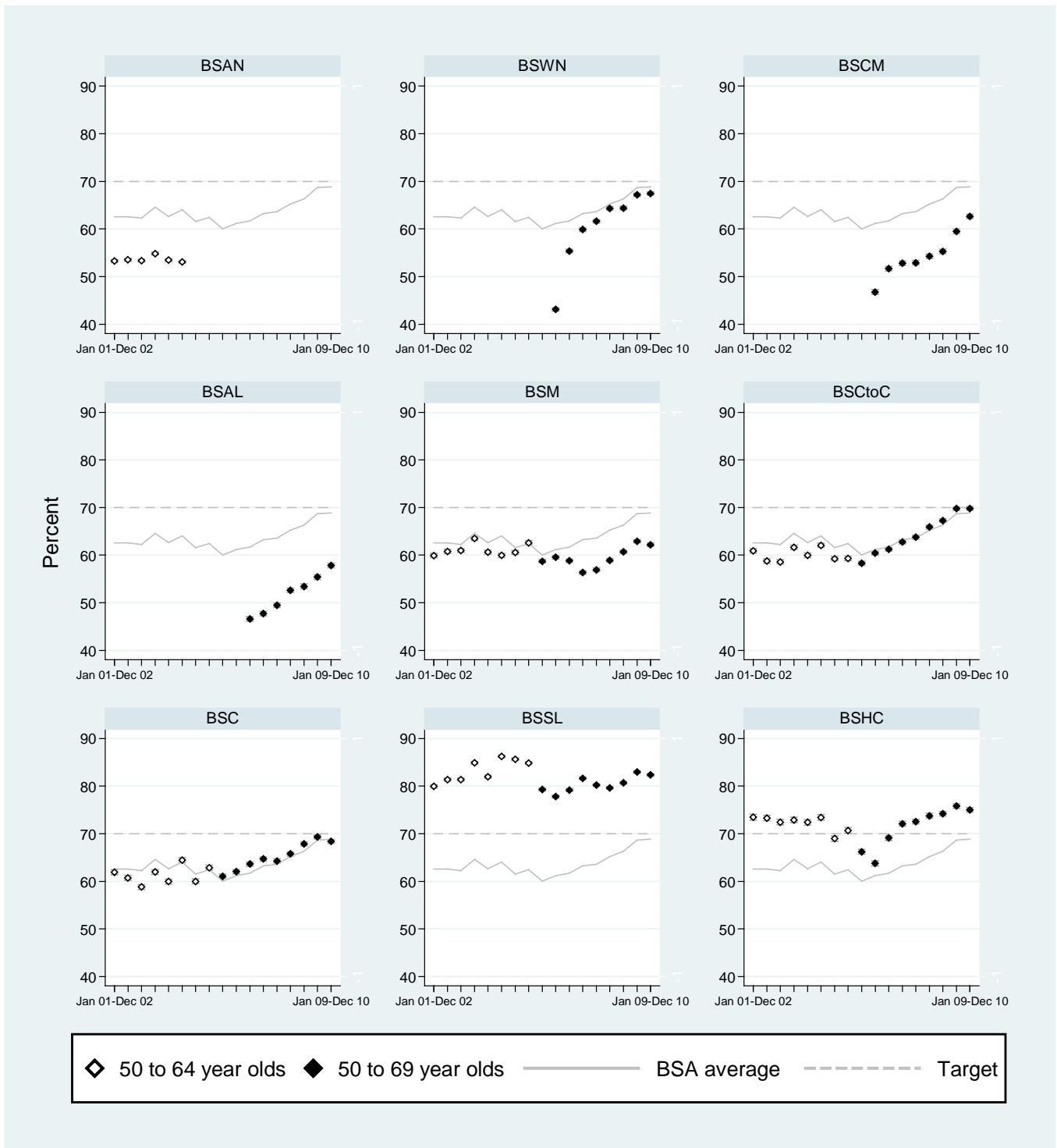


Figure 1a.1: Trends in biennial coverage of eligible women



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)
<i>45-49 years</i>						
BSWN	10,056	18,753	53.6 (52.9-54.3)	8,697	18,753	46.4 (45.7-47.1)
BSCM	6,957	11,293	61.6 (60.7-62.5)	4,336	11,293	38.4 (37.5-39.3)
BSAL	5,689	9,911	57.4 (56.4-58.4)	4,222	9,911	42.6 (41.6-43.6)
BSM	8,240	13,631	60.5 (59.6-61.3)	5,391	13,631	39.5 (38.7-40.4)
BSCtoC	6,921	13,364	51.8 (50.9-52.6)	6,443	13,364	48.2 (47.4-49.1)
BSC	6,262	11,312	55.4 (54.4-56.3)	5,050	11,312	44.6 (43.7-45.6)
BSSL	10,122	23,730	42.7 (42.0-43.3)	13,608	23,730	57.3 (56.7-58.0)
BSHC	3,724	7,259	51.3 (50.1-52.5)	3,535	7,259	48.7 (47.5-49.9)
BSA Total	57,971	109,253	53.1 (52.8-53.4)	51,282	109,253	46.9 (46.6-47.2)
<i>50-69 years</i>						
BSWN	6,822	52,573	13.0 (12.7-13.3)	45,751	52,573	87.0 (86.7-87.3)
BSCM	5,097	29,197	17.5 (17.0-17.9)	24,100	29,197	82.5 (82.1-83.0)
BSAL	4,127	25,127	16.4 (16.0-16.9)	21,000	25,127	83.6 (83.1-84.0)
BSM	5,350	47,569	11.2 (11.0-11.5)	42,219	47,569	88.8 (88.5-89.0)
BSCtoC	4,613	44,089	10.5 (10.2-10.8)	39,476	44,089	89.5 (89.2-89.8)
BSC	3,557	34,453	10.3 (10.0-10.7)	30,896	34,453	89.7 (89.3-90.0)
BSSL	2,884	70,139	4.1 (4.0-4.3)	67,255	70,139	95.9 (95.7-96.0)
BSHC	1,331	25,318	5.3 (5.0-5.5)	23,987	25,318	94.7 (94.5-95.0)
BSA Total	33,781	328,465	10.3 (10.2-10.4)	294,684	328,465	89.7 (89.6-89.8)

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

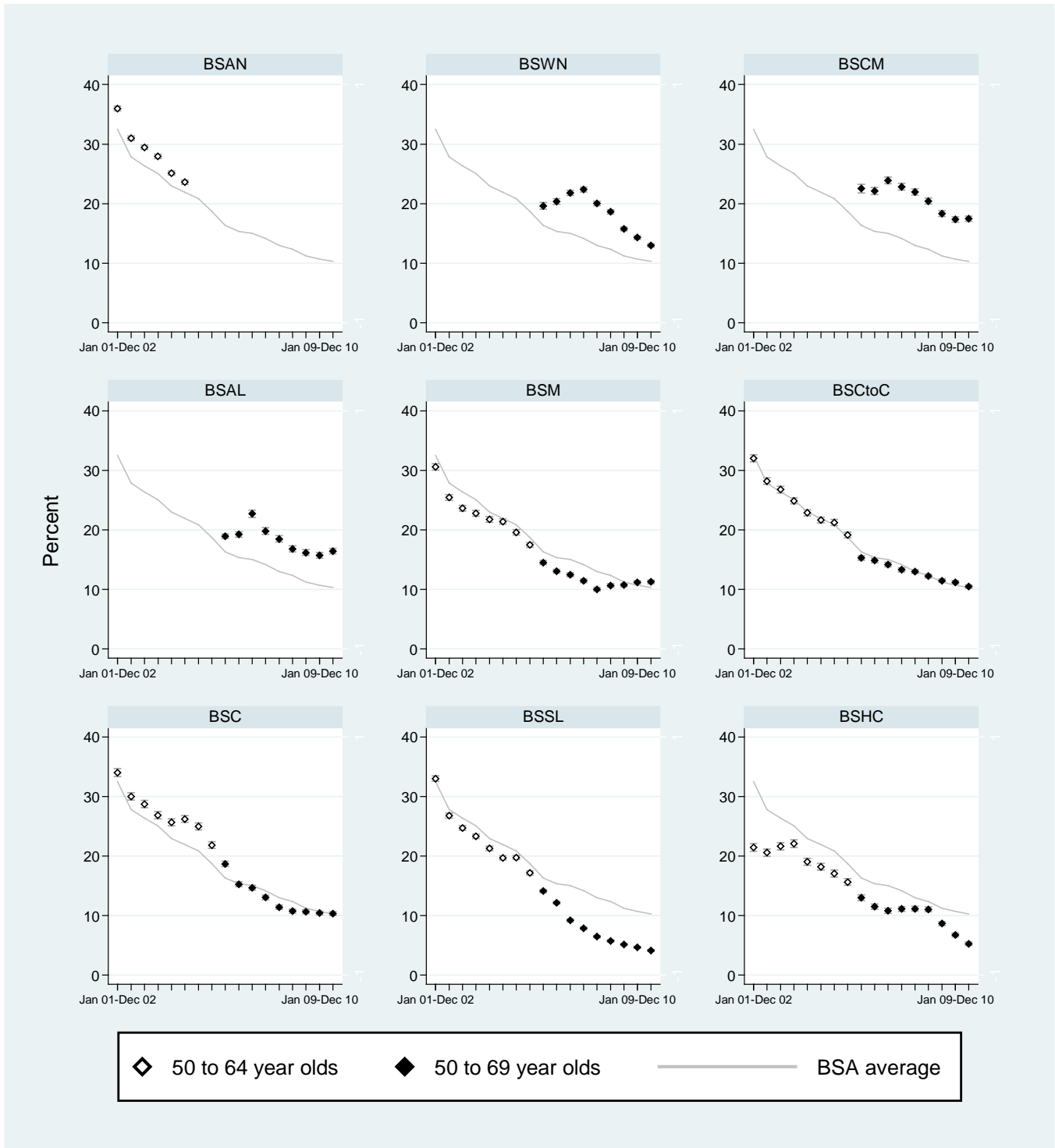
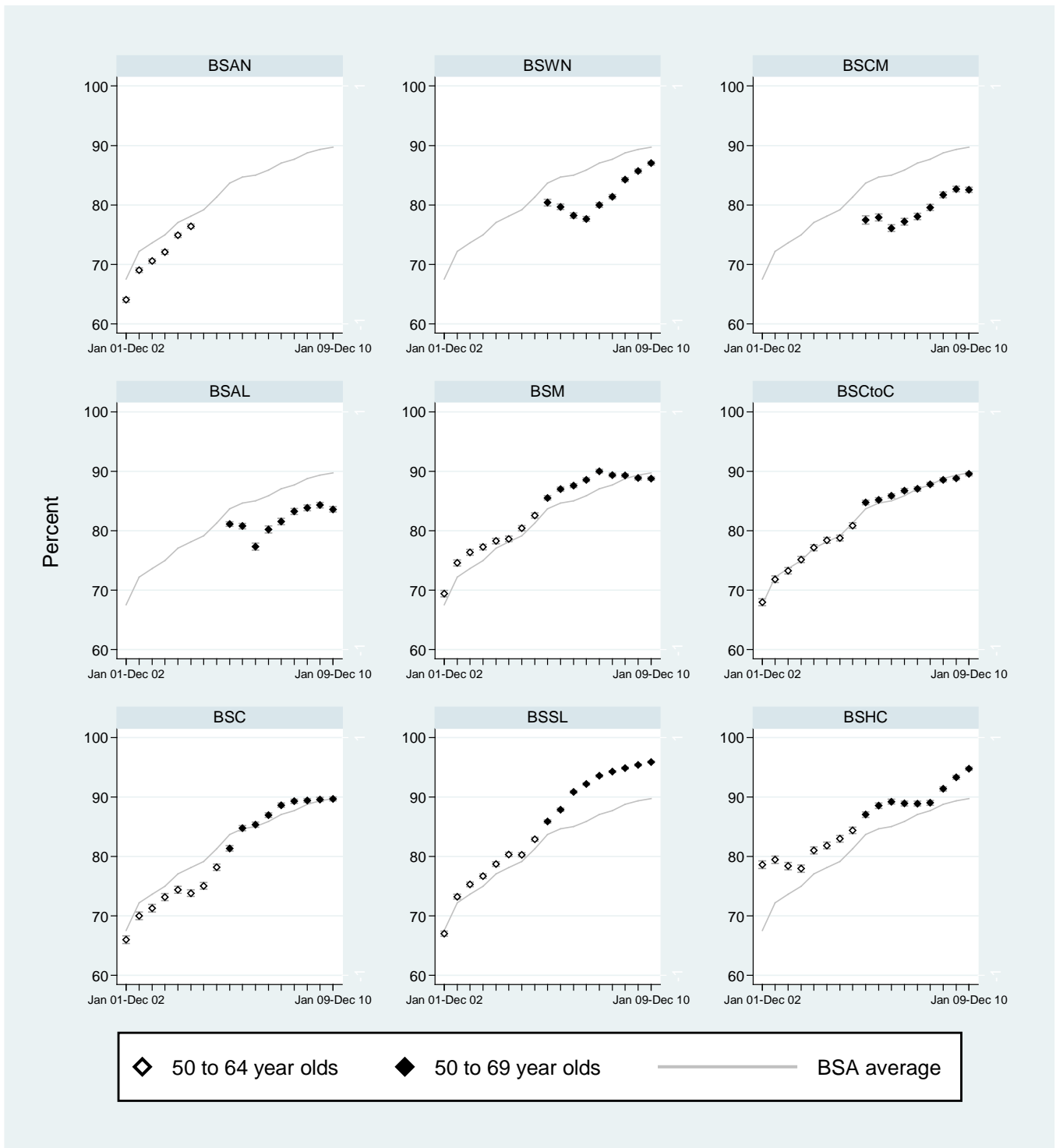


Figure 1a.2: Percentage of subsequent screens for each screening biennium



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, 2 years

	Fixed site screens	Number of women screened	% (95%CI)	Mobile site screens	Number of women screened	% (95%CI)
<i>45-49 years</i>						
BSWN	16,269	18,753	86.8 (86.3-87.2)	2,484	18,753	13.2 (12.8-13.7)
BSCM	7,904	11,293	70.0 (69.1-70.8)	3,389	11,293	30.0 (29.2-30.9)
BSAL	7,955	9,911	80.3 (79.5-81.0)	1,956	9,911	19.7 (19.0-20.5)
BSM	9,129	13,631	67.0 (66.2-67.8)	4,502	13,631	33.0 (32.2-33.8)
BSCtoC	11,518	13,364	86.2 (85.6-86.8)	1,846	13,364	13.8 (13.2-14.4)
BSC	8,883	11,312	78.5 (77.8-79.3)	2,429	11,312	21.5 (20.7-22.2)
BSSL	21,173	23,730	89.2 (88.8-89.6)	2,557	23,730	10.8 (10.4-11.2)
BSHC	4,615	7,259	63.6 (62.5-64.7)	2,644	7,259	36.4 (35.3-37.5)
BSA Total	87,446	109,253	80.0 (79.8-80.3)	21,807	109,253	20.0 (19.7-20.2)
<i>50-69 years</i>						
BSWN	45,541	52,573	86.6 (86.3-86.9)	7,032	52,573	13.4 (13.1-13.7)
BSCM	20,863	29,197	71.5 (70.9-72.0)	8,334	29,197	28.5 (28.0-29.1)
BSAL	20,511	25,127	81.6 (81.1-82.1)	4,616	25,127	18.4 (17.9-18.9)
BSM	31,759	47,569	66.8 (66.3-67.2)	15,810	47,569	33.2 (32.8-33.7)
BSCtoC	37,627	44,089	85.3 (85.0-85.7)	6,462	44,089	14.7 (14.3-15.0)
BSC	25,512	34,453	74.0 (73.6-74.5)	8,941	34,453	26.0 (25.5-26.4)
BSSL	62,431	70,139	89.0 (88.8-89.2)	7,708	70,139	11.0 (10.8-11.2)
BSHC	16,406	25,318	64.8 (64.2-65.4)	8,912	25,318	35.2 (34.6-35.8)
BSA Total	260,650	328,465	79.4 (79.2-79.5)	67,815	328,465	20.6 (20.5-20.8)

Poisson 95% confidence intervals presented

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)		
<i>50-54 years</i>								
BSWN	4,623	24,390	19.0 (18.5-19.5)	15,742	24,390	64.5 (63.9-65.1)	xx	*
BSCM	2,703	14,705	18.4 (17.8-19.0)	9,136	14,705	62.1 (61.3-62.9)	xxx	*
BSAL	2,656	14,460	18.4 (17.7-19.0)	7,949	14,460	55.0 (54.2-55.8)	xxx	*
BSM	3,144	23,195	13.6 (13.1-14.0)	12,923	23,195	55.7 (55.1-56.4)	xxx	*
BSCtoC	3,107	19,235	16.2 (15.6-16.7)	12,601	19,235	65.5 (64.8-66.2)	xx	*
BSC	2,318	15,895	14.6 (14.0-15.1)	10,090	15,895	63.5 (62.7-64.2)	xx	*
BSSL	4,702	25,780	18.2 (17.8-18.7)	21,141	25,780	82.0 (81.5-82.5)	✓✓✓	*
BSHC	1,656	10,330	16.0 (15.3-16.8)	7,612	10,330	73.7 (72.8-74.5)	✓✓	*
BSA Total	24,909	147,990	16.8 (16.6-17.0)	97,194	147,990	65.7 (65.4-65.9)	xx	*
<i>55-59 years</i>								
BSWN	3,855	20,450	18.9 (18.3-19.4)	13,722	20,450	67.1 (66.5-67.7)	✓	*
BSCM	2,134	12,530	17.0 (16.4-17.7)	7,789	12,530	62.2 (61.3-63.0)	xxx	*
BSAL	1,935	12,020	16.1 (15.4-16.8)	7,052	12,020	58.7 (57.8-59.6)	xxx	*
BSM	3,212	20,285	15.8 (15.3-16.3)	12,015	20,285	59.2 (58.6-59.9)	xxx	*
BSCtoC	3,416	16,785	20.4 (19.7-21.0)	11,505	16,785	68.5 (67.8-69.2)	✓	*
BSC	2,449	13,275	18.4 (17.8-19.1)	9,289	13,275	70.0 (69.2-70.8)	✓	ns
BSSL	4,494	22,545	19.9 (19.4-20.5)	18,329	22,545	81.3 (80.8-81.8)	✓✓✓	*
BSHC	1,595	8,880	18.0 (17.2-18.8)	6,646	8,880	74.8 (73.9-75.7)	✓✓	*
BSA Total	23,090	126,770	18.2 (18.0-18.4)	86,347	126,770	68.1 (67.9-68.4)	✓	*
<i>60-64 years</i>								
BSWN	3,442	18,795	18.3 (17.8-18.9)	13,059	18,795	69.5 (68.8-70.1)	✓	ns
BSCM	1,634	11,030	14.8 (14.2-15.5)	7,142	11,030	64.8 (63.9-65.6)	xx	*
BSAL	1,636	9,940	16.5 (15.7-17.2)	5,983	9,940	60.2 (59.2-61.2)	xxx	*
BSM	3,612	18,320	19.7 (19.1-20.3)	11,994	18,320	65.5 (64.8-66.2)	xx	*
BSCtoC	3,061	15,170	20.2 (19.5-20.8)	11,350	15,170	74.8 (74.1-75.5)	✓✓	*
BSC	2,105	12,190	17.3 (16.6-18.0)	8,719	12,190	71.5 (70.7-72.3)	✓	*
BSSL	4,199	21,100	19.9 (19.4-20.4)	17,806	21,100	84.4 (83.9-84.9)	✓✓✓	*
BSHC	1,447	8,180	17.7 (16.9-18.5)	6,297	8,180	77.0 (76.1-77.9)	✓✓	*
BSA Total	21,136	114,725	18.4 (18.2-18.6)	82,350	114,725	71.8 (71.5-72.0)	✓	*
<i>65-69 years</i>								
BSWN	2,617	14,330	18.3 (17.6-18.9)	10,050	14,330	70.1 (69.4-70.9)	✓	ns
BSCM	1,183	8,345	14.2 (13.4-14.9)	5,130	8,345	61.5 (60.4-62.5)	xxx	*
BSAL	1,107	7,020	15.8 (14.9-16.6)	4,144	7,020	59.0 (57.9-60.2)	xxx	*
BSM	2,691	14,670	18.3 (17.7-19.0)	10,637	14,670	72.5 (71.8-73.2)	✓	*
BSCtoC	2,398	11,975	20.0 (19.3-20.8)	8,633	11,975	72.1 (71.3-72.9)	✓	*
BSC	1,519	9,000	16.9 (16.1-17.7)	6,355	9,000	70.6 (69.7-71.6)	✓	ns
BSSL	2,941	15,720	18.7 (18.1-19.3)	12,863	15,720	81.8 (81.2-82.4)	✓✓✓	*
BSHC	1,120	6,365	17.6 (16.7-18.6)	4,763	6,365	74.8 (73.7-75.9)	✓✓	*
BSA Total	15,576	87,425	17.8 (17.6-18.1)	62,575	87,425	71.6 (71.3-71.9)	✓	*

Note: Eligible populations are 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)
<i>Maori</i>						
BSWN	547	3,520	15.5 (14.4-16.8)	2,237	3,520	63.6 (61.9-65.1)
BSCM	451	2,510	18.0 (16.5-19.5)	1,356	2,510	54.0 (52.1-56.0)
BSAL	198	1,170	16.9 (14.8-19.2)	649	1,170	55.5 (52.6-58.3)
BSM	434	5,380	8.1 (7.4-8.8)	2,124	5,380	39.5 (38.2-40.8)
BSCtoC	514	4,105	12.5 (11.5-13.6)	2,015	4,105	49.1 (47.5-50.6)
BSC	289	2,010	14.4 (12.9-16.0)	1,104	2,010	54.9 (52.7-57.1)
BSSL	374	1,645	22.7 (20.7-24.8)	1,368	1,645	83.2 (81.3-84.9)
BSHC	86	745	11.5 (9.3-14.1)	358	745	48.1 (44.4-51.7)
BSA Total	2,893	21,085	13.7 (13.3-14.2)	11,211	21,085	53.2 (52.5-53.8)
<i>Pacific</i>						
BSWN	270	1,325	20.4 (18.2-22.6)	940	1,325	70.9 (68.4-73.4)
BSCM	610	2,965	20.6 (19.1-22.1)	1,931	2,965	65.1 (63.4-66.8)
BSAL	386	1,790	21.6 (19.7-23.5)	1,122	1,790	62.7 (60.4-64.9)
BSM	35	400	8.7 (6.2-12.0)	160	400	40.0 (35.2-45.0)
BSCtoC	65	340	19.1 (15.1-23.7)	184	340	54.1 (48.7-59.5)
BSC	165	1,080	15.3 (13.2-17.6)	557	1,080	51.6 (48.5-54.6)
BSSL	59	335	17.6 (13.7-22.1)	241	335	71.9 (66.8-76.7)
BSHC	14	60	23.3 (13.4-36.0)	42	60	70.0 (56.8-81.2)
BSA Total	1,604	8,295	19.3 (18.5-20.2)	5,177	8,295	62.4 (61.4-63.5)
<i>Other</i>						
BSWN	4,272	22,640	18.9 (18.4-19.4)	15,545	22,640	68.7 (68.1-69.3)
BSCM	2,136	11,820	18.1 (17.4-18.8)	8,006	11,820	67.7 (66.9-68.6)
BSAL	2,788	14,530	19.2 (18.6-19.8)	8,121	14,530	55.9 (55.1-56.7)
BSM	2,792	18,940	14.7 (14.2-15.3)	11,293	18,940	59.6 (58.9-60.3)
BSCtoC	2,944	15,965	18.4 (17.8-19.1)	11,130	15,965	69.7 (69.0-70.4)
BSC	2,377	15,340	15.5 (14.9-16.1)	9,601	15,340	62.6 (61.8-63.4)
BSSL	6,292	25,590	24.6 (24.1-25.1)	22,064	25,590	86.2 (85.8-86.6)
BSHC	1,193	10,250	11.6 (11.0-12.3)	6,845	10,250	66.8 (65.9-67.7)
BSA Total	24,794	135,075	18.4 (18.1-18.6)	92,605	135,075	68.6 (68.3-68.8)

Poisson 95% confidence intervals presented

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)		
<i>Maori</i>								
BSWN	1,293	7,350	17.6 (16.7-18.5)	4,933	7,350	67.1 (66.0-68.2)	✓	*
BSCM	896	5,240	17.1 (16.1-18.1)	3,137	5,240	59.9 (58.5-61.2)	xxx	*
BSAL	431	2,780	15.5 (14.2-16.9)	1,399	2,780	50.3 (48.4-52.2)	xxx	*
BSM	1,281	12,230	10.5 (9.9-11.0)	5,845	12,230	47.8 (46.9-48.7)	xxx	*
BSCtoC	1,364	9,095	15.0 (14.3-15.7)	5,000	9,095	55.0 (53.9-56.0)	xxx	*
BSC	641	4,120	15.6 (14.5-16.7)	2,442	4,120	59.3 (57.8-60.8)	xxx	*
BSSL	636	3,450	18.4 (17.2-19.8)	2,918	3,450	84.6 (83.3-85.8)	✓✓✓	*
BSHC	216	1,405	15.4 (13.5-17.4)	843	1,405	60.0 (57.4-62.6)	xxx	*
BSA Total	6,758	45,670	14.8 (14.5-15.1)	26,517	45,670	58.1 (57.6-58.5)	xxx	*
<i>Pacific</i>								
BSWN	623	2,885	21.6 (20.1-23.1)	2,108	2,885	73.1 (71.4-74.7)	✓	*
BSCM	1,187	6,420	18.5 (17.5-19.5)	4,078	6,420	63.5 (62.3-64.7)	xx	*
BSAL	759	3,790	20.0 (18.8-21.3)	2,458	3,790	64.9 (63.3-66.4)	xx	*
BSM	108	810	13.3 (11.1-15.9)	476	810	58.8 (55.3-62.2)	xxx	*
BSCtoC	146	700	20.9 (17.9-24.1)	418	700	59.7 (56.0-63.4)	xxx	*
BSC	426	2,540	16.8 (15.3-18.3)	1,388	2,540	54.6 (52.7-56.6)	xxx	*
BSSL	132	615	21.5 (18.3-24.9)	487	615	79.2 (75.8-82.3)	✓✓✓	*
BSHC	30	180	16.7 (11.5-22.9)	128	180	71.1 (63.9-77.6)	✓	ns
BSA Total	3,411	17,940	19.0 (18.4-19.6)	11,541	17,940	64.3 (63.6-65.0)	xx	*
<i>Other</i>								
BSWN	12,596	67,730	18.6 (18.3-18.9)	45,478	67,730	67.1 (66.8-67.5)	✓	*
BSCM	5,571	34,950	15.9 (15.6-16.3)	21,980	34,950	62.9 (62.4-63.4)	xxx	*
BSAL	6,122	36,870	16.6 (16.2-17.0)	21,224	36,870	57.6 (57.1-58.1)	xxx	*
BSM	11,257	63,430	17.7 (17.5-18.0)	41,188	63,430	64.9 (64.6-65.3)	xx	*
BSCtoC	10,448	53,370	19.6 (19.2-19.9)	38,577	53,370	72.3 (71.9-72.7)	✓	*
BSC	7,305	43,700	16.7 (16.4-17.1)	30,531	43,700	69.9 (69.4-70.3)	✓	ns
BSSL	15,538	81,080	19.2 (18.9-19.4)	66,597	81,080	82.1 (81.9-82.4)	✓✓✓	*
BSHC	5,555	32,170	17.3 (16.9-17.7)	24,303	32,170	75.5 (75.1-76.0)	✓✓	*
BSA Total	74,392	413,300	18.0 (17.9-18.1)	289,878	413,300	70.1 (70.0-70.3)	✓	ns

Note: Eligible populations are 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 Māori

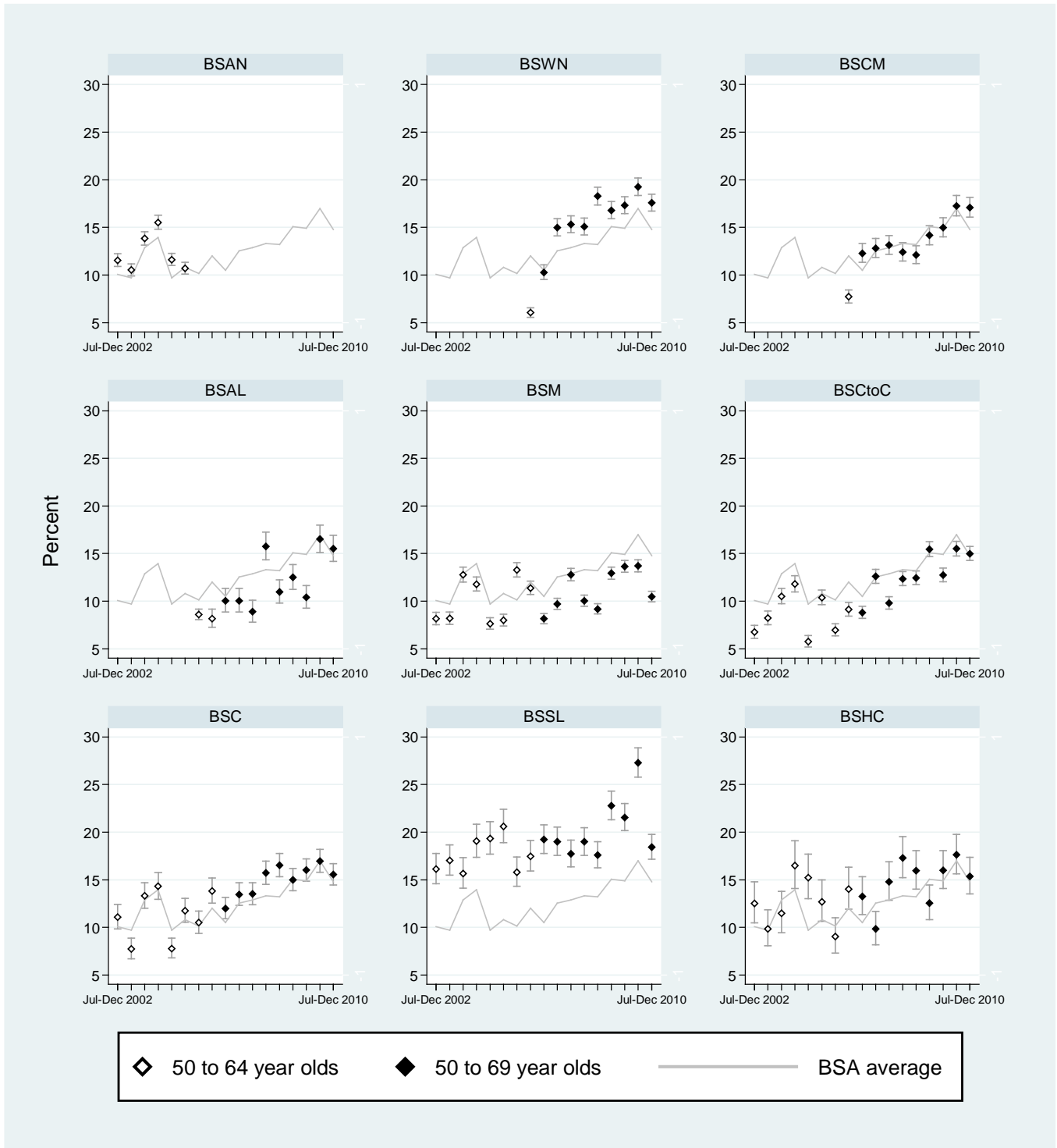


Figure 1a7.1: Trends in biennial coverage for Māori

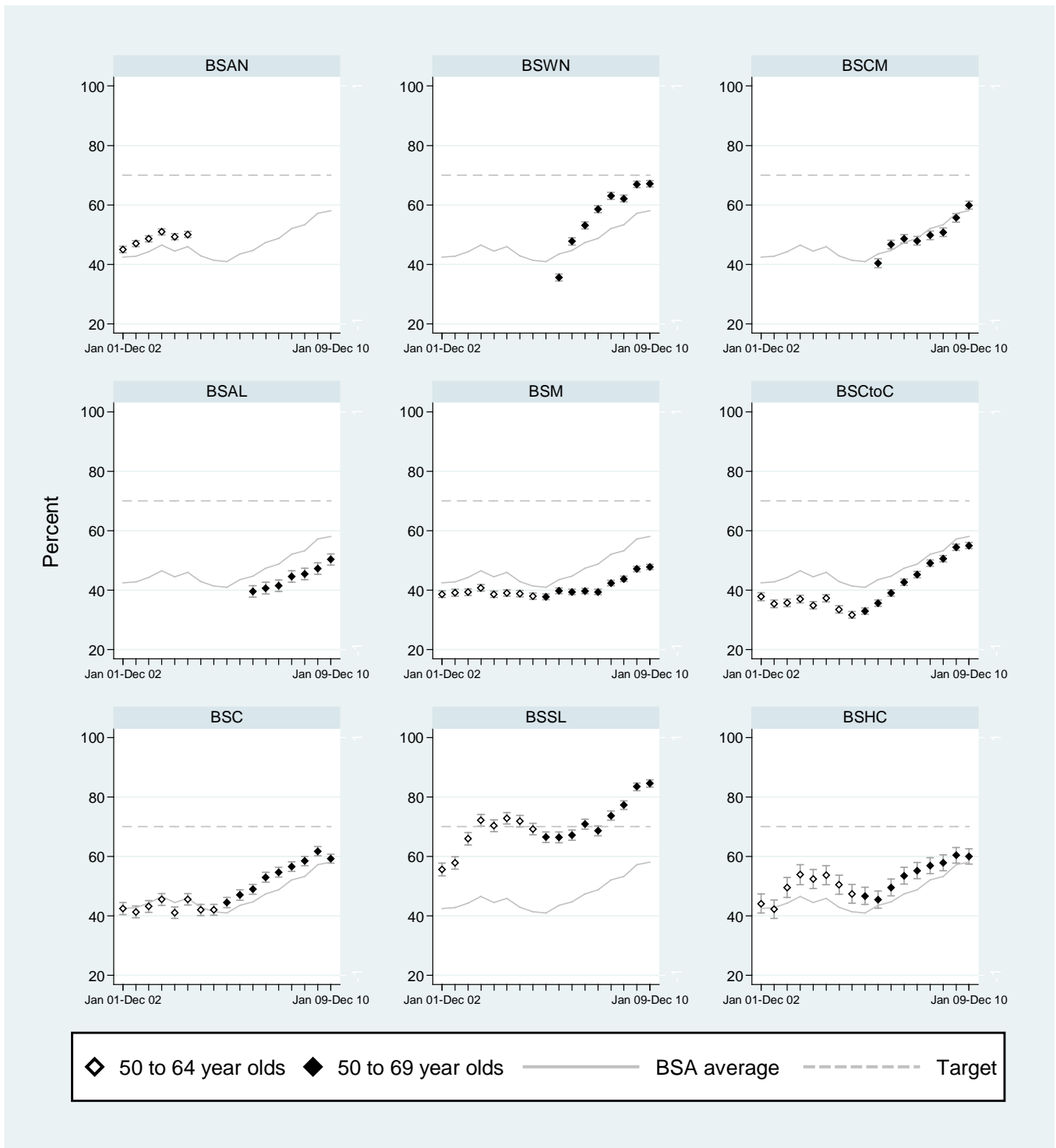


Figure 1a7.1: Trends in 6 month coverage for Pacific

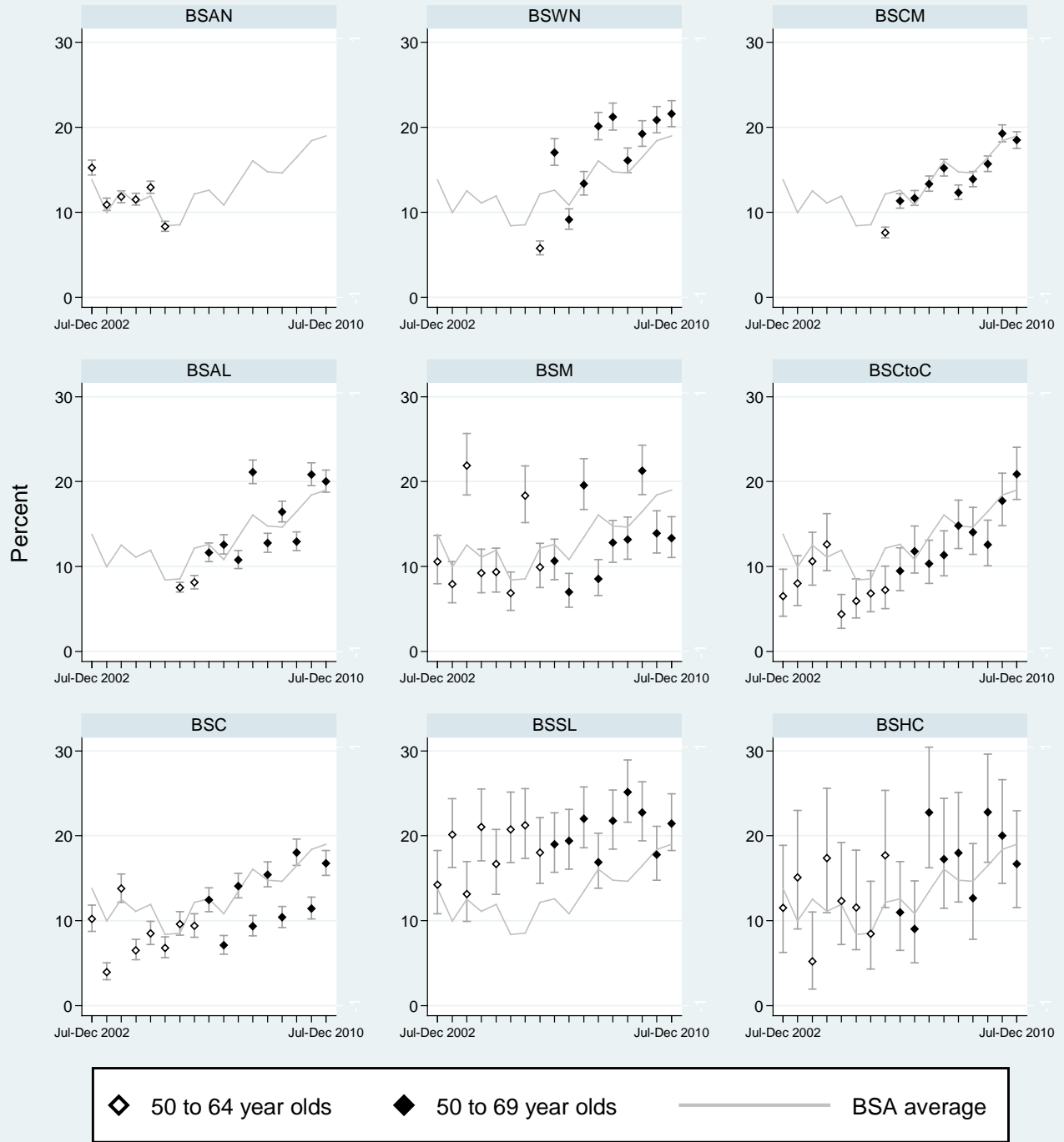


Figure 1a7.1: Trends in biennial coverage for Pacific

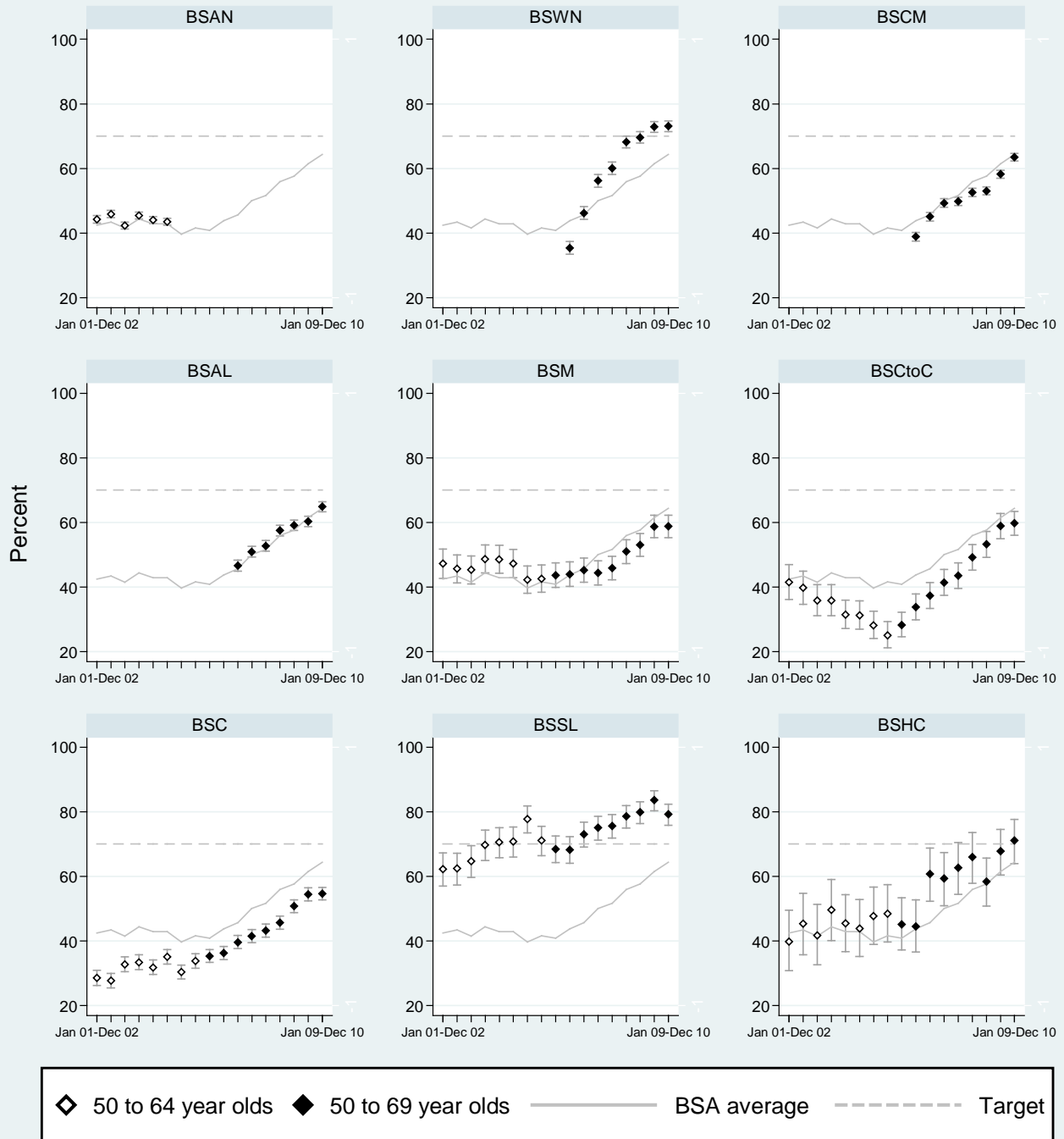


Figure 1a7.1: Trends in 6 month coverage for other ethnic groups

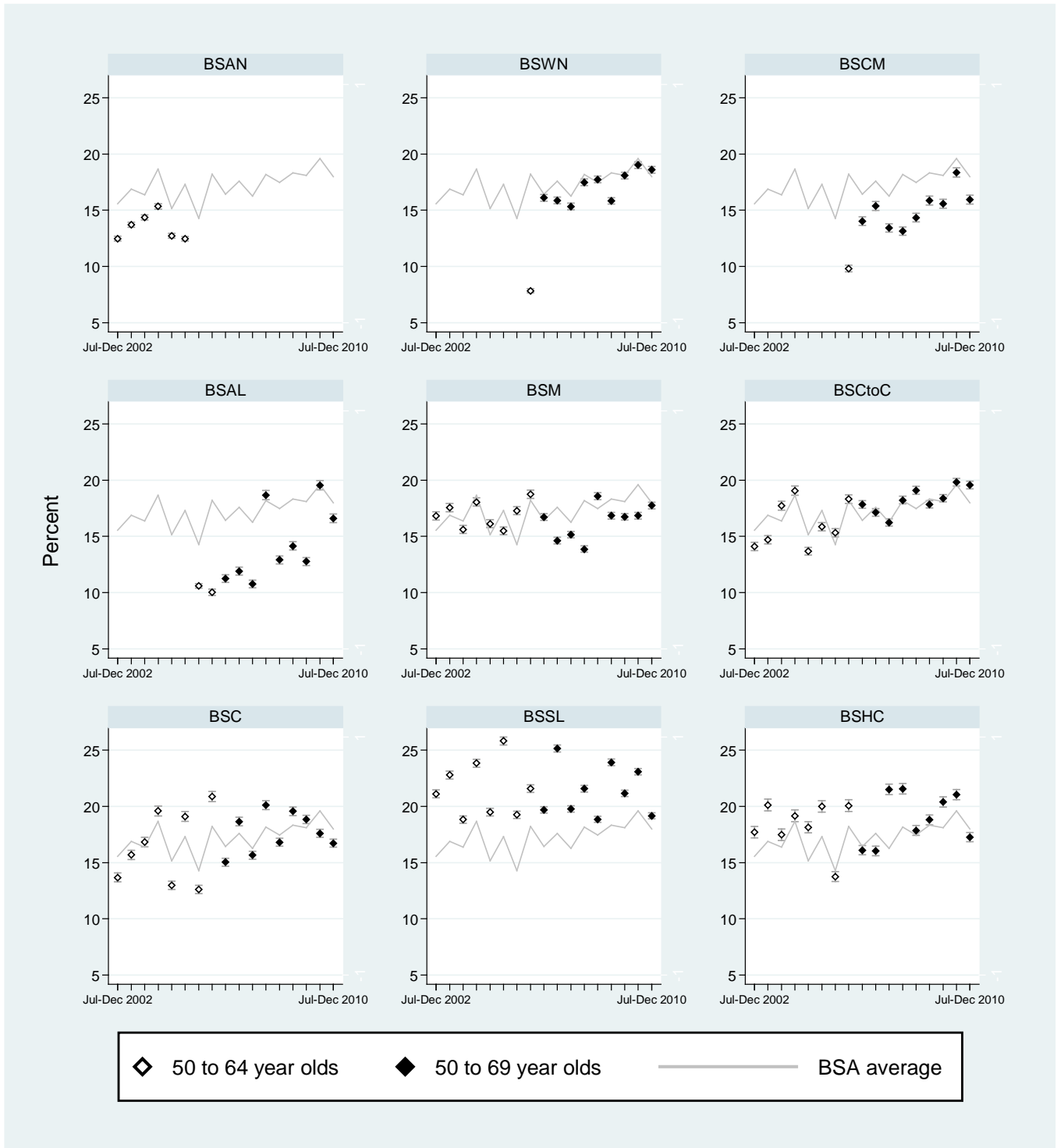
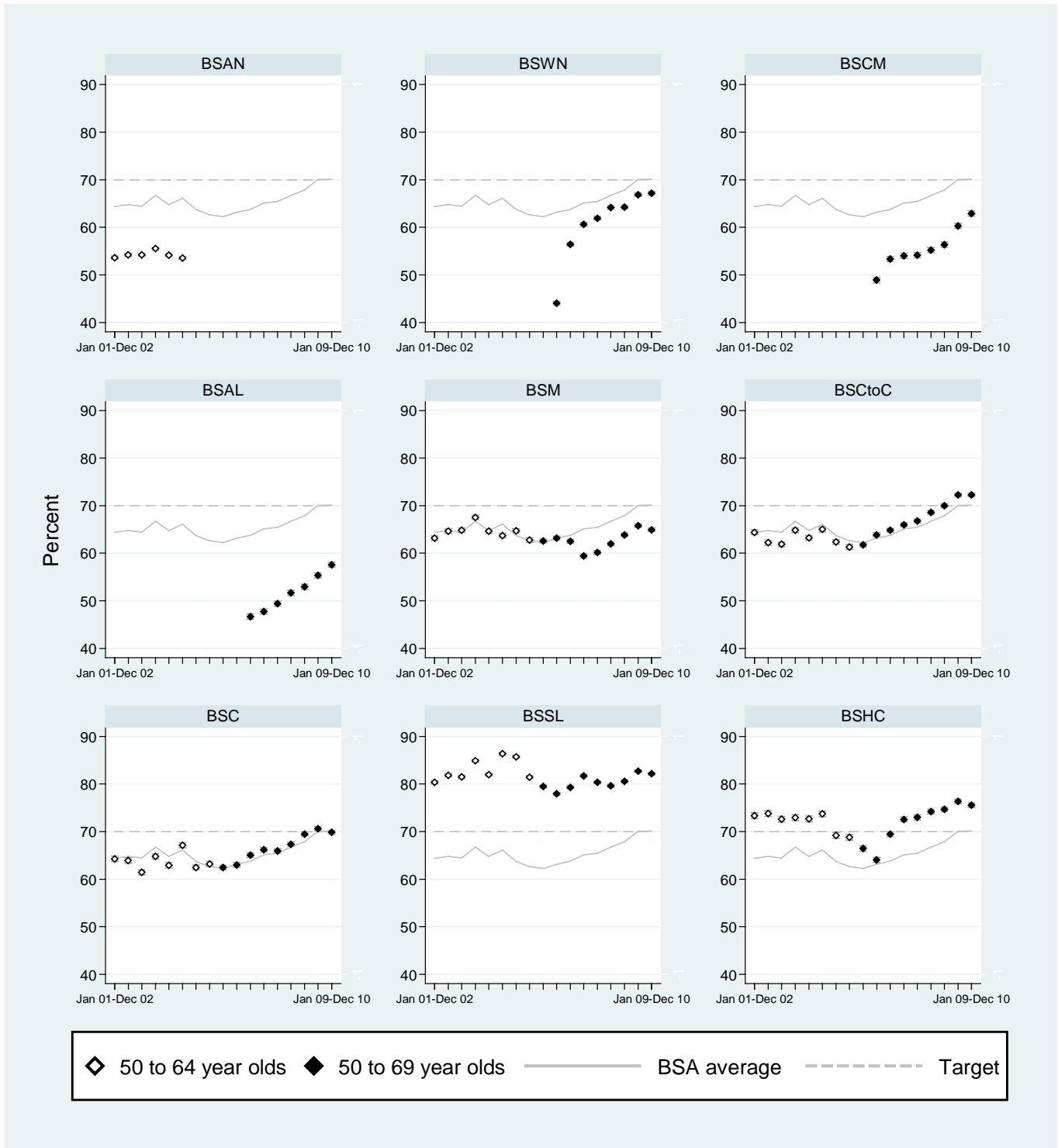


Figure 1a7.1: Trends in biennial coverage for other ethnic groups



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)		
<i>45-49 years</i>								
BSWN	2,323	4,529	51.3 (49.8-52.8)	7,583	15,124	50.1 (49.3-50.9)		
BSCM	847	1,660	51.0 (48.6-53.5)	3,487	7,922	44.0 (42.9-45.1)		
BSAL	1,183	2,201	53.7 (51.6-55.8)	3,373	6,830	49.4 (48.2-50.6)		
BSM	1,089	2,543	42.8 (40.9-44.8)	4,423	10,853	40.8 (39.8-41.7)		
BSCtoC	1,602	2,787	57.5 (55.6-59.3)	5,711	10,572	54.0 (53.1-55.0)		
BSC	1,447	2,622	55.2 (53.3-57.1)	4,400	8,587	51.2 (50.2-52.3)		
BSSL	4,278	7,775	55.0 (53.9-56.1)	11,964	23,078	51.8 (51.2-52.5)		
BSHC	793	1,495	53.0 (50.5-55.6)	3,237	6,554	49.4 (48.2-50.6)		
BSA Total	13,562	25,612	53.0 (52.3-53.6)	44,178	89,520	49.3 (49.0-49.7)		
<i>50-69 years</i>								
BSWN	8,782	9,968	88.1 (87.5-88.7)	27,447	32,870	83.5 (83.1-83.9)	✓	*
BSCM	3,651	4,358	83.8 (82.6-84.9)	12,816	17,374	73.8 (73.1-74.4)	xxx	*
BSAL	4,615	5,129	90.0 (89.1-90.8)	13,056	15,613	83.6 (83.0-84.2)	✓	*
BSM	6,945	8,428	82.4 (81.6-83.2)	22,743	29,861	76.2 (75.7-76.6)	xxx	*
BSCtoC	7,663	8,252	92.9 (92.3-93.4)	24,892	27,809	89.5 (89.1-89.9)	✓✓	*
BSC	5,990	6,579	91.0 (90.3-91.7)	19,902	22,773	87.4 (87.0-87.8)	✓	*
BSSL	12,760	13,817	92.4 (91.9-92.8)	43,676	48,858	89.4 (89.1-89.7)	✓✓	*
BSHC	4,153	4,448	93.4 (92.6-94.1)	15,265	17,176	88.9 (88.4-89.3)	✓	*
BSA Total	54,559	60,979	89.5 (89.2-89.7)	179,797	212,334	84.7 (84.5-84.8)	✓	*

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)		
<i>45-49 years</i>								
BSWN	1,977	2,323	85.1 (83.6-86.5)	6,064	7,583	80.0 (79.0-80.9)		
BSCM	697	847	82.3 (79.5-84.8)	2,698	3,487	77.4 (75.9-78.8)		
BSAL	1,120	1,183	94.7 (93.2-95.9)	3,135	3,373	92.9 (92.0-93.8)		
BSM	623	1,089	57.2 (54.2-60.2)	2,490	4,423	56.3 (54.8-57.8)		
BSCtoC	1,297	1,602	81.0 (79.0-82.9)	4,539	5,711	79.5 (78.4-80.5)		
BSC	1,227	1,447	84.8 (82.8-86.6)	3,816	4,400	86.7 (85.7-87.7)		
BSSL	3,779	4,278	88.3 (87.3-89.3)	10,383	11,964	86.8 (86.2-87.4)		
BSHC	711	793	89.7 (87.3-91.7)	2,694	3,237	83.2 (81.9-84.5)		
BSA Total	11,431	13,562	84.3 (83.7-84.9)	35,819	44,178	81.1 (80.7-81.4)		
<i>50-69 years</i>								
BSWN	7,521	8,782	85.6 (84.9-86.4)	22,502	27,447	82.0 (81.5-82.4)	✓✓	*
BSCM	3,220	3,651	88.2 (87.1-89.2)	10,023	12,816	78.2 (77.5-78.9)	✓	*
BSAL	4,348	4,615	94.2 (93.5-94.9)	12,032	13,056	92.2 (91.7-92.6)	✓✓✓	*
BSM	4,612	6,945	66.4 (65.3-67.5)	12,776	22,743	56.2 (55.5-56.8)	xxx	*
BSCtoC	6,186	7,663	80.7 (79.8-81.6)	20,095	24,892	80.7 (80.2-81.2)	✓✓	*
BSC	5,098	5,990	85.1 (84.2-86.0)	17,256	19,902	86.7 (86.2-87.2)	✓✓✓	*
BSSL	11,515	12,760	90.2 (89.7-90.8)	38,771	43,676	88.8 (88.5-89.1)	✓✓✓	*
BSHC	3,618	4,153	87.1 (86.1-88.1)	12,852	15,265	84.2 (83.6-84.8)	✓✓✓	*
BSA Total	46,118	54,559	84.5 (84.2-84.8)	146,307	179,797	81.4 (81.2-81.6)	✓✓	*

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

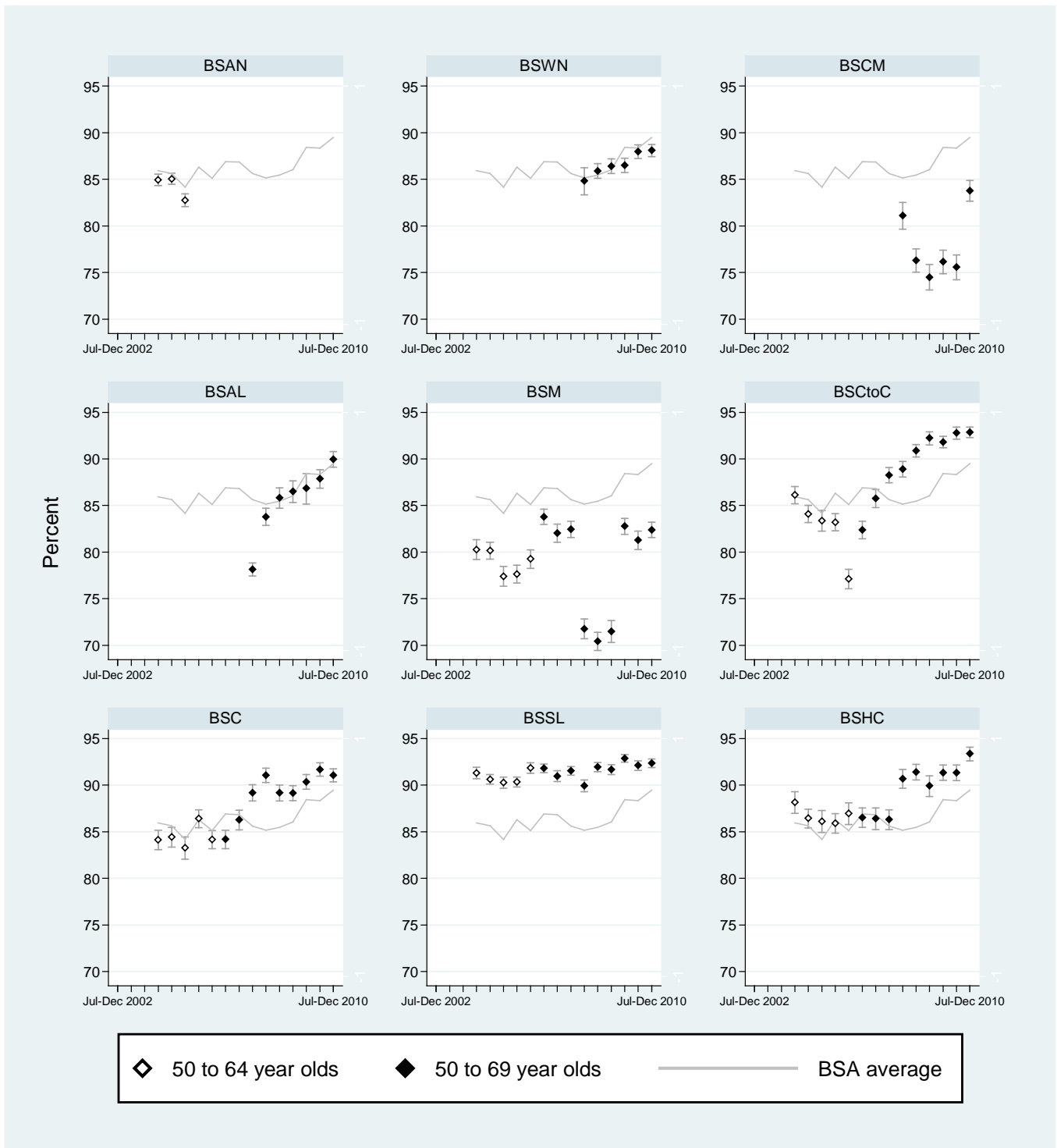
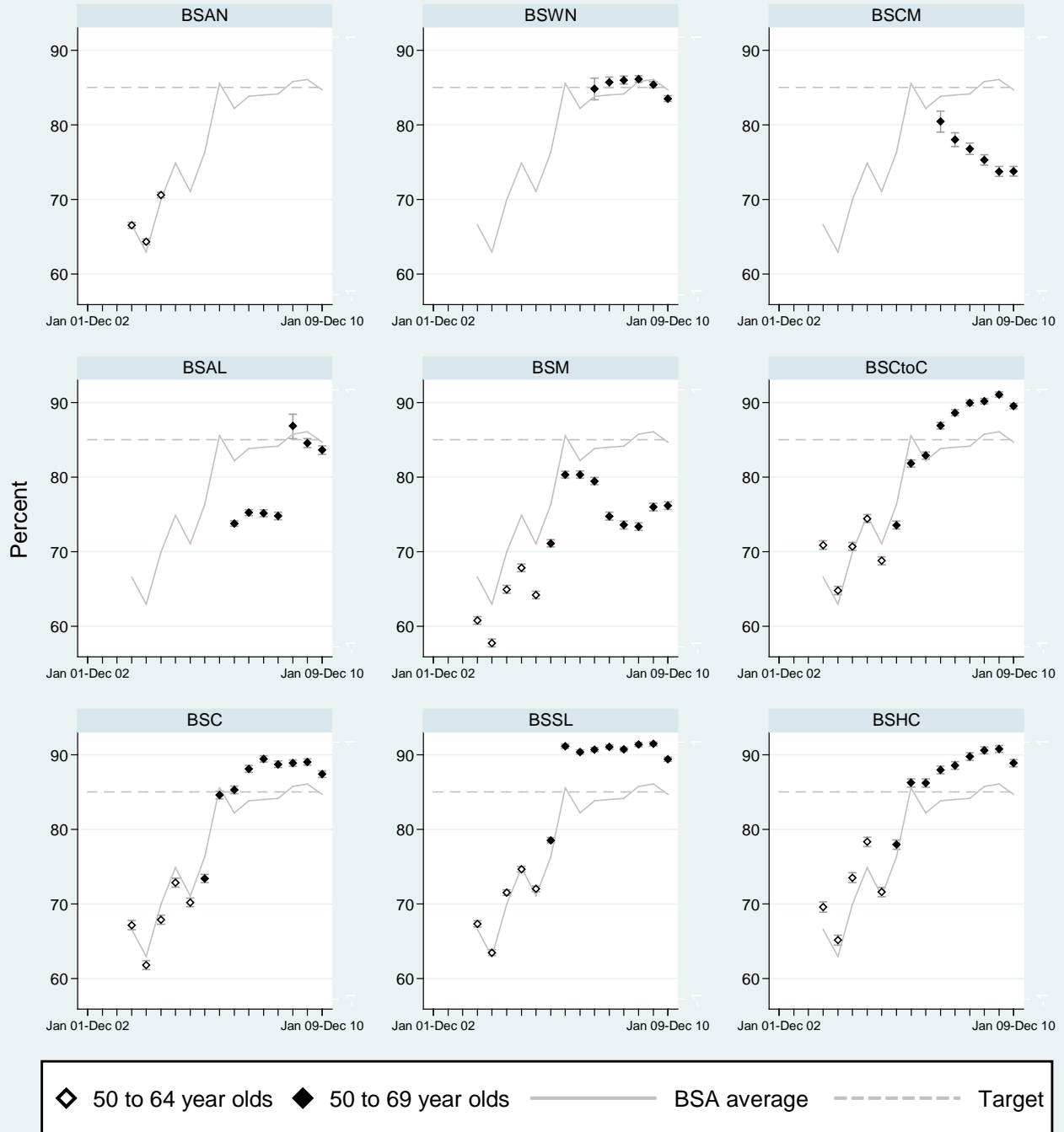


Figure 1b.1: Trends in re-screen rates (within 27 months), 2 years



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)
<i>45-49 years</i>						
BSWN	3,833	4,298	89.2 (88.2-90.1)	676	804	84.1 (81.4-86.5)
BSCM	1,707	2,337	73.0 (71.2-74.8)	739	860	85.9 (83.4-88.2)
BSAL	2,242	2,507	89.4 (88.2-90.6)	753	875	86.1 (83.6-88.3)
BSM	1,951	2,155	90.5 (89.2-91.7)	998	1,113	89.7 (87.7-91.4)
BSCtoC	2,736	2,950	92.7 (91.7-93.7)	479	579	82.7 (79.4-85.7)
BSC	1,604	1,955	82.0 (80.3-83.7)	784	883	88.8 (86.5-90.8)
BSSL	5,470	6,072	90.1 (89.3-90.8)	607	667	91.0 (88.6-93.1)
BSHC	630	745	84.6 (81.8-87.1)	489	554	88.3 (85.3-90.8)
BSA Total	20,173	23,019	87.6 (87.2-88.1)	5,525	6,335	87.2 (86.4-88.0)
<i>50-69 years</i>						
BSWN	11,269	12,780	88.2 (87.6-88.7)	1,403	1,757	79.9 (77.9-81.7)
BSCM	4,053	5,600	72.4 (71.2-73.5)	1,749	2,054	85.2 (83.5-86.7)
BSAL	4,874	5,516	88.4 (87.5-89.2)	1,582	1,818	87.0 (85.4-88.5)
BSM	7,811	8,487	92.0 (91.4-92.6)	3,695	4,172	88.6 (87.6-89.5)
BSCtoC	8,954	9,687	92.4 (91.9-93.0)	1,857	2,295	80.9 (79.2-82.5)
BSC	5,090	5,971	85.2 (84.3-86.1)	2,075	2,420	85.7 (84.3-87.1)
BSSL	13,523	15,009	90.1 (89.6-90.6)	1,155	1,327	87.0 (85.1-88.8)
BSHC	3,194	3,872	82.5 (81.3-83.7)	1,669	1,946	85.8 (84.1-87.3)
BSA Total	58,768	66,922	87.8 (87.6-88.1)	15,185	17,789	85.4 (84.8-85.9)

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)
<i>45-49 years</i>						
BSWN	14,776	16,269	90.8 (90.4-91.3)	2,166	2,484	87.2 (85.8-88.5)
BSCM	6,190	7,904	78.3 (77.4-79.2)	2,970	3,389	87.6 (86.5-88.7)
BSAL	7,235	7,955	90.9 (90.3-91.6)	1,708	1,956	87.3 (85.8-88.8)
BSM	8,322	9,129	91.2 (90.6-91.7)	3,900	4,502	86.6 (85.6-87.6)
BSCtoC	10,742	11,518	93.3 (92.8-93.7)	1,524	1,846	82.6 (80.7-84.3)
BSC	7,571	8,883	85.2 (84.5-86.0)	2,159	2,429	88.9 (87.6-90.1)
BSSL	19,953	21,173	94.2 (93.9-94.5)	2,299	2,557	89.9 (88.7-91.1)
BSHC	3,718	4,615	80.6 (79.4-81.7)	2,392	2,644	90.5 (89.3-91.6)
BSA Total	78,507	87,446	89.8 (89.6-90.0)	19,118	21,807	87.7 (87.2-88.1)
<i>50-69 years</i>						
BSWN	41,272	45,541	90.6 (90.4-90.9) ✓✓✓ *	5,969	7,032	84.9 (84.0-85.7) ✓✓ *
BSCM	16,396	20,863	78.6 (78.0-79.1) ✓ *	7,226	8,334	86.7 (86.0-87.4) ✓✓ *
BSAL	18,935	20,511	92.3 (91.9-92.7) ✓✓✓ *	4,012	4,616	86.9 (85.9-87.9) ✓✓ *
BSM	29,477	31,759	92.8 (92.5-93.1) ✓✓✓ *	13,876	15,810	87.8 (87.2-88.3) ✓✓ *
BSCtoC	35,403	37,627	94.1 (93.8-94.3) ✓✓✓ *	5,208	6,462	80.6 (79.6-81.6) ✓ ns
BSC	22,267	25,512	87.3 (86.9-87.7) ✓✓ *	8,052	8,941	90.1 (89.4-90.7) ✓✓✓ *
BSSL	58,775	62,431	94.1 (94.0-94.3) ✓✓✓ *	6,839	7,708	88.7 (88.0-89.4) ✓✓✓ *
BSHC	12,830	16,406	78.2 (77.6-78.8) ✓ *	7,878	8,912	88.4 (87.7-89.1) ✓✓✓ *
BSA Total	235,355	260,650	90.3 (90.2-90.4) ✓✓✓ *	59,060	67,815	87.1 (86.8-87.3) ✓✓ *

* 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)
<i>45-49 years</i>						
BSWN	4	4,298	0.1 (0.0-0.2)	1	804	0.1 (0.0-0.7)
BSCM	8	2,337	0.3 (0.1-0.7)	18	860	2.1 (1.2-3.3)
BSAL	5	2,507	0.2 (0.1-0.5)	34	875	3.9 (2.7-5.4)
BSM	19	2,155	0.9 (0.5-1.4)	37	1,113	3.3 (2.3-4.6)
BSCtoC	0	2,950	0.0 (0.0-0.1)	24	579	4.1 (2.7-6.2)
BSC	13	1,955	0.7 (0.4-1.1)	34	883	3.9 (2.7-5.4)
BSSL	9	6,072	0.1 (0.1-0.3)	5	667	0.7 (0.2-1.7)
BSHC	0	745	0.0 (0.0-0.5)	9	554	1.6 (0.7-3.1)
BSA Total	58	23,019	0.3 (0.2-0.3)	162	6,335	2.6 (2.2-3.0)
<i>50-69 years</i>						
BSWN	1	12,780	0.0 (0.0-0.0)	1	1,757	0.1 (0.0-0.3)
BSCM	6	5,600	0.1 (0.0-0.2)	28	2,054	1.4 (0.9-2.0)
BSAL	12	5,516	0.2 (0.1-0.4)	61	1,818	3.4 (2.6-4.3)
BSM	62	8,487	0.7 (0.6-0.9)	169	4,172	4.1 (3.5-4.7)
BSCtoC	3	9,687	0.0 (0.0-0.1)	94	2,295	4.1 (3.3-5.0)
BSC	21	5,971	0.4 (0.2-0.5)	80	2,420	3.3 (2.6-4.1)
BSSL	14	15,009	0.1 (0.1-0.2)	15	1,327	1.1 (0.6-1.9)
BSHC	2	3,872	0.1 (0.0-0.2)	43	1,946	2.2 (1.6-3.0)
BSA Total	121	66,922	0.2 (0.2-0.2)	491	17,789	2.8 (2.5-3.0)

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)
<i>45-49 years</i>						
BSWN	9	16,269	0.1 (0.0-0.1)	27	2,484	1.1 (0.7-1.6)
BSCM	14	7,904	0.2 (0.1-0.3)	71	3,389	2.1 (1.6-2.6)
BSAL	30	7,955	0.4 (0.3-0.5)	71	1,956	3.6 (2.8-4.6)
BSM	76	9,129	0.8 (0.7-1.0)	234	4,502	5.2 (4.6-5.9)
BSCtoC	22	11,518	0.2 (0.1-0.3)	71	1,846	3.8 (3.0-4.9)
BSC	72	8,883	0.8 (0.6-1.0)	121	2,429	5.0 (4.1-6.0)
BSSL	37	21,173	0.2 (0.1-0.2)	38	2,557	1.5 (1.1-2.0)
BSHC	5	4,615	0.1 (0.0-0.3)	75	2,644	2.8 (2.2-3.6)
BSA Total	265	87,446	0.3 (0.3-0.3)	708	21,807	3.2 (3.0-3.5)
<i>50-69 years</i>						
BSWN	7	45,541	0.0 (0.0-0.0) ✓✓✓ *	96	7,032	1.4 (1.1-1.7) ✓✓✓ *
BSCM	13	20,863	0.1 (0.0-0.1) ✓✓✓ *	173	8,334	2.1 (1.8-2.4) ✓✓✓ *
BSAL	56	20,511	0.3 (0.2-0.4) ✓✓✓ *	201	4,616	4.4 (3.8-5.0) xxx *
BSM	232	31,759	0.7 (0.6-0.8) xxx *	840	15,810	5.3 (5.0-5.7) xxx *
BSCtoC	86	37,627	0.2 (0.2-0.3) ✓✓✓ *	242	6,462	3.7 (3.3-4.2) xxx *
BSC	117	25,512	0.5 (0.4-0.5) ✓ ns	371	8,941	4.1 (3.7-4.6) xxx *
BSSL	84	62,431	0.1 (0.1-0.2) ✓✓✓ *	101	7,708	1.3 (1.1-1.6) ✓✓✓ *
BSHC	15	16,406	0.1 (0.1-0.2) ✓✓✓ *	254	8,912	2.9 (2.5-3.2) ✓ ns
BSA Total	610	260,650	0.2 (0.2-0.3) ✓✓✓ *	2,278	67,815	3.4 (3.2-3.5) xxx *

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

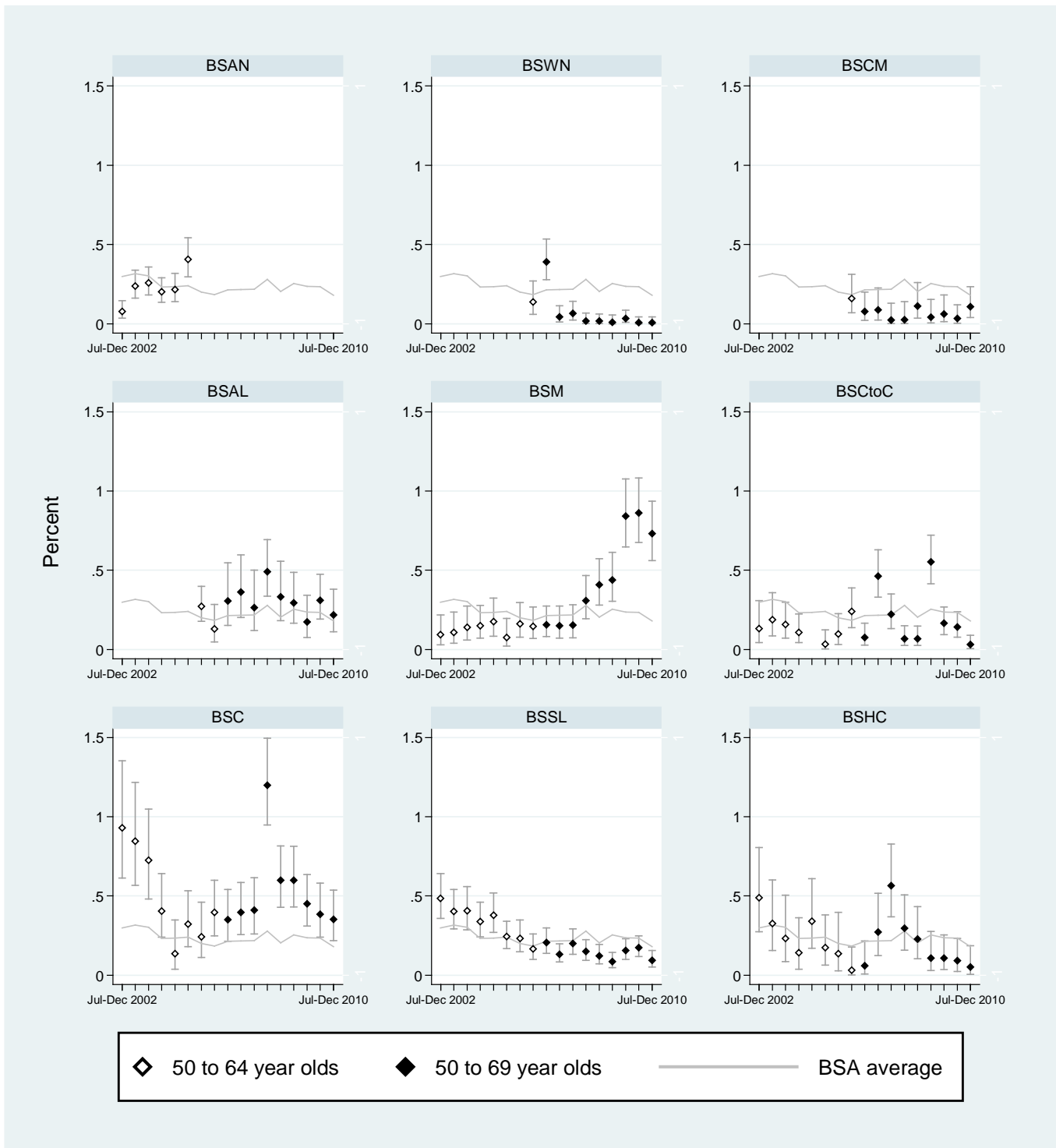


Figure 2b1: Technical recall rates for fixed sites, women aged 50-69 years, fixed sites, 2 years

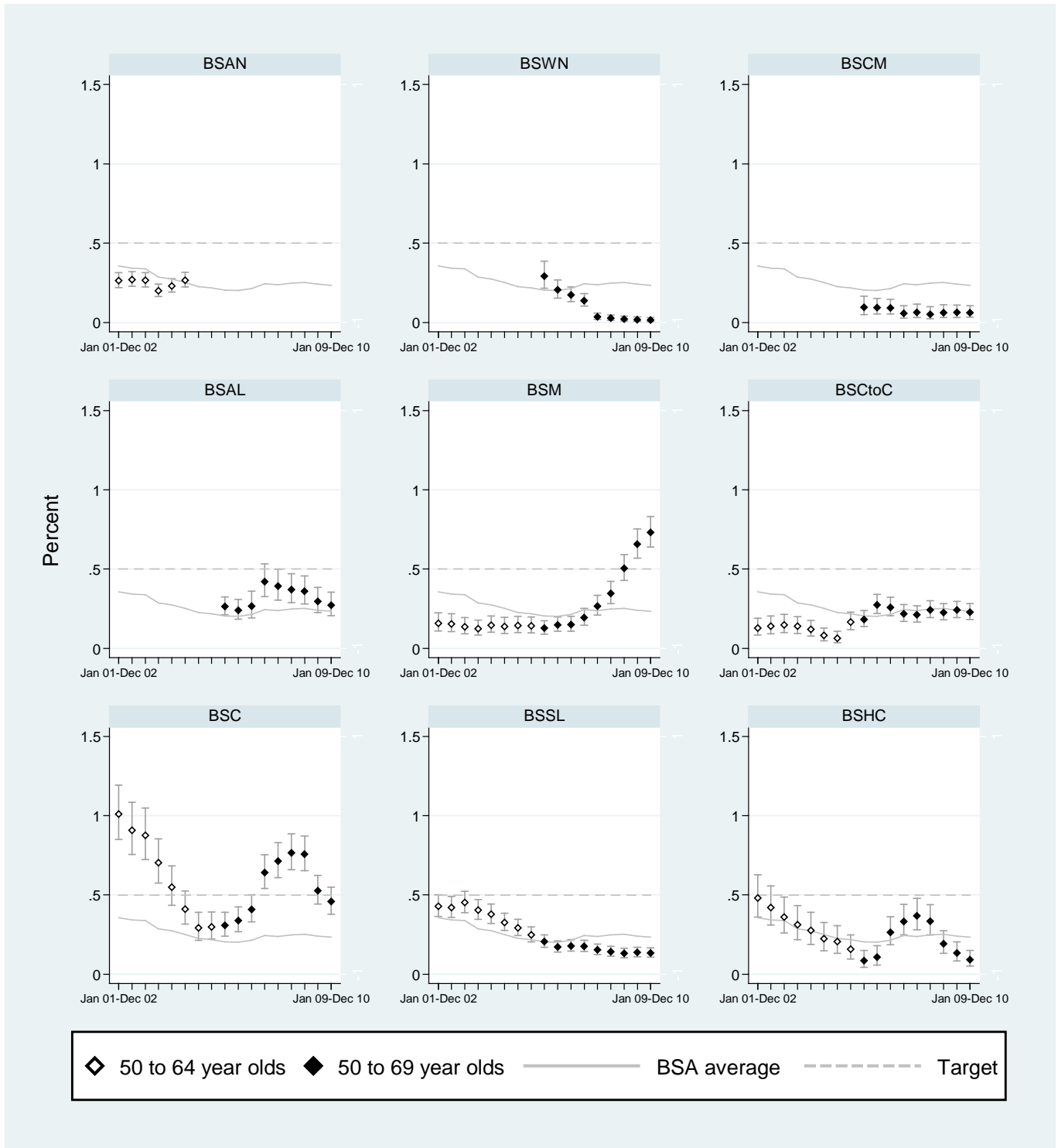


Figure 2b.2: Technical recall rates for mobile sites, women aged 50-69 years, 6 months

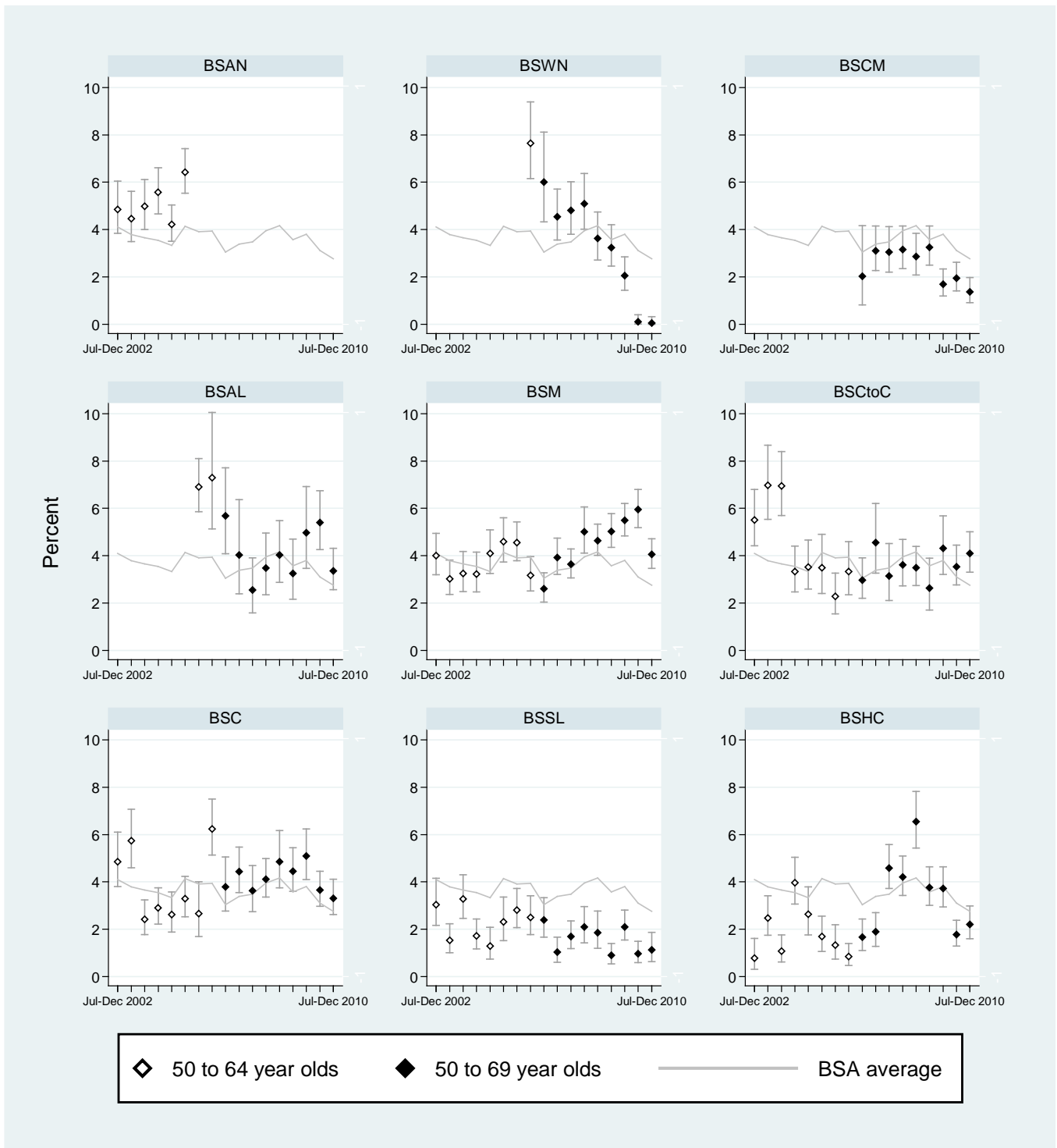
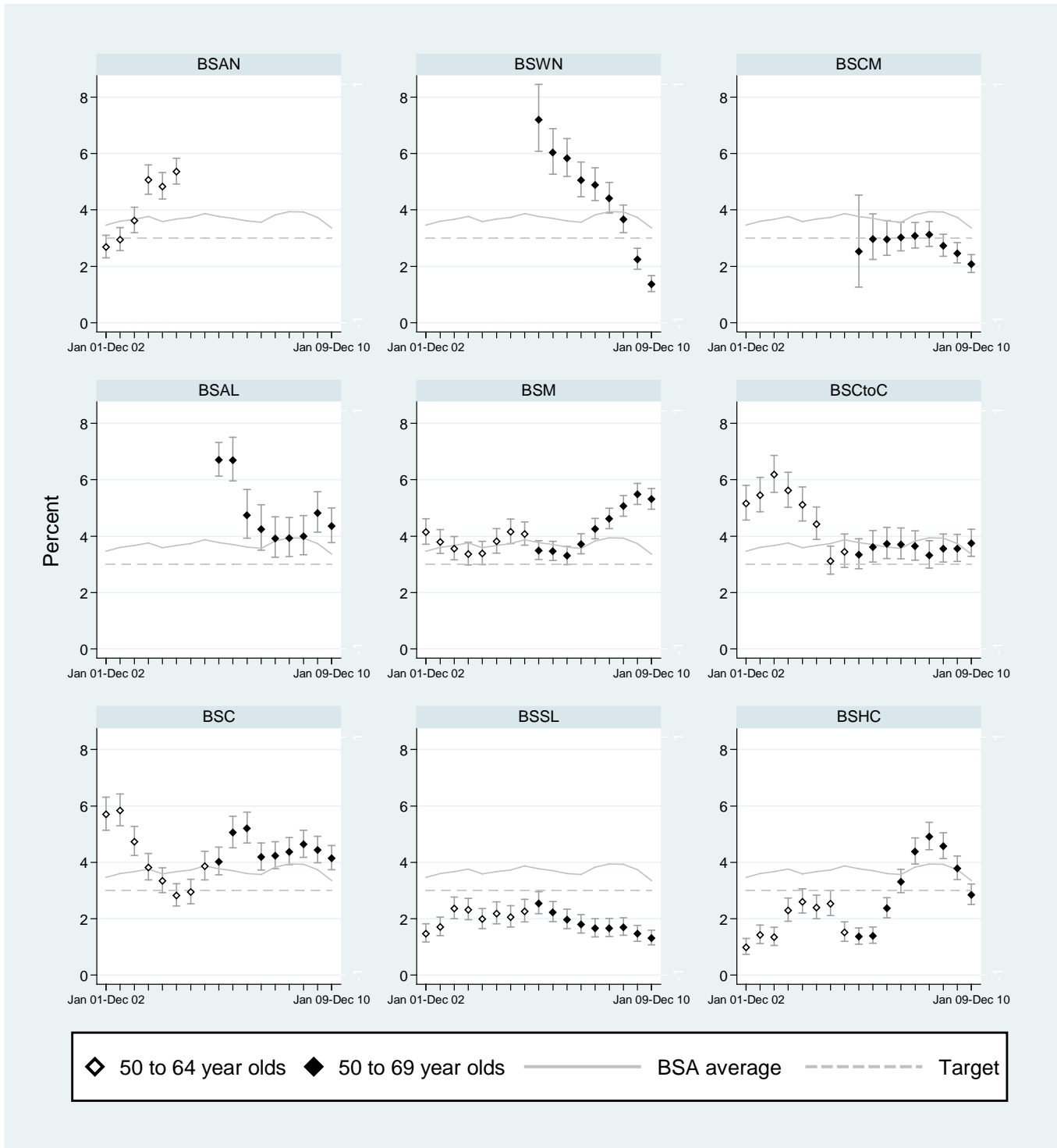


Figure 2b.2: Technical recall rates for mobile sites, women aged 50-69 years, 2 years



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)
<i>45-49 years</i>						
BSWN	151	18,012	0.8 (0.7-1.0)	28	3,441	0.8 (0.5-1.2)
BSCM	138	10,425	1.3 (1.1-1.6)	28	3,665	0.8 (0.5-1.1)
BSAL	78	10,568	0.7 (0.6-0.9)	8	3,719	0.2 (0.1-0.4)
BSM	97	9,027	1.1 (0.9-1.3)	32	4,628	0.7 (0.5-1.0)
BSCtoC	56	12,133	0.5 (0.3-0.6)	23	2,501	0.9 (0.6-1.4)
BSC	118	8,378	1.4 (1.2-1.7)	15	3,697	0.4 (0.2-0.7)
BSSL	166	25,273	0.7 (0.6-0.8)	13	2,784	0.5 (0.2-0.8)
BSHC	36	3,154	1.1 (0.8-1.6)	1	2,309	0.0 (0.0-0.2)
BSA Total	840	96,970	0.9 (0.8-0.9)	148	26,744	0.6 (0.5-0.7)
<i>50-69 years</i>						
BSWN	448	53,542	0.8 (0.8-0.9)	62	7,599	0.8 (0.6-1.0)
BSCM	381	24,953	1.5 (1.4-1.7)	31	8,752	0.4 (0.2-0.5)
BSAL	160	23,184	0.7 (0.6-0.8)	12	7,662	0.2 (0.1-0.3)
BSM	305	35,070	0.9 (0.8-1.0)	147	17,424	0.8 (0.7-1.0)
BSCtoC	231	39,801	0.6 (0.5-0.7)	70	9,953	0.7 (0.5-0.9)
BSC	271	25,143	1.1 (1.0-1.2)	18	10,212	0.2 (0.1-0.3)
BSSL	387	62,003	0.6 (0.6-0.7)	36	5,597	0.6 (0.5-0.9)
BSHC	159	16,418	1.0 (0.8-1.1)	15	8,213	0.2 (0.1-0.3)
BSA Total	2,342	280,114	0.8 (0.8-0.9)	391	75,412	0.5 (0.5-0.6)

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)
<i>45-49 years</i>						
BSWN	578	70,283	0.8 (0.8-0.9)	118	10,631	1.1 (0.9-1.3)
BSCM	524	34,832	1.5 (1.4-1.6)	83	14,587	0.6 (0.5-0.7)
BSAL	317	35,422	0.9 (0.8-1.0)	10	8,524	0.1 (0.1-0.2)
BSM	391	38,322	1.0 (0.9-1.1)	174	19,372	0.9 (0.8-1.0)
BSCtoC	318	48,555	0.7 (0.6-0.7)	77	7,992	1.0 (0.8-1.2)
BSC	455	37,831	1.2 (1.1-1.3)	22	10,300	0.2 (0.1-0.3)
BSSL	636	91,772	0.7 (0.6-0.7)	43	10,681	0.4 (0.3-0.5)
BSHC	229	20,115	1.1 (1.0-1.3)	35	10,975	0.3 (0.2-0.4)
BSA Total	3,448	377,132	0.9 (0.9-0.9)	562	93,062	0.6 (0.6-0.7)
<i>50-69 years</i>						
BSWN	1,668	198,279	0.8 (0.8-0.9) ✓✓✓ *	314	30,209	1.0 (0.9-1.2) ✓✓✓ *
BSCM	1,435	92,191	1.6 (1.5-1.6) ✓✓✓ *	162	36,049	0.4 (0.4-0.5) ✓✓✓ *
BSAL	701	93,036	0.8 (0.7-0.8) ✓✓✓ *	37	20,665	0.2 (0.1-0.2) ✓✓✓ *
BSM	1,115	133,105	0.8 (0.8-0.9) ✓✓✓ *	608	69,743	0.9 (0.8-0.9) ✓✓✓ *
BSCtoC	1,116	160,228	0.7 (0.7-0.7) ✓✓✓ *	185	28,060	0.7 (0.6-0.8) ✓✓✓ *
BSC	1,020	108,099	0.9 (0.9-1.0) ✓✓✓ *	60	38,488	0.2 (0.1-0.2) ✓✓✓ *
BSSL	1,804	268,123	0.7 (0.6-0.7) ✓✓✓ *	151	32,247	0.5 (0.4-0.5) ✓✓✓ *
BSHC	941	71,669	1.3 (1.2-1.4) ✓✓✓ *	153	37,254	0.4 (0.3-0.5) ✓✓✓ *
BSA Total	9,800	1,124,730	0.9 (0.9-0.9) ✓✓✓ *	1,670	292,715	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)
<i>45-49 years</i>						
BSWN	269	2,657	10.1 (9.0-11.4)	97	2,445	4.0 (3.2-4.8)
BSCM	219	2,109	10.4 (9.1-11.9)	58	1,088	5.3 (4.0-6.9)
BSAL	140	1,943	7.2 (6.1-8.5)	45	1,439	3.1 (2.3-4.2)
BSM	191	1,843	10.4 (8.9-11.9)	64	1,425	4.5 (3.5-5.7)
BSCtoC	86	1,701	5.1 (4.0-6.2)	43	1,828	2.4 (1.7-3.2)
BSC	121	1,509	8.0 (6.7-9.6)	52	1,329	3.9 (2.9-5.1)
BSSL	179	2,319	7.7 (6.6-8.9)	206	4,420	4.7 (4.0-5.3)
BSHC	58	498	11.6 (8.8-15.1)	40	801	5.0 (3.6-6.8)
BSA Total	1,263	14,579	8.7 (8.2-9.2)	605	14,775	4.1 (3.8-4.4)
<i>50-69 years</i>						
BSWN	184	1,681	10.9 (9.4-12.6)	336	12,856	2.6 (2.3-2.9)
BSCM	196	1,519	12.9 (11.2-14.8)	238	6,135	3.9 (3.4-4.4)
BSAL	108	1,475	7.3 (6.0-8.8)	147	5,859	2.5 (2.1-2.9)
BSM	129	1,208	10.7 (8.9-12.7)	355	11,451	3.1 (2.8-3.4)
BSCtoC	75	1,084	6.9 (5.4-8.7)	165	10,898	1.5 (1.3-1.8)
BSC	78	874	8.9 (7.1-11.1)	194	7,517	2.6 (2.2-3.0)
BSSL	49	651	7.5 (5.6-10.0)	485	15,685	3.1 (2.8-3.4)
BSHC	26	265	9.8 (6.4-14.4)	148	5,553	2.7 (2.3-3.1)
BSA Total	845	8,757	9.6 (9.0-10.3)	2068	75,954	2.7 (2.6-2.8)

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)				
<i>45-49 years</i>										
BSWN	1,043	10,056	10.4 (9.8-11.0)	358	8,697	4.1 (3.7-4.6)				
BSCM	776	6,957	11.2 (10.4-12.0)	198	4,336	4.6 (4.0-5.2)				
BSAL	490	5,689	8.6 (7.9-9.4)	165	4,222	3.9 (3.3-4.6)				
BSM	830	8,240	10.1 (9.4-10.8)	284	5,391	5.3 (4.7-5.9)				
BSCtoC	420	6,921	6.1 (5.5-6.7)	150	6,443	2.3 (2.0-2.7)				
BSC	614	6,262	9.8 (9.0-10.6)	243	5,050	4.8 (4.2-5.5)				
BSSL	776	10,122	7.7 (7.1-8.2)	611	13,608	4.5 (4.1-4.9)				
BSHC	462	3,724	12.4 (11.3-13.6)	133	3,535	3.8 (3.2-4.5)				
BSA Total	5,411	57,971	9.3 (9.1-9.6)	2,142	51,282	4.2 (4.0-4.4)				
<i>50-69 years</i>										
BSWN	737	6,822	10.8 (10.0-11.6)	**	*	1,351	45,751	3.0 (2.8-3.1)	✓✓✓	*
BSCM	601	5,097	11.8 (10.9-12.8)	***	*	839	24,100	3.5 (3.2-3.7)	✓✓✓	*
BSAL	420	4,127	10.2 (9.2-11.2)	✓	ns	614	21,000	2.9 (2.7-3.2)	✓✓✓	*
BSM	542	5,350	10.1 (9.3-11.0)	✓	ns	1,436	42,219	3.4 (3.2-3.6)	✓✓✓	*
BSCtoC	319	4,613	6.9 (6.2-7.7)	✓✓✓	*	616	39,476	1.6 (1.4-1.7)	✓✓✓	*
BSC	369	3,557	10.4 (9.3-11.5)	✓	ns	1,053	30,896	3.4 (3.2-3.6)	✓✓✓	*
BSSL	226	2,884	7.8 (6.8-8.9)	✓✓✓	*	1,882	67,255	2.8 (2.7-2.9)	✓✓✓	*
BSHC	155	1,331	11.6 (9.9-13.6)	✓	ns	619	23,987	2.6 (2.4-2.8)	✓✓✓	*
BSA Total	3,369	33,781	10.0 (9.6-10.3)	✓	ns	8,410	294,684	2.9 (2.8-2.9)	✓✓✓	*

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

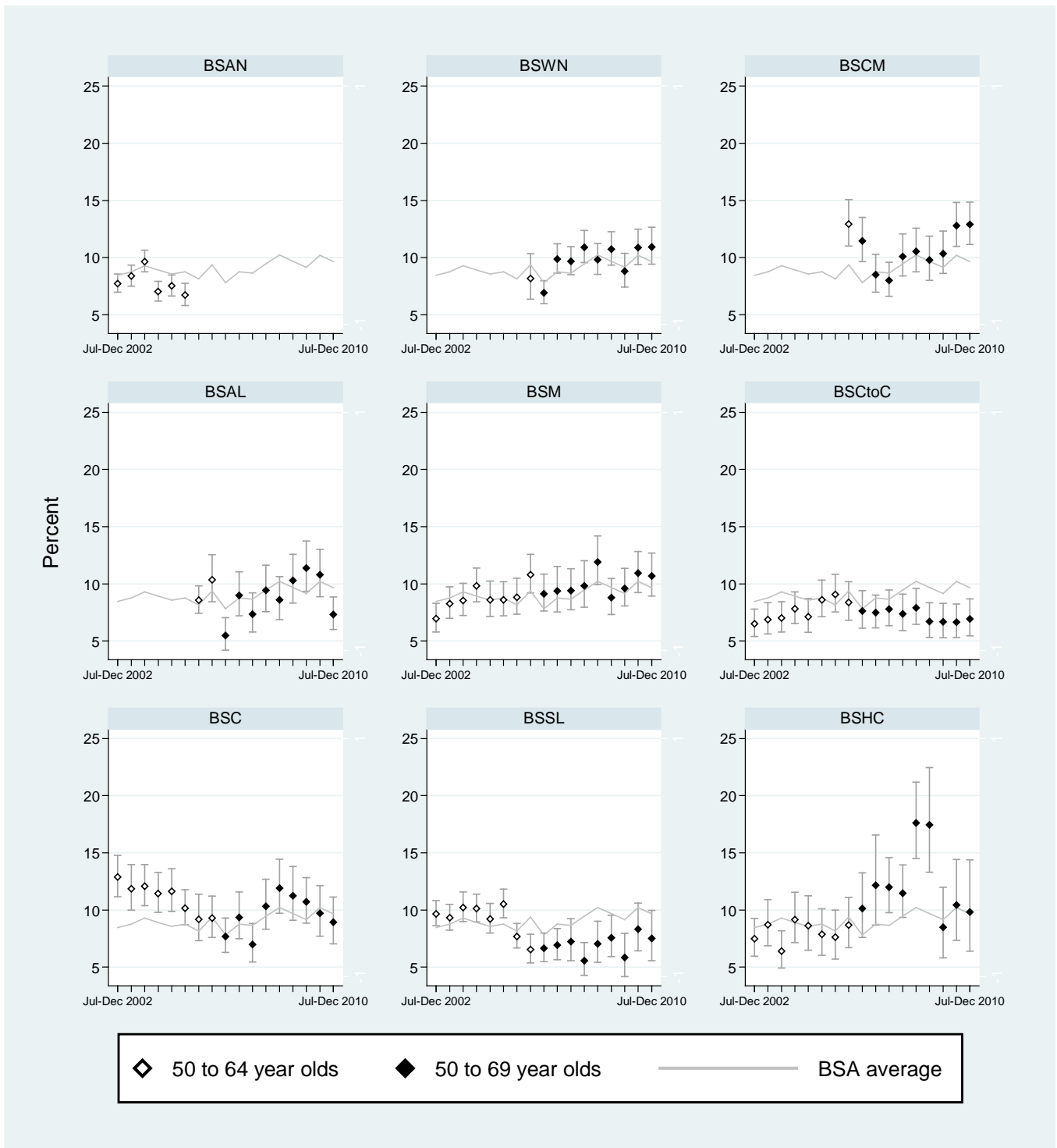


Figure 2d.1: Trends in referral to assessment for initial screens, 2 years

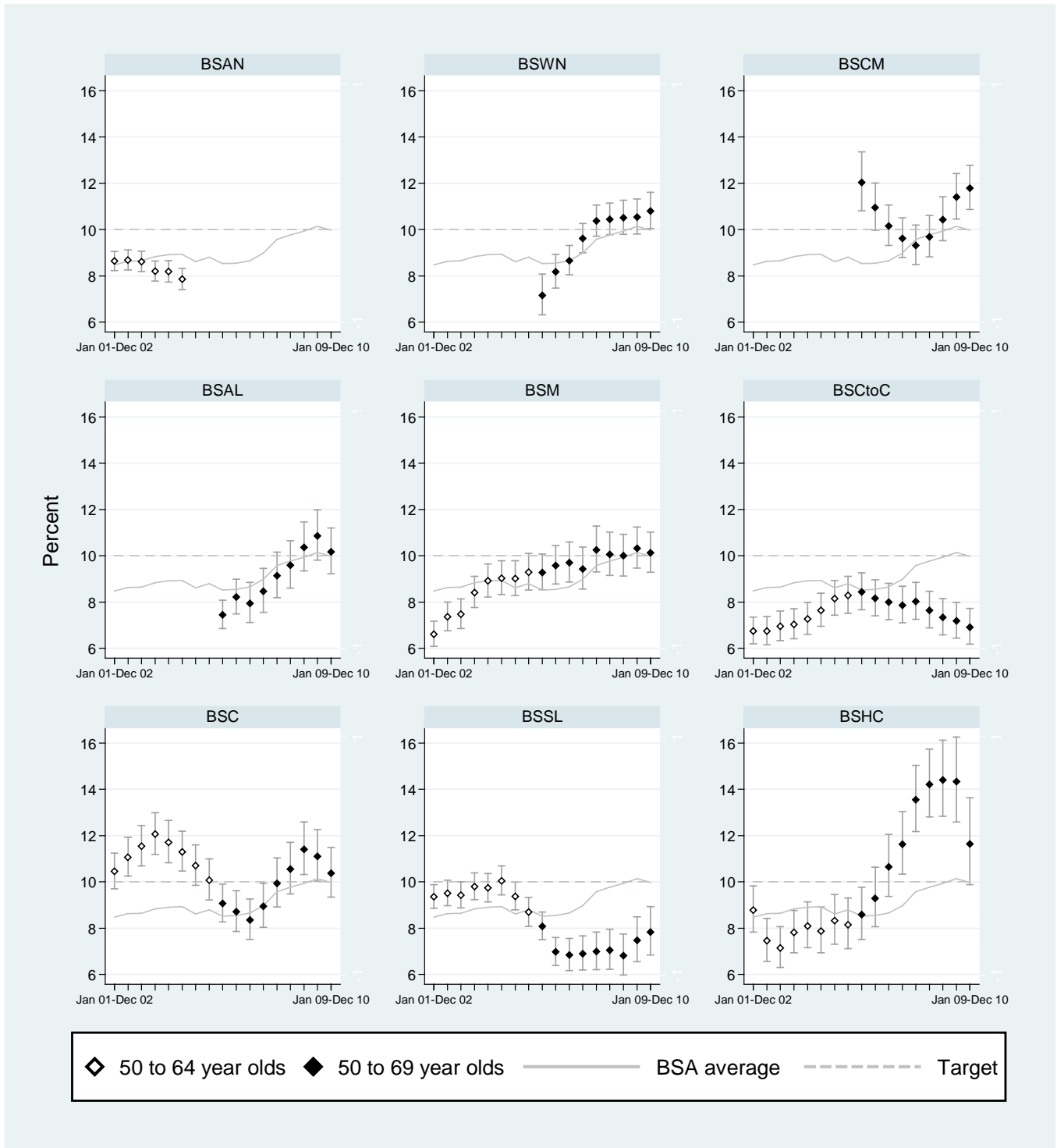
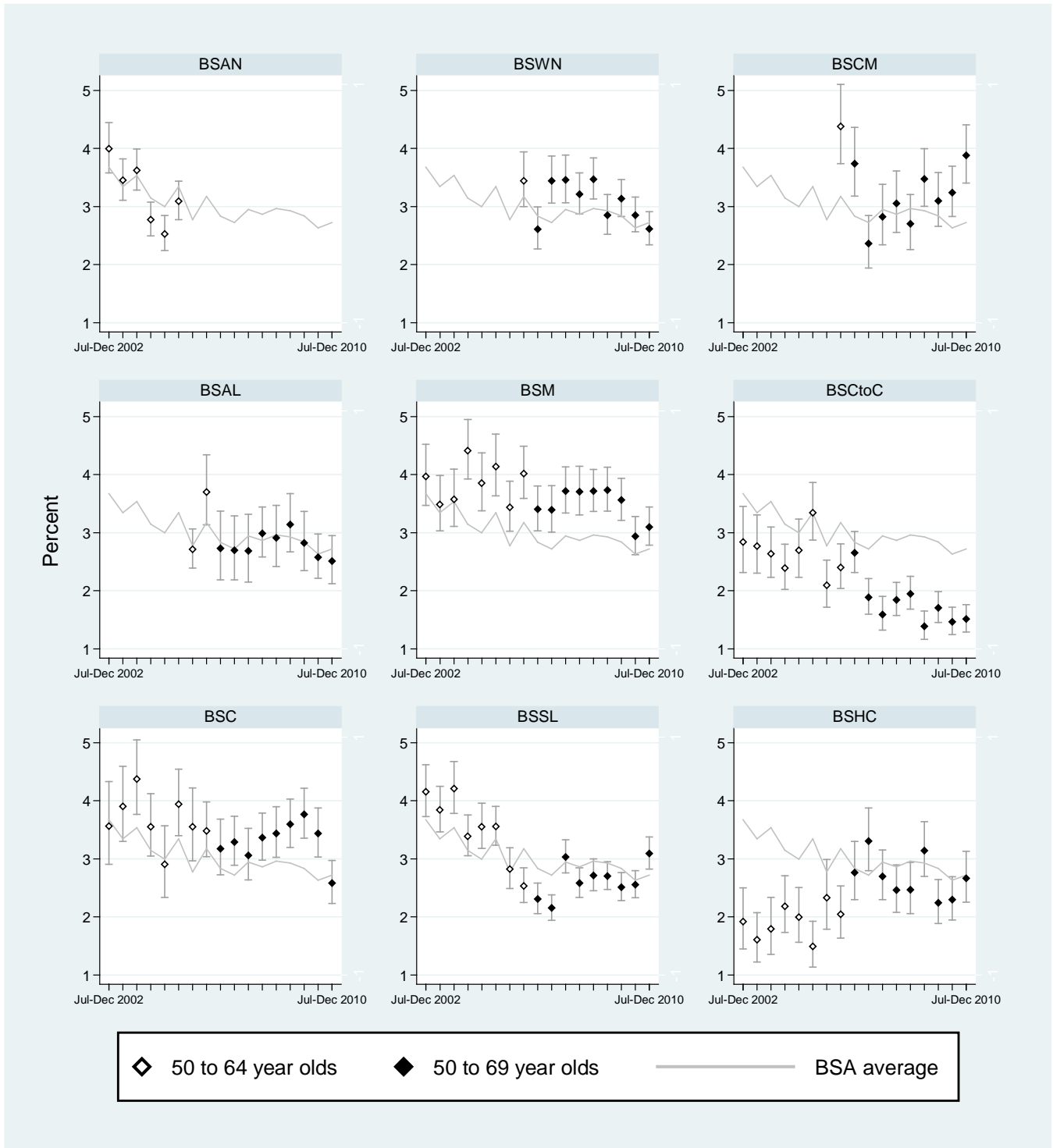


Figure 2d.2: Trends in referral to assessment for subsequent screens, 6 months



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)
<i>45-49 years</i>						
BSWN	254	2,657	9.6 (8.5-10.7)	88	2,445	3.6 (2.9-4.4)
BSCM	203	2,109	9.6 (8.4-11.0)	50	1,088	4.6 (3.4-6.0)
BSAL	130	1,943	6.7 (5.6-7.9)	34	1,439	2.4 (1.6-3.3)
BSM	181	1,843	9.8 (8.5-11.3)	60	1,425	4.2 (3.2-5.4)
BSCtoC	73	1,701	4.3 (3.4-5.4)	37	1,828	2.0 (1.4-2.8)
BSC	103	1,509	6.8 (5.6-8.2)	47	1,329	3.5 (2.6-4.7)
BSSL	170	2,319	7.3 (6.3-8.5)	190	4,420	4.3 (3.7-4.9)
BSHC	53	498	10.6 (8.1-13.7)	37	801	4.6 (3.3-6.3)
BSA Total	1,167	14,579	8.0 (7.6-8.5)	543	14,775	3.7 (3.4-4.0)
<i>50-69 years</i>						
BSWN	160	1,681	9.5 (8.2-11.0)	265	12,856	2.1 (1.8-2.3)
BSCM	167	1,519	11.0 (9.5-12.7)	188	6,135	3.1 (2.6-3.5)
BSAL	84	1,475	5.7 (4.6-7.0)	119	5,859	2.0 (1.7-2.4)
BSM	111	1,208	9.2 (7.6-11.0)	290	11,451	2.5 (2.3-2.8)
BSCtoC	61	1,084	5.6 (4.3-7.2)	110	10,898	1.0 (0.8-1.2)
BSC	62	874	7.1 (5.5-9.0)	147	7,517	2.0 (1.7-2.3)
BSSL	40	651	6.1 (4.4-8.3)	406	15,685	2.6 (2.3-2.8)
BSHC	25	265	9.4 (6.2-13.6)	120	5,553	2.2 (1.8-2.6)
BSA Total	710	8,757	8.1 (7.5-8.7)	1,645	75,954	2.2 (2.1-2.3)

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)				
<i>45-49 years</i>										
BSWN	973	10,056	9.7 (9.1-10.3)	314	8,697	3.6 (3.2-4.0)				
BSCM	720	6,957	10.3 (9.6-11.1)	178	4,336	4.1 (3.5-4.7)				
BSAL	447	5,689	7.9 (7.2-8.6)	146	4,222	3.5 (2.9-4.1)				
BSM	786	8,240	9.5 (8.9-10.2)	264	5,391	4.9 (4.3-5.5)				
BSCtoC	374	6,921	5.4 (4.9-6.0)	135	6,443	2.1 (1.8-2.5)				
BSC	559	6,262	8.9 (8.2-9.7)	222	5,050	4.4 (3.8-5.0)				
BSSL	723	10,122	7.1 (6.6-7.7)	564	13,608	4.1 (3.8-4.5)				
BSHC	441	3,724	11.8 (10.8-12.9)	120	3,535	3.4 (2.8-4.0)				
BSA Total	5,023	57,971	8.7 (8.4-8.9)	1,943	51,282	3.8 (3.6-4.0)				
<i>50-69 years</i>										
BSWN	636	6,822	9.3 (8.6-10.0)	✓	ns	1,057	45,751	2.3 (2.2-2.5)	✓✓✓	*
BSCM	521	5,097	10.2 (9.4-11.1)	***	*	666	24,100	2.8 (2.6-3.0)	✓✓✓	*
BSAL	350	4,127	8.5 (7.6-9.4)	✓	ns	469	21,000	2.2 (2.0-2.4)	✓✓✓	*
BSM	490	5,350	9.2 (8.4-10.0)	✓	ns	1,192	42,219	2.8 (2.7-3.0)	✓✓✓	*
BSCtoC	269	4,613	5.8 (5.2-6.5)	✓✓✓	*	417	39,476	1.1 (1.0-1.2)	✓✓✓	*
BSC	303	3,557	8.5 (7.6-9.5)	✓	ns	838	30,896	2.7 (2.5-2.9)	✓✓✓	*
BSSL	201	2,884	7.0 (6.1-8.0)	✓✓✓	*	1,554	67,255	2.3 (2.2-2.4)	✓✓✓	*
BSHC	141	1,331	10.6 (9.0-12.4)	✓	ns	503	23,987	2.1 (1.9-2.3)	✓✓✓	*
BSA Total	2,911	33,781	8.6 (8.3-8.9)	✓	*	6,696	294,684	2.3 (2.2-2.3)	✓✓✓	*

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). The number with diagnosed cancer as a percentage of the number referred to assessment.

Target:

≥ 9%.

Table 2f.1: Positive predictive value (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)
<i>45-49 years</i>						
BSWN	10	269	3.7 (1.8-6.7)	8	97	8.2 (3.6-15.6)
BSCM	10	219	4.6 (2.2-8.2)	6	58	10.3 (3.9-21.2)
BSAL	4	140	2.9 (0.8-7.2)	7	45	15.6 (6.5-29.5)
BSM	7	191	3.7 (1.5-7.4)	4	64	6.3 (1.7-15.2)
BSCtoC	10	86	11.6 (5.7-20.3)	4	43	9.3 (2.6-22.1)
BSC	16	121	13.2 (7.8-20.6)	4	52	7.7 (2.1-18.5)
BSSL	6	179	3.4 (1.2-7.2)	14	206	6.8 (3.8-11.1)
BSHC	3	58	5.2 (1.1-14.4)	1	40	2.5 (0.1-13.2)
BSA Total	66	1,263	5.2 (4.1-6.6)	48	605	7.9 (5.9-10.4)
<i>50-69 years</i>						
BSWN	19	184	10.3 (6.3-15.7)	65	336	19.3 (15.3-24.0)
BSCM	14	196	7.1 (4.0-11.7)	48	238	20.2 (15.3-25.8)
BSAL	16	108	14.8 (8.7-22.9)	26	147	17.7 (11.9-24.8)
BSM	14	129	10.9 (6.1-17.5)	60	355	16.9 (13.2-21.2)
BSCtoC	10	75	16.3 (8.9-26.2)	48	165	29.1 (22.3-36.7)
BSC	14	78	17.9 (10.2-28.3)	42	194	21.6 (16.1-28.1)
BSSL	7	49	14.3 (5.9-27.2)	71	485	14.6 (11.6-18.1)
BSHC	1	26	3.8 (0.1-19.6)	25	148	16.9 (11.2-23.9)
BSA Total	95	845	11.2 (9.2-13.6)	385	2,068	18.6 (17.0-20.4)

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). The number with diagnosed cancer as a percentage of the number referred to assessment.

Target:

≥ 9%.

Table 2f.2: Positive predictive value (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	54	1,043	5.2 (3.9-6.7)	40	358	11.2 (8.1-14.9)				
BSCM	36	776	4.6 (3.3-6.4)	18	198	9.1 (5.5-14.0)				
BSAL	30	490	6.1 (4.2-8.6)	14	165	8.5 (4.7-13.8)				
BSM	40	830	4.8 (3.5-6.5)	20	284	7.0 (4.4-10.7)				
BSCtoC	37	420	8.8 (6.3-11.9)	10	150	6.7 (3.2-11.9)				
BSC	46	614	7.5 (5.5-9.9)	19	243	7.8 (4.8-11.9)				
BSSL	47	776	6.1 (4.5-8.0)	42	611	6.9 (5.0-9.2)				
BSHC	12	462	2.6 (1.3-4.5)	10	133	7.5 (3.7-13.4)				
BSA Total	302	5,411	5.6 (5.0-6.2)	173	2,142	8.1 (7.0-9.3)				
50-69 years										
BSWN	79	737	10.7 (8.6-13.2)	✓	ns	271	1,351	20.1 (18.0-22.3)	✓✓✓	*
BSCM	50	601	8.3 (6.2-10.8)	✓	ns	162	839	19.3 (16.7-22.1)	✓✓✓	*
BSAL	47	420	11.2 (8.3-14.6)	✓	ns	136	614	22.1 (18.9-25.6)	✓✓✓	*
BSM	45	542	8.3 (6.1-11.0)	✓	ns	236	1,436	16.4 (14.6-18.5)	✓✓✓	*
BSCtoC	41	319	12.9 (9.4-17.0)	✓✓✓	*	185	616	30.0 (26.4-33.8)	✓✓✓	*
BSC	56	369	15.2 (11.7-19.3)	✓✓✓	*	201	1,053	19.1 (16.8-21.6)	✓✓✓	*
BSSL	23	226	10.2 (6.6-14.9)	✓	ns	306	1,882	16.3 (14.6-18.0)	✓✓✓	*
BSHC	9	155	5.8 (2.7-10.7)	✓	ns	103	619	16.6 (13.8-19.8)	✓✓✓	*
BSA Total	350	3,369	10.4 (9.4-11.5)	✓✓✓	*	1,600	8,410	19.0 (18.2-19.9)	✓✓✓	*

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

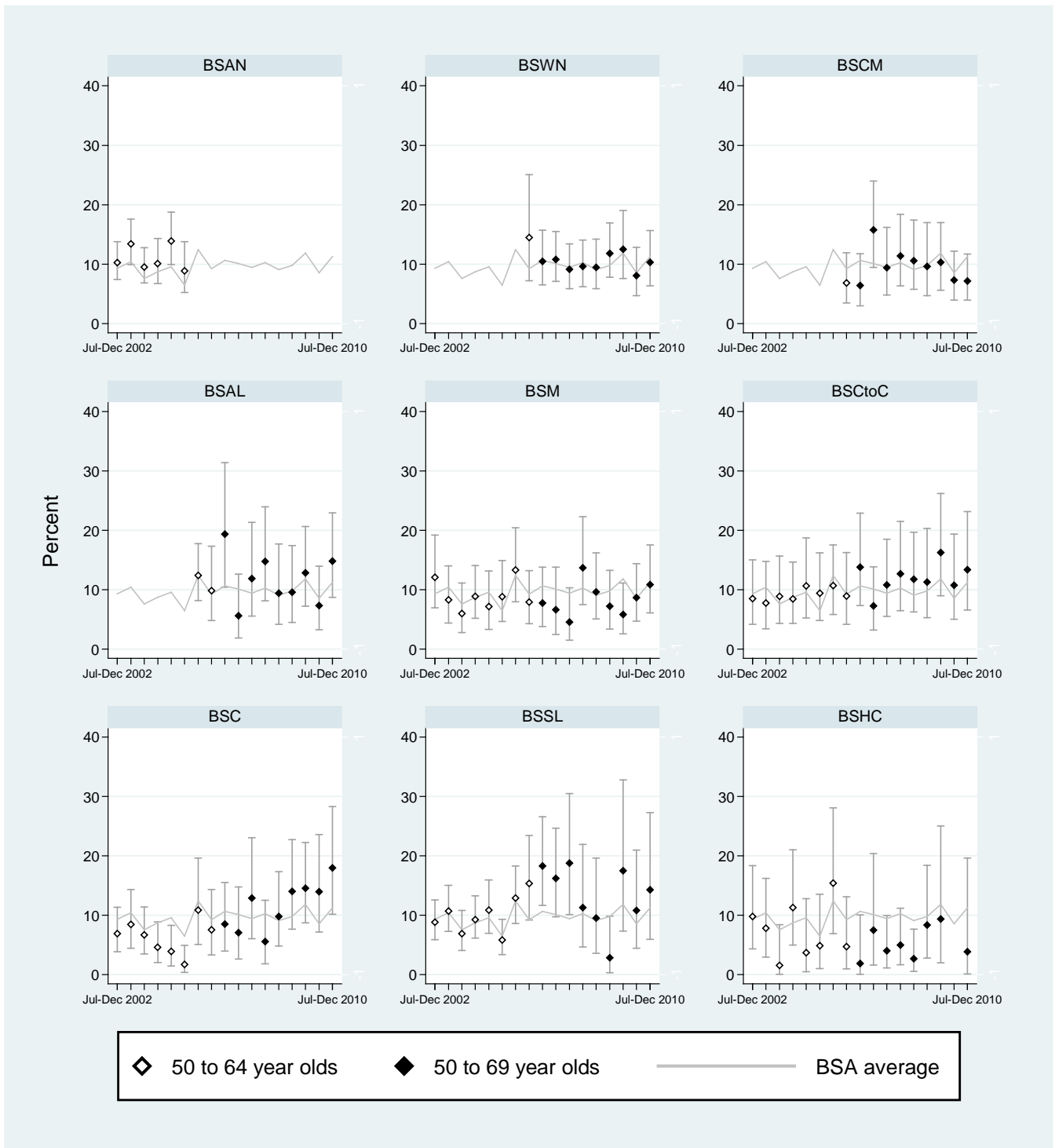


Figure 2f.1b: DCIS and invasive cancers as a percentage of referrals to assessment for initial screens, women 50-69 years, 2 years

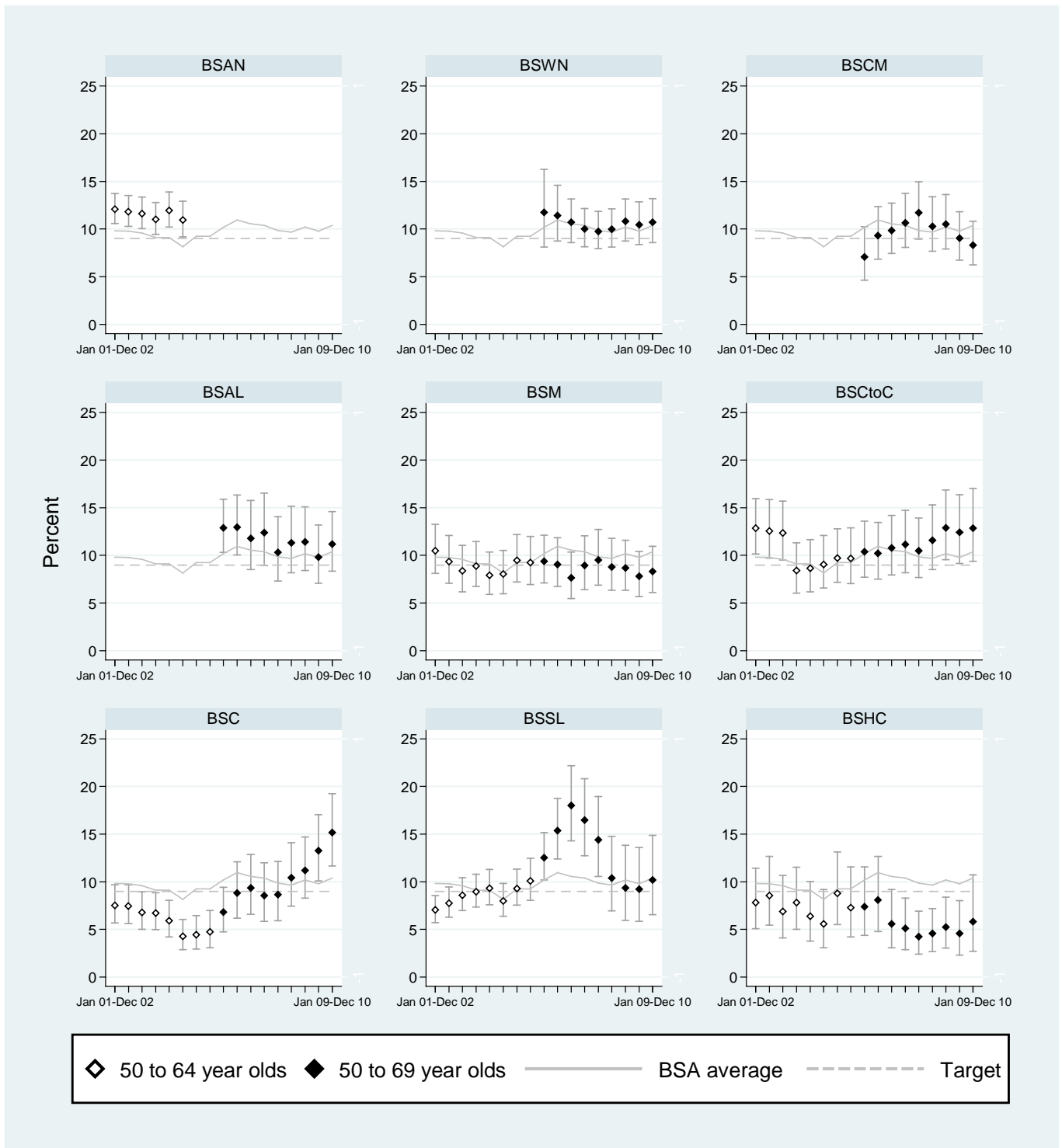


Figure 2f.2a: DCIS and invasive cancers as a percentage of referrals to assessment for subsequent screens, women 50-69 years, 6 months

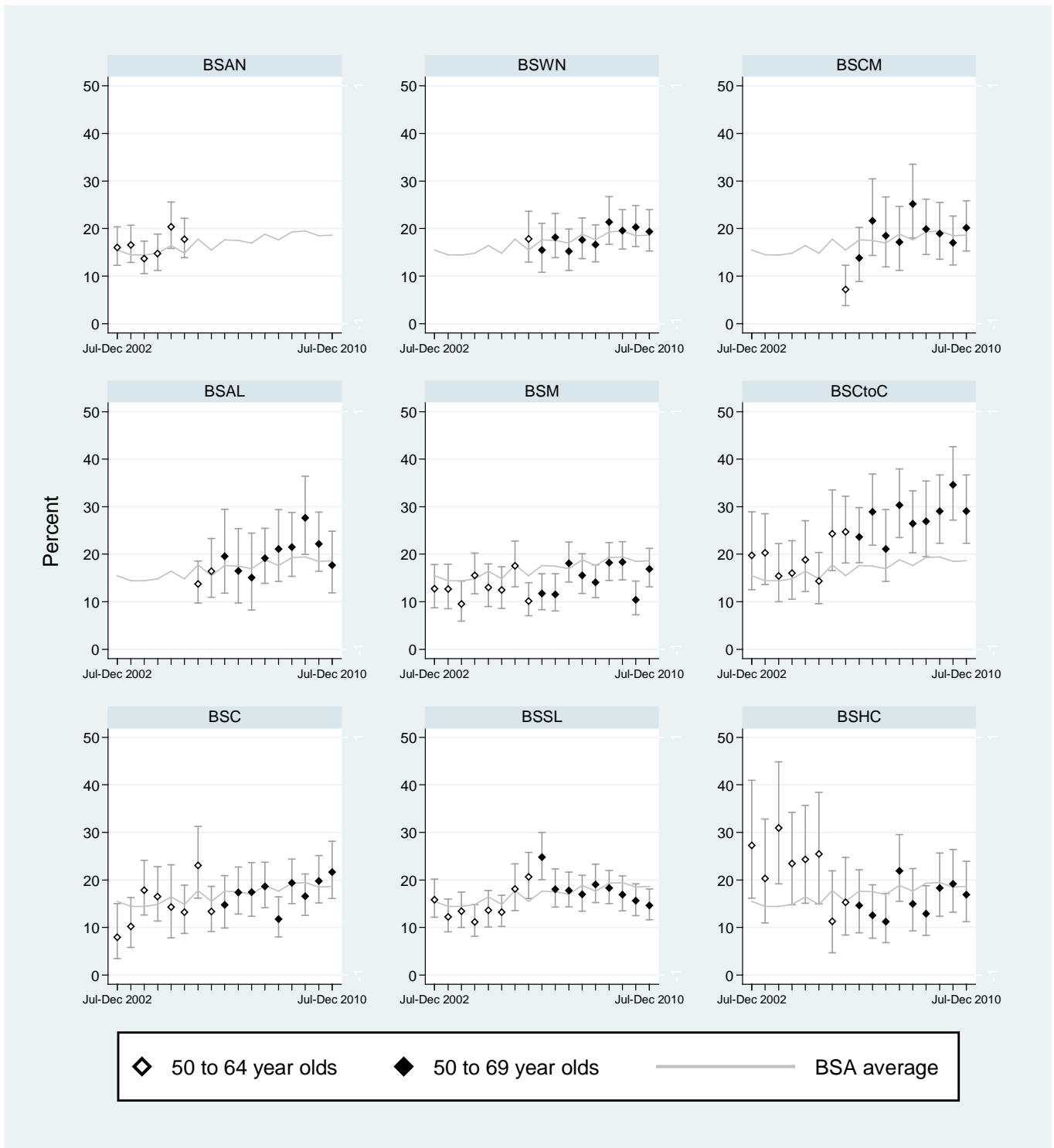
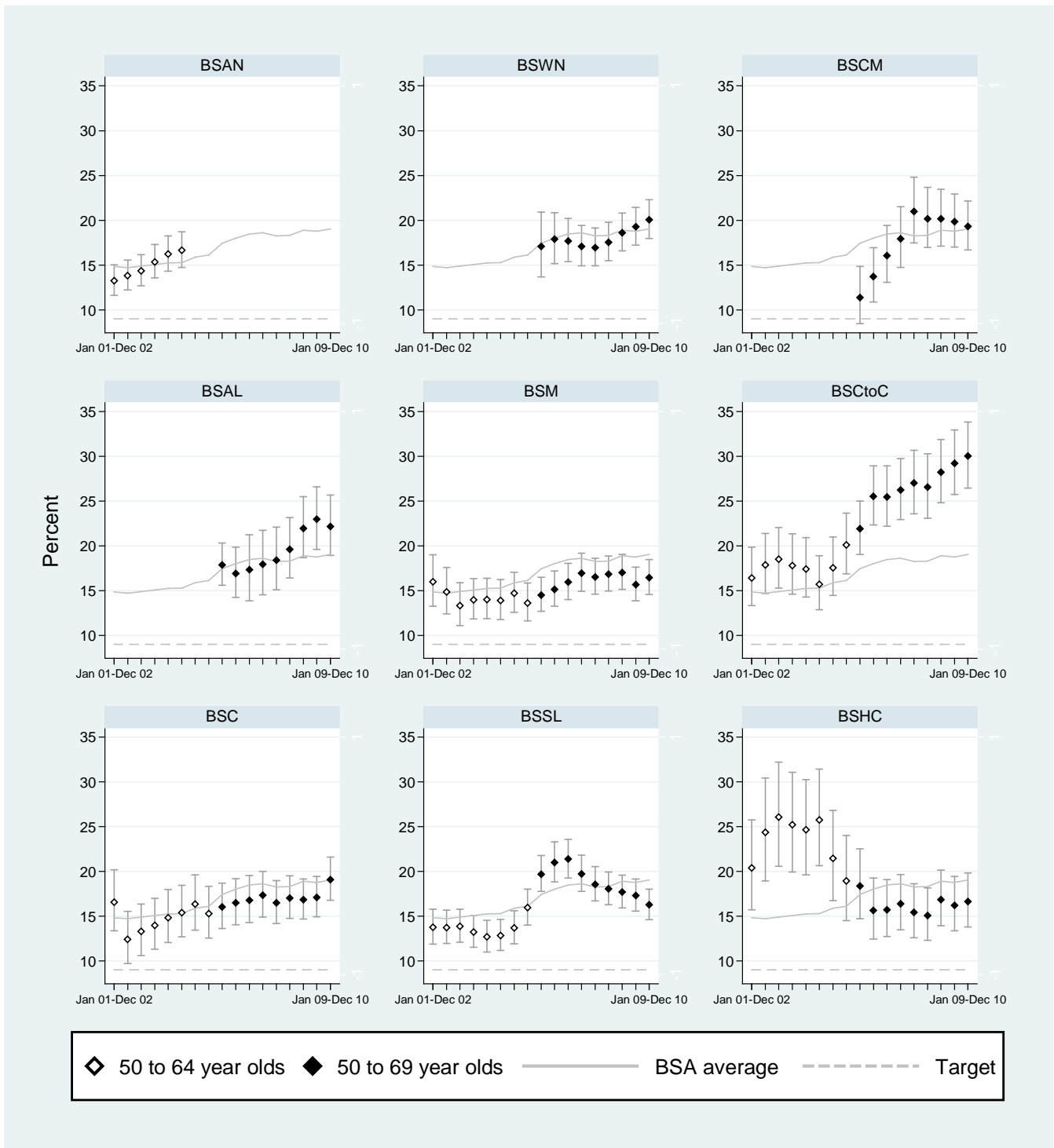


Figure 2f.2b: DCIS and invasive cancers as a percentage of referrals to assessment for subsequent screens, women 50-69 years, 2 years



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)
<i>45-49 years</i>											
BSWN	36	33	91.7 (77.5-98.2)	2	5.6 (0.7-18.7)	1	2.8 (0.1-14.5)	0	0.0 (0.0-9.7)	0	0.0 (0.0-9.7)
BSCM	17	12	70.6 (44.0-89.7)	5	29.4 (10.3-56.0)	0	0.0 (0.0-19.5)	0	0.0 (0.0-19.5)	0	0.0 (0.0-19.5)
BSAL	17	15	88.2 (63.6-98.5)	2	11.8 (1.5-36.4)	0	0.0 (0.0-19.5)	0	0.0 (0.0-19.5)	0	0.0 (0.0-19.5)
BSM	27	20	74.1 (53.7-88.9)	3	11.1 (2.4-29.2)	2	7.4 (0.9-24.3)	1	3.7 (0.1-19.0)	1	3.7 (0.1-19.0)
BSCtoC	7	5	71.4 (29.0-96.3)	1	14.3 (0.4-57.9)	0	0.0 (0.0-41.0)	0	0.0 (0.0-41.0)	1	14.3 (0.4-57.9)
BSC	11	9	81.8 (48.2-97.7)	1	9.1 (0.2-41.3)	0	0.0 (0.0-28.5)	0	0.0 (0.0-28.5)	1	9.1 (0.2-41.3)
BSSL	22	16	72.7 (49.8-89.3)	5	22.7 (7.8-45.4)	1	4.5 (0.1-22.8)	0	0.0 (0.0-15.4)	0	0.0 (0.0-15.4)
BSHC	11	10	90.9 (58.7-99.8)	0	0.0 (0.0-28.5)	0	0.0 (0.0-28.5)	1	9.1 (0.2-41.3)	0	0.0 (0.0-28.5)
BSA Total	148	120	81.1 (73.8-87.0)	19	12.8 (7.9-19.3)	4	2.7 (0.7-6.8)	2	1.4 (0.2-4.8)	3	2.0 (0.4-5.8)
<i>50-69 years</i>											
BSWN	48	42	87.5 (74.8-95.3)	5	10.4 (3.5-22.7)	0	0.0 (0.0-7.4)	1	2.1 (0.1-11.1)	0	0.0 (0.0-7.4)
BSCM	39	29	74.4 (57.9-87.0)	8	20.5 (9.3-36.5)	1	2.6 (0.1-13.5)	1	2.6 (0.1-13.5)	0	0.0 (0.0-9.0)
BSAL	24	20	83.3 (62.6-95.3)	3	12.5 (2.7-32.4)	0	0.0 (0.0-14.2)	1	4.2 (0.1-21.1)	0	0.0 (0.0-14.2)
BSM	40	28	70.0 (53.5-83.4)	7	17.5 (7.3-32.8)	2	5.0 (0.6-16.9)	2	5.0 (0.6-16.9)	1	2.5 (0.1-13.2)
BSCtoC	12	9	75.0 (42.8-94.5)	3	25.0 (5.5-57.2)	0	0.0 (0.0-26.5)	0	0.0 (0.0-26.5)	0	0.0 (0.0-26.5)
BSC	20	17	85.0 (62.1-96.8)	2	10.0 (1.2-31.7)	1	5.0 (0.1-24.9)	0	0.0 (0.0-16.8)	0	0.0 (0.0-16.8)
BSSL	23	17	73.9 (51.6-89.8)	3	13.0 (2.8-33.6)	3	13.0 (2.8-33.6)	0	0.0 (0.0-14.8)	0	0.0 (0.0-14.8)
BSHC	11	7	63.6 (30.8-89.1)	1	9.1 (0.2-41.3)	2	18.2 (2.3-51.8)	1	9.1 (0.2-41.3)	0	0.0 (0.0-28.5)
BSA Total	217	169	77.9 (71.8-83.2)	32	14.7 (10.3-20.2)	9	4.1 (1.9-7.7)	6	2.8 (1.0-5.9)	1	0.5 (0.0-2.5)

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)
<i>45-49 years</i>						
BSWN	16	18		81	94	86.2 (77.5-92.4)
BSCM	13	16		45	54	83.3 (70.7-92.1)
BSAL	11	11		41	44	93.2 (81.3-98.6)
BSM	11	11		56	60	93.3 (83.8-98.2)
BSCtoC	12	14		43	47	91.5 (79.6-97.6)
BSC	16	20		57	65	87.7 (77.2-94.5)
BSSL	20	20		85	89	95.5 (88.9-98.8)
BSHC	2	4		17	22	77.3 (54.6-92.2)
BSA Total	101	114	88.6 (81.3-93.8)	425	475	89.5 (86.4-92.1)
<i>50-69 years</i>						
BSWN	78	84	92.9 (85.1-97.3) ✓✓✓ *	329	350	94.0 (91.0-96.2) ✓✓✓ *
BSCM	57	62	91.9 (82.2-97.3) ✓✓✓ *	205	212	96.7 (93.3-98.7) ✓✓✓ *
BSAL	40	42	95.2 (83.8-99.4) ✓✓✓ *	174	183	95.1 (90.9-97.7) ✓✓✓ *
BSM	72	74	97.3 (90.6-99.7) ✓✓✓ *	263	281	93.6 (90.1-96.2) ✓✓✓ *
BSCtoC	58	58	100.0 (93.8-100.0) ✓✓✓ *	223	226	98.7 (96.2-99.7) ✓✓✓ *
BSC	55	56	98.2 (90.4-100.0) ✓✓✓ *	249	257	96.9 (94.0-98.6) ✓✓✓ *
BSSL	73	78	93.6 (85.7-97.9) ✓✓✓ *	314	329	95.4 (92.6-97.4) ✓✓✓ *
BSHC	24	26	92.3 (74.9-99.1) ✓✓✓ *	105	112	93.8 (87.5-97.5) ✓✓✓ *
BSA Total	457	480	95.2 (92.9-96.9) ✓✓✓ *	1,862	1,950	95.5 (94.5-96.4) ✓✓✓ *

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

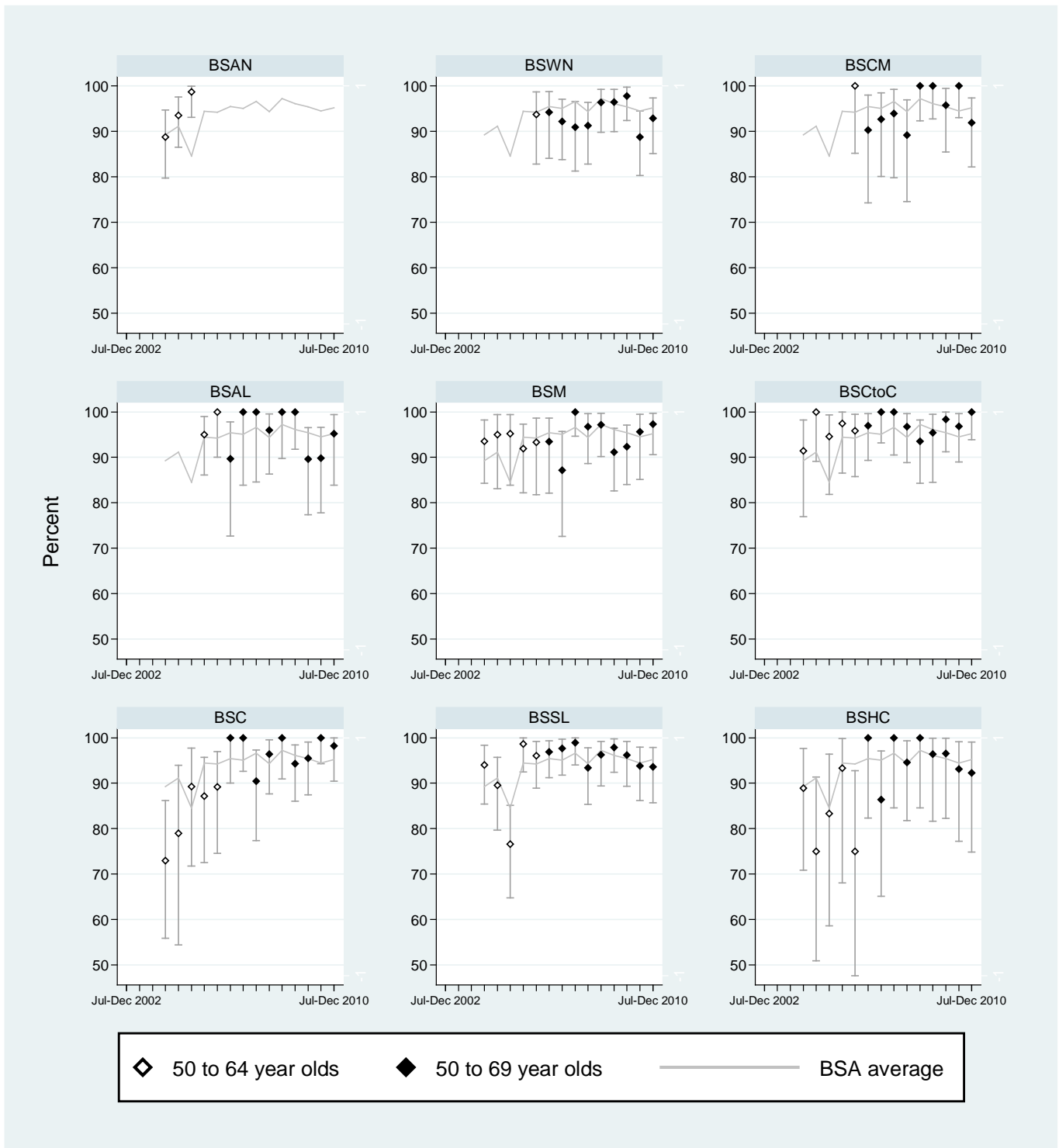
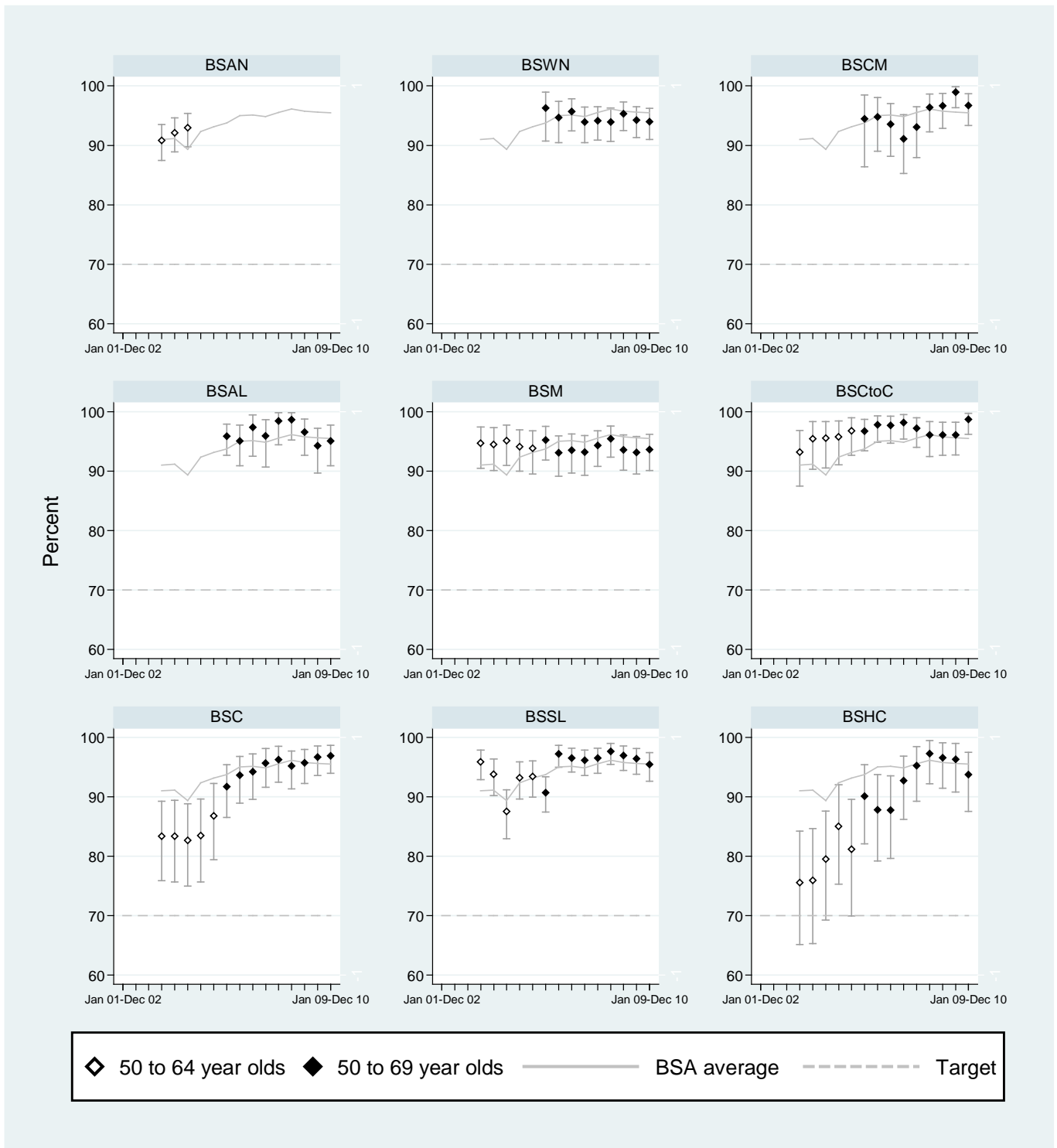


Figure 2h.b: Percentage of women with a preoperative diagnosis of cancer (DCIS and invasive), 2 years



2.1. 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 %

2.1.1. Specificity, 6 months

Table 21.1: 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)
<i>45-49 years</i>						
BSWN	2,388	2,642	90.4 (89.2-91.5)	2,348	2,436	96.4 (95.6-97.1)
BSCM	1,890	2,093	90.3 (89.0-91.5)	1,030	1,080	95.4 (93.9-96.5)
BSAL	1,803	1,933	93.3 (92.1-94.4)	1,394	1,428	97.6 (96.7-98.3)
BSM	1,652	1,833	90.1 (88.7-91.5)	1,361	1,421	95.8 (94.6-96.8)
BSCtoC	1,615	1,688	95.7 (94.6-96.6)	1,785	1,822	98.0 (97.2-98.6)
BSC	1,388	1,491	93.1 (91.7-94.3)	1,277	1,324	96.5 (95.3-97.4)
BSSL	2,140	2,310	92.6 (91.5-93.7)	4,214	4,404	95.7 (95.0-96.3)
BSHC	440	493	89.2 (86.2-91.8)	761	798	95.4 (93.7-96.7)
BSA Total	13,316	14,483	91.9 (91.5-92.4)	14,170	14,713	96.3 (96.0-96.6)
<i>50-69 years</i>						
BSWN	1,497	1,657	90.3 (88.8-91.7)	12,520	12,785	97.9 (97.7-98.2)
BSCM	1,323	1,490	88.8 (87.1-90.3)	5,897	6,085	96.9 (96.4-97.3)
BSAL	1,367	1,451	94.2 (92.9-95.4)	5,712	5,831	98.0 (97.6-98.3)
BSM	1,079	1,190	90.7 (88.9-92.3)	11,096	11,386	97.5 (97.1-97.7)
BSCtoC	1,009	1,070	94.3 (92.7-95.6)	10,733	10,843	99.0 (98.8-99.2)
BSC	796	858	92.8 (90.8-94.4)	7,323	7,470	98.0 (97.7-98.3)
BSSL	602	642	93.8 (91.6-95.5)	15,200	15,606	97.4 (97.1-97.6)
BSHC	239	264	90.5 (86.3-93.8)	5,405	5,525	97.8 (97.4-98.2)
BSA Total	7,912	8,622	91.8 (91.2-92.3)	73,886	75,531	97.8 (97.7-97.9)

RRS:

Exact binomial 95% confidence intervals presented

2.1.2. 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 21.2: 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	9,354	10,327	90.6 (90.0-91.1)	8,462	8,776	96.4 (96.0-96.8)
BSCM	6,271	6,991	89.7 (89.0-90.4)	4,154	4,332	95.9 (95.3-96.5)
BSAL	5,480	5,927	92.5 (91.8-93.1)	4,196	4,342	96.6 (96.1-97.2)
BSM	7,504	8,290	90.5 (89.9-91.1)	5,132	5,396	95.1 (94.5-95.7)
BSCtoC	6,641	7,015	94.7 (94.1-95.2)	6,376	6,511	97.9 (97.6-98.3)
BSC	5,708	6,267	91.1 (90.3-91.8)	4,823	5,045	95.6 (95.0-96.1)
BSSL	9,921	10,644	93.2 (92.7-93.7)	13,339	13,903	95.9 (95.6-96.3)
BSHC	3,301	3,742	88.2 (87.1-89.2)	3,402	3,522	96.6 (95.9-97.2)
BSA Total	54,180	59,203	91.5 (91.3-91.7)	49,884	51,827	96.3 (96.1-96.4)
50-69 years						
BSWN	6,364	7,000	90.9 (90.2-91.6)	45,893	46,950	97.7 (97.6-97.9)
BSCM	4,576	5,097	89.8 (88.9-90.6)	23,612	24,278	97.3 (97.0-97.5)
BSAL	3,926	4,276	91.8 (91.0-92.6)	21,824	22,293	97.9 (97.7-98.1)
BSM	4,890	5,380	90.9 (90.1-91.6)	41,749	42,941	97.2 (97.1-97.4)
BSCtoC	4,414	4,683	94.3 (93.6-94.9)	39,955	40,372	99.0 (98.9-99.1)
BSC	3,234	3,537	91.4 (90.5-92.3)	30,312	31,150	97.3 (97.1-97.5)
BSSL	2,821	3,022	93.3 (92.4-94.2)	67,693	69,247	97.8 (97.6-97.9)
BSHC	1,185	1,326	89.4 (87.6-91.0)	23,501	24,004	97.9 (97.7-98.1)
BSA Total	31,410	34,321	91.5 (91.2-91.8)	294,539	301,235	97.8 (97.7-97.8)

RRS:

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 women screened	Rate per 1,000 (95%CI)	Benign open biopsies	Number of women screened	Rate per 1,000 (95%CI)
<i>45-49 years</i>						
BSWN	20	10,056	2.0 (1.2-3.1)	16	8,697	
BSCM	15	6,957	2.2 (1.2-3.6)	2	4,336	
BSAL	15	5,689	2.6 (1.5-4.3)	2	4,222	
BSM	19	8,240	2.3 (1.4-3.6)	8	5,391	
BSCtoC	6	6,921	0.9 (0.3-1.9)	1	6,443	
BSC	8	6,262	1.3 (0.6-2.5)	3	5,050	
BSSL	17	10,122	1.7 (1.0-2.7)	5	13,608	
BSHC	9	3,724	2.4 (1.1-4.6)	2	3,535	
BSA Total	109	57,971	1.9 (1.5-2.3)	39	51,282	
<i>50-69 years</i>						
BSWN	13	6,822	1.9 (1.0-3.3)	35	45,751	0.8 (0.5-1.1)
BSCM	15	5,097	2.9 (1.6-4.9)	24	24,100	1.0 (0.6-1.5)
BSAL	13	4,127	3.1 (1.7-5.4)	11	21,000	0.5 (0.3-0.9)
BSM	8	5,350	1.5 (0.6-2.9)	29	42,219	0.7 (0.5-1.0)
BSCtoC	7	4,613	1.5 (0.6-3.1)	5	39,476	0.1 (0.0-0.3)
BSC	6	3,557	1.7 (0.6-3.7)	14	30,896	0.5 (0.2-0.8)
BSSL	5	2,884	1.7 (0.6-4.0)	18	67,255	0.3 (0.2-0.4)
BSHC	0	1,331	0.0 (0.0-2.8)	11	23,987	0.5 (0.2-0.8)
BSA Total	67	33,781	2.0 (1.5-2.5)	147	294,684	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

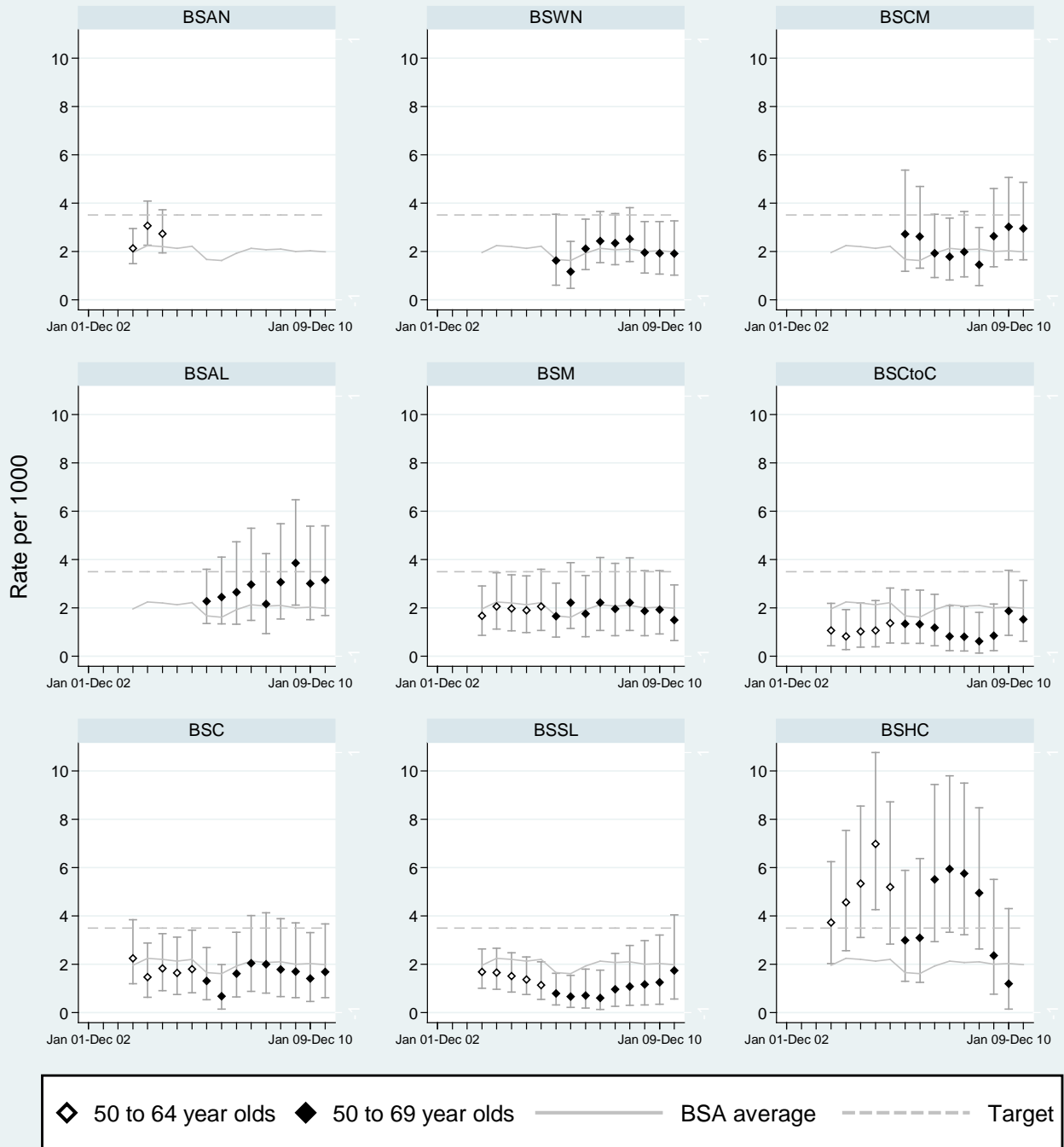
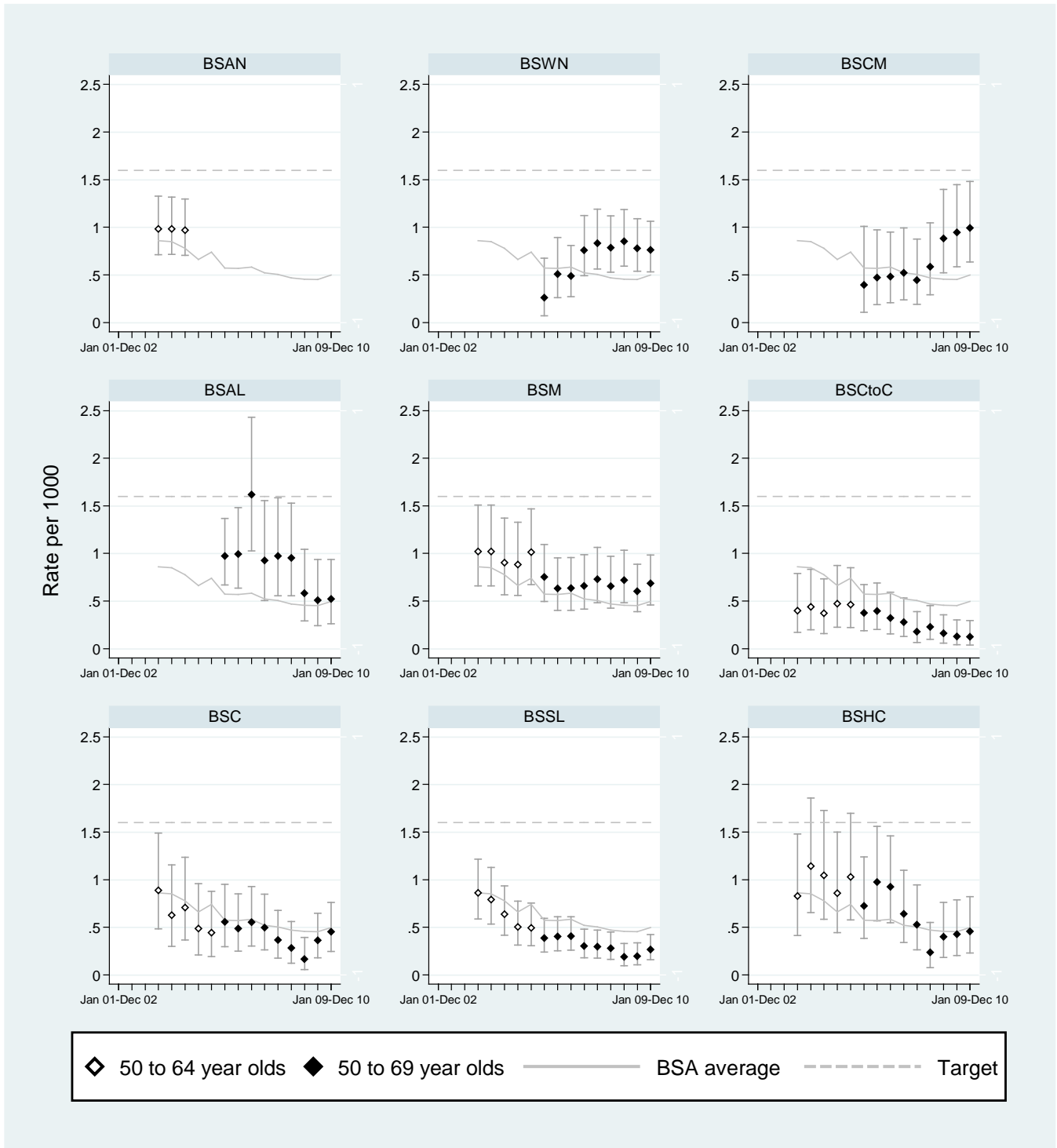


Figure 2m2: Benign open biopsy rate for subsequent screens, 2 years



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)
<i>45-49 years</i>						
BSWN	10	2,657	3.8 (1.8-6.9)	8	2,445	3.3 (1.4-6.4)
BSCM	10	2,109	4.7 (2.3-8.7)	6	1,088	5.5 (2.0-12.0)
BSAL	4	1,943	2.1 (0.6-5.3)	7	1,439	4.9 (2.0-10.0)
BSM	7	1,843	3.8 (1.5-7.8)	4	1,425	2.8 (0.8-7.2)
BSCtoC	10	1,701	5.9 (2.8-10.8)	4	1,828	2.2 (0.6-5.6)
BSC	16	1,509	10.6 (6.1-17.2)	4	1,329	3.0 (0.8-7.7)
BSSL	6	2,319	2.6 (0.9-5.6)	14	4,420	3.2 (1.7-5.3)
BSHC	3	498	6.0 (1.2-17.6)	1	801	1.2 (0.0-7.0)
BSA Total	66	14,579	4.5 (3.5-5.8)	48	14,775	3.2 (2.4-4.3)
<i>50-69 years</i>						
BSWN	19	1,681	11.3 (6.8-17.7)	65	12,856	5.1 (3.9-6.4)
BSCM	14	1,519	9.2 (5.0-15.5)	48	6,135	7.8 (5.8-10.4)
BSAL	16	1,475	10.8 (6.2-17.6)	26	5,859	4.4 (2.9-6.5)
BSM	14	1,208	11.6 (6.3-19.4)	60	11,451	5.2 (4.0-6.7)
BSCtoC	10	1,084	9.2 (4.4-17.0)	48	10,898	4.4 (3.2-5.8)
BSC	14	874	16.0 (8.8-26.9)	42	7,517	5.6 (4.0-7.6)
BSSL	7	651	10.8 (4.3-22.2)	71	15,685	4.5 (3.5-5.7)
BSHC	1	265	3.8 (0.1-21.0)	25	5,553	4.5 (2.9-6.6)
BSA Total	95	8,757	10.8 (8.8-13.3)	385	75,954	5.1 (4.6-5.6)

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)
<i>45-49 years</i>						
BSWN	54	10,056	5.4 (4.0-7.0)	40	8,697	4.6 (3.3-6.3)
BSCM	36	6,957	5.2 (3.6-7.2)	18	4,336	4.2 (2.5-6.6)
BSAL	30	5,689	5.3 (3.6-7.5)	14	4,222	3.3 (1.8-5.6)
BSM	40	8,240	4.9 (3.5-6.6)	20	5,391	3.7 (2.3-5.7)
BSCtoC	37	6,921	5.3 (3.8-7.4)	10	6,443	1.6 (0.7-2.9)
BSC	46	6,262	7.3 (5.4-9.8)	19	5,050	3.8 (2.3-5.9)
BSSL	47	10,122	4.6 (3.4-6.2)	42	13,608	3.1 (2.2-4.2)
BSHC	12	3,724	3.2 (1.7-5.6)	10	3,535	2.8 (1.4-5.2)
BSA Total	302	57,971	5.2 (4.6-5.8)	173	51,282	3.4 (2.9-3.9)
<i>50-69 years</i>						
BSWN	79	6,822	11.6 (9.2-14.4)	271	45,751	5.9 (5.2-6.7)
BSCM	50	5,097	9.8 (7.3-12.9)	162	24,100	6.7 (5.7-7.8)
BSAL	47	4,127	11.4 (8.4-15.1)	136	21,000	6.5 (5.4-7.7)
BSM	45	5,350	8.4 (6.1-11.3)	236	42,219	5.6 (4.9-6.4)
BSCtoC	41	4,613	8.9 (6.4-12.1)	185	39,476	4.7 (4.0-5.4)
BSC	56	3,557	15.7 (11.9-20.4)	201	30,896	6.5 (5.6-7.5)
BSSL	23	2,884	8.0 (5.1-12.0)	306	67,255	4.5 (4.1-5.1)
BSHC	9	1,331	6.8 (3.1-12.8)	103	23,987	4.3 (3.5-5.2)
BSA Total	350	33,781	10.4 (9.3-11.5)	1,600	294,684	5.4 (5.2-5.7)

Poisson 95% confidence intervals presented

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

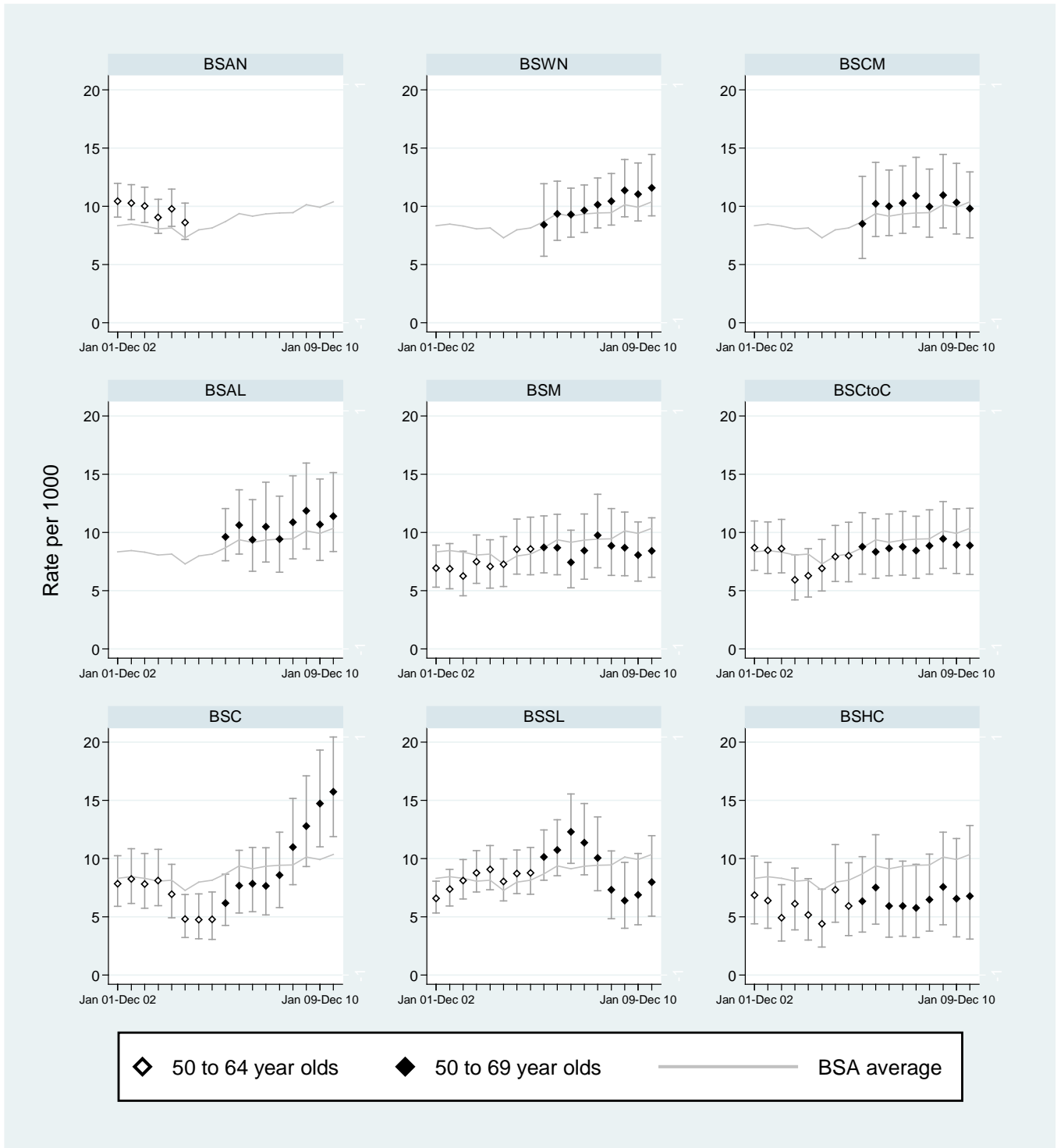
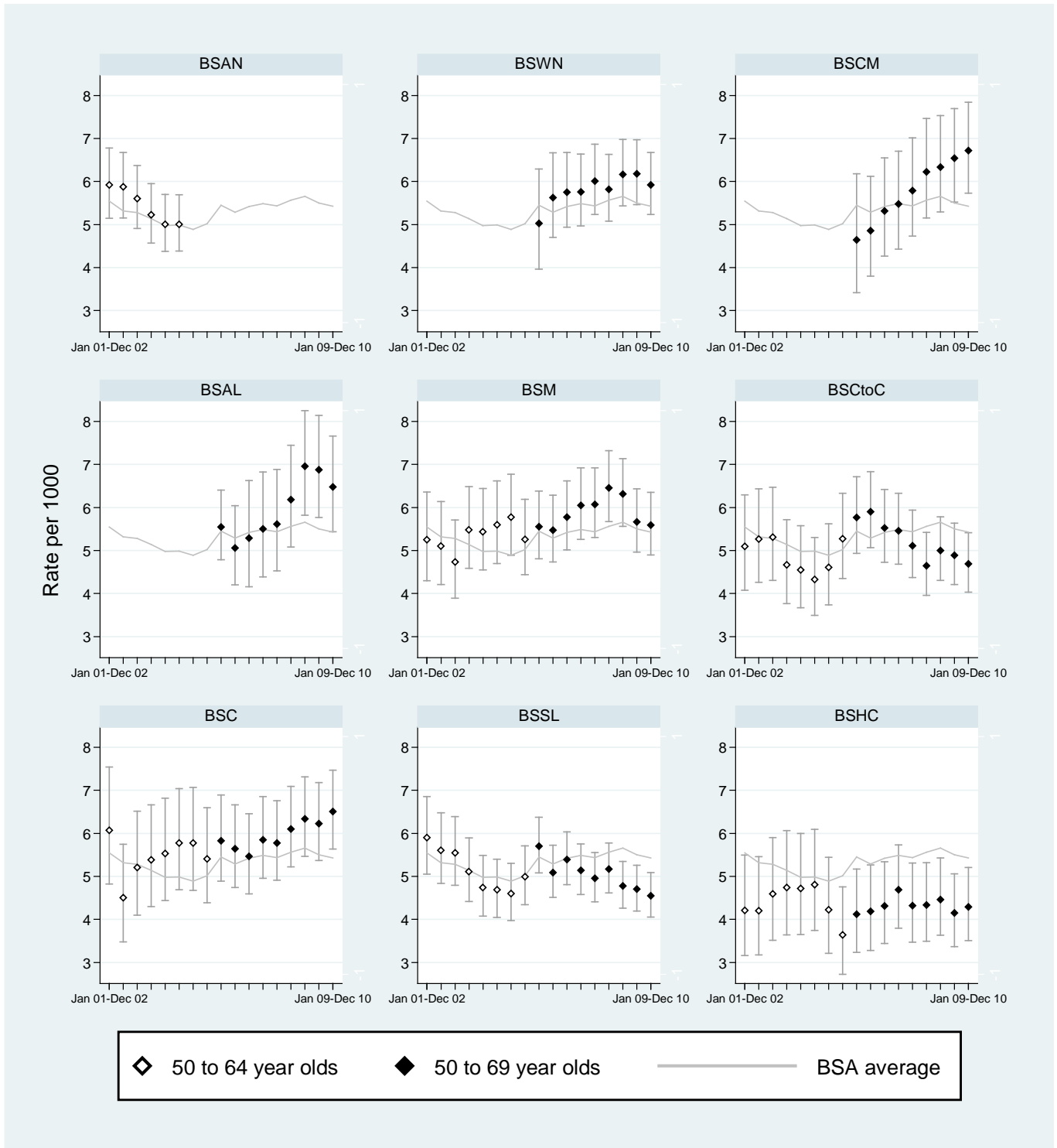


Figure 3a: Detection rate of DCIS and invasive breast cancer, subsequent screens, 2 years



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)
<i>45-49 years</i>						
BSWN	4	2,657	1.5 (0.4-3.9)	5	2,445	2.0 (0.7-4.8)
BSCM*	7	2,109	3.3 (1.3-6.8)	3	1,088	2.8 (0.6-8.1)
BSAL*	2	1,943	1.0 (0.1-3.7)	4	1,439	2.8 (0.8-7.1)
BSM*	6	1,843	3.3 (1.2-7.1)	4	1,425	2.8 (0.8-7.2)
BSCtoC	5	1,701	2.9 (1.0-6.9)	1	1,828	0.5 (0.0-3.0)
BSC	13	1,509	8.6 (4.6-14.7)	4	1,329	3.0 (0.8-7.7)
BSSL	5	2,319	2.2 (0.7-5.0)	11	4,420	2.5 (1.2-4.5)
BSHC	2	498	4.0 (0.5-14.5)	1	801	1.2 (0.0-7.0)
BSA Total	44	14,579	3.0 (2.2-4.1)	33	14,775	2.2 (1.5-3.1)
<i>50-69 years</i>						
BSWN	16	1,681	9.5 (5.4-15.5)	46	12,856	3.6 (2.6-4.8)
BSCM	12	1,519	7.9 (4.1-13.8)	32	6,135	5.2 (3.6-7.4)
BSAL	11	1,475	7.5 (3.7-13.3)	19	5,859	3.2 (2.0-5.1)
BSM	12	1,208	9.9 (5.1-17.4)	48	11,451	4.2 (3.1-5.6)
BSCtoC	7	1,084	6.5 (2.6-13.3)	34	10,898	3.1 (2.2-4.4)
BSC	11	874	12.6 (6.3-22.5)	28	7,517	3.7 (2.5-5.4)
BSSL	4	651	6.1 (1.7-15.7)	60	15,685	3.8 (2.9-4.9)
BSHC	1	265	3.8 (0.1-21.0)	18	5,553	3.2 (1.9-5.1)
BSA Total	74	8,757	8.5 (6.6-10.6)	285	75,954	3.8 (3.3-4.2)

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)				
<i>45-49 years</i>										
BSWN	34	10,056	3.4 (2.3-4.7)	28	8,697	3.2 (2.1-4.7)				
BSCM	25	6,957	3.6 (2.3-5.3)	9	4,336	2.1 (0.9-3.9)				
BSAL	17	5,689	3.0 (1.7-4.8)	6	4,222	1.4 (0.5-3.1)				
BSM	27	8,240	3.3 (2.2-4.8)	19	5,391	3.5 (2.1-5.5)				
BSCtoC	27	6,921	3.9 (2.6-5.7)	4	6,443	0.6 (0.2-1.6)				
BSC	31	6,262	5.0 (3.4-7.0)	14	5,050	2.8 (1.5-4.7)				
BSSL	31	10,122	3.1 (2.1-4.3)	30	13,608	2.2 (1.5-3.1)				
BSHC	9	3,724	2.4 (1.1-4.6)	6	3,535	1.7 (0.6-3.7)				
BSA Total	201	57,971	3.5 (3.0-4.0)	116	51,282	2.3 (1.9-2.7)				
<i>50-69 years</i>										
BSWN	64	6,822	9.4 (7.2-12.0)	✓✓✓	*	201	45,751	4.4 (3.8-5.0)	✓✓✓	*
BSCM	40	5,097	7.8 (5.6-10.7)	✓	ns	121	24,100	5.0 (4.2-6.0)	✓✓✓	*
BSAL	37	4,127	9.0 (6.3-12.4)	✓✓✓	*	95	21,000	4.5 (3.7-5.5)	✓✓✓	*
BSM	36	5,350	6.7 (4.7-9.3)	✓	ns	185	42,219	4.4 (3.8-5.1)	✓✓✓	*
BSCtoC	33	4,613	7.2 (4.9-10.0)	✓	ns	153	39,476	3.9 (3.3-4.5)	✓	ns
BSC	39	3,557	11.0 (7.8-15.0)	✓✓✓	*	153	30,896	5.0 (4.2-5.8)	✓✓✓	*
BSSL	18	2,884	6.2 (3.7-9.9)	✓	ns	245	67,255	3.6 (3.2-4.1)	✓	ns
BSHC	7	1,331	5.3 (2.1-10.8)	✓	ns	84	23,987	3.5 (2.8-4.3)	✓	ns
BSA Total	274	33,781	8.1 (7.2-9.1)	✓✓✓	*	1,237	294,684	4.2 (4.0-4.4)	✓✓✓	*

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				
<i>Initial round</i>				
BSWN	10.9 (9.4-12.6)	90.3 (88.8-91.7)	10.3 (6.3-15.7)	11.3 (6.8-17.7)
BSCM	12.9 (11.2-14.8)	88.8 (87.1-90.3)	7.1 (4.0-11.7)	9.2 (5.0-15.5)
BSAL	7.3 (6.0-8.8)	94.2 (92.9-95.4)	14.8 (8.7-22.9)	10.8 (6.2-17.6)
BSM	10.7 (8.9-12.7)	90.7 (88.9-92.3)	10.9 (6.1-17.5)	11.6 (6.3-19.4)
BSCtoC	6.9 (5.4-8.7)	94.3 (92.7-95.6)	16.3 (8.9-26.2)	9.2 (4.4-17.0)
BSC	8.9 (7.1-11.1)	92.8 (90.8-94.4)	17.9 (10.2-28.3)	16.0 (8.8-26.9)
BSSL	7.5 (5.6-10.0)	93.8 (91.6-95.5)	14.3 (5.9-27.2)	10.8 (4.3-22.2)
BSHC	9.8 (6.4-14.4)	90.5 (86.3-93.8)	3.8 (0.1-19.6)	3.8 (0.1-21.0)
BSA Total	9.6 (9.0-10.3)	91.8 (91.2-92.3)	11.2 (9.2-13.6)	10.8 (8.8-13.3)
<i>Subsequent round</i>				
BSWN	2.6 (2.3-2.9)	97.9 (97.7-98.2)	19.3 (15.3-24.0)	5.1 (3.9-6.4)
BSCM	3.9 (3.4-4.4)	96.9 (96.4-97.3)	20.2 (15.3-25.8)	7.8 (5.8-10.4)
BSAL	2.5 (2.1-2.9)	98.0 (97.6-98.3)	17.7 (11.9-24.8)	4.4 (2.9-6.5)
BSM	3.1 (2.8-3.4)	97.5 (97.1-97.7)	16.9 (13.2-21.2)	5.2 (4.0-6.7)
BSCtoC	1.5 (1.3-1.8)	99.0 (98.8-99.2)	29.1 (22.3-36.7)	4.4 (3.2-5.8)
BSC	2.6 (2.2-3.0)	98.0 (97.7-98.3)	21.6 (16.1-28.1)	5.6 (4.0-7.6)
BSSL	3.1 (2.8-3.4)	97.4 (97.1-97.6)	14.6 (11.6-18.1)	4.5 (3.5-5.7)
BSHC	2.7 (2.3-3.1)	97.8 (97.4-98.2)	16.9 (11.2-23.9)	4.5 (2.9-6.6)
BSA Total	2.7 (2.6-2.8)	97.8 (97.7-97.9)	18.6 (17.0-20.4)	5.1 (4.6-5.6)
2 years				
<i>Initial round</i>				
BSWN	10.8 (10.0-11.6)	90.9 (90.2-91.6)	10.7 (8.6-13.2)	11.6 (9.2-14.4)
BSCM	11.8 (10.9-12.8)	89.8 (88.9-90.6)	8.3 (6.2-10.8)	9.8 (7.3-12.9)
BSAL	10.2 (9.2-11.2)	91.8 (91.0-92.6)	11.2 (8.3-14.6)	11.4 (8.4-15.1)
BSM	10.1 (9.3-11.0)	90.9 (90.1-91.6)	8.3 (6.1-11.0)	8.4 (6.1-11.3)
BSCtoC	6.9 (6.2-7.7)	94.3 (93.6-94.9)	12.9 (9.4-17.0)	8.9 (6.4-12.1)
BSC	10.4 (9.3-11.5)	91.4 (90.5-92.3)	15.2 (11.7-19.3)	15.7 (11.9-20.4)
BSSL	7.8 (6.8-8.9)	93.3 (92.4-94.2)	10.2 (6.6-14.9)	8.0 (5.1-12.0)
BSHC	11.6 (9.9-13.6)	89.4 (87.6-91.0)	5.8 (2.7-10.7)	6.8 (3.1-12.8)
BSA Total	10.0 (9.6-10.3)	91.5 (91.2-91.8)	10.4 (9.4-11.5)	10.4 (9.3-11.5)
<i>Subsequent round</i>				
BSWN	3.0 (2.8-3.1)	97.7 (97.6-97.9)	20.1 (18.0-22.3)	5.9 (5.2-6.7)
BSCM	3.5 (3.2-3.7)	97.3 (97.0-97.5)	19.3 (16.7-22.1)	6.7 (5.7-7.8)
BSAL	2.9 (2.7-3.2)	97.9 (97.7-98.1)	22.1 (18.9-25.6)	6.5 (5.4-7.7)
BSM	3.4 (3.2-3.6)	97.2 (97.1-97.4)	16.4 (14.6-18.5)	5.6 (4.9-6.4)
BSCtoC	1.6 (1.4-1.7)	99.0 (98.9-99.1)	30.0 (26.4-33.8)	4.7 (4.0-5.4)
BSC	3.4 (3.2-3.6)	97.3 (97.1-97.5)	19.1 (16.8-21.6)	6.5 (5.6-7.5)
BSSL	2.8 (2.7-2.9)	97.8 (97.6-97.9)	16.3 (14.6-18.0)	4.5 (4.1-5.1)
BSHC	2.6 (2.4-2.8)	97.9 (97.7-98.1)	16.6 (13.8-19.8)	4.3 (3.5-5.2)
BSA Total	2.9 (2.8-2.9)	97.8 (97.7-97.8)	19.0 (18.2-19.9)	5.4 (5.2-5.7)

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

	Initial			Subsequent						
	Invasive cancers ≤10 mm	Total invasive cancers	% (95%CI)	Invasive cancers ≤10 mm	Total invasive cancers	% (95%CI)				
<i>45-49 years</i>										
BSWN	10	34	29.4 (15.1-47.5)	13	28	46.4 (27.5-66.1)				
BSCM	7	25	28.0 (12.1-49.4)	3	9	33.3 (7.5-70.1)				
BSAL	3	17	17.6 (3.8-43.4)	3	6	50.0 (11.8-88.2)				
BSM	9	27	33.3 (16.5-54.0)	5	19	26.3 (9.1-51.2)				
BSCtoC	5	27	18.5 (6.3-38.1)	0	4	0.0 (0.0-60.2)				
BSC	8	31	25.8 (11.9-44.6)	5	14	35.7 (12.8-64.9)				
BSSL	8	31	25.8 (11.9-44.6)	10	30	33.3 (17.3-52.8)				
BSHC	2	9	22.2 (2.8-60.0)	0	6	0.0 (0.0-45.9)				
BSA Total	52	201	25.9 (20.0-32.5)	39	116	33.6 (25.1-43.0)				
<i>50-69 years</i>										
BSWN	21	64	32.8 (21.6-45.7)	✓	ns	78	201	38.8 (32.0-45.9)	✓✓✓	*
BSCM	11	40	27.5 (14.6-43.9)	✓	ns	40	121	33.1 (24.8-42.2)	✓	ns
BSAL	14	37	37.8 (22.5-55.2)	✓	ns	28	95	29.5 (20.6-39.7)	✓	ns
BSM	11	36	30.6 (16.3-48.1)	✓	ns	73	185	39.5 (32.4-46.9)	✓✓✓	*
BSCtoC	6	33	18.2 (7.0-35.5)	✓	ns	52	153	34.0 (26.5-42.1)	✓	ns
BSC	7	39	17.9 (7.5-33.5)	✓	ns	55	153	35.9 (28.4-44.1)	✓	ns
BSSL	4	18	22.2 (6.4-47.6)	✓	ns	109	245	44.5 (38.2-51.0)	✓✓✓	*
BSHC	0	7	0.0 (0.0-41.0)	✓	ns	25	84	29.8 (20.3-40.7)	✓	ns
BSA Total	74	274	27.0 (21.8-32.7)	✓	ns	460	1237	37.2 (34.5-39.9)	✓✓✓	*

Exact Binomial 95% confidence intervals presented

* Statistically different from target value, ns: not significant

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✓✓✓ 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

	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)				
<i>45-49 years</i>										
BSWN	10	10,056	9.9 (4.8-18.3)	13	8,697	14.9 (8.0-25.6)				
BSCM	7	6,957	10.1 (4.0-20.7)	3	4,336	6.9 (1.4-20.2)				
BSAL	3	5,689	5.3 (1.1-15.4)	3	4,222	7.1 (1.5-20.8)				
BSM	9	8,240	10.9 (5.0-20.7)	5	5,391	9.3 (3.0-21.6)				
BSCtoC	5	6,921	7.2 (2.3-16.9)	0	6,443	0.0 (0.0-5.7)				
BSC	8	6,262	12.8 (5.5-25.2)	5	5,050	9.9 (3.2-23.1)				
BSSL	8	10,122	7.9 (3.4-15.6)	10	13,608	7.3 (3.5-13.5)				
BSHC	2	3,724	5.4 (0.7-19.4)	0	3,535	0.0 (0.0-10.4)				
BSA Total	52	57,971	9.0 (6.7-11.8)	39	51,282	7.6 (5.4-10.4)				
<i>50-69 years</i>										
BSWN	21	6,822	30.8 (19.1-47.1)	✓✓✓	*	78	45,751	17.0 (13.5-21.3)	✓✓✓	*
BSCM	11	5,097	21.6 (10.8-38.6)	✓	ns	40	24,100	16.6 (11.9-22.6)	✓✓✓	*
BSAL	14	4,127	33.9 (18.5-56.9)	✓✓✓	*	28	21,000	13.3 (8.9-19.3)	✓	ns
BSM	11	5,350	20.6 (10.3-36.8)	✓	ns	73	42,219	17.3 (13.6-21.7)	✓✓✓	*
BSCtoC	6	4,613	13.0 (4.8-28.3)	✓	ns	52	39,476	13.2 (9.8-17.3)	✓	ns
BSC	7	3,557	19.7 (7.9-40.5)	✓	ns	55	30,896	17.8 (13.4-23.2)	✓✓✓	*
BSSL	4	2,884	13.9 (3.8-35.5)	✓	ns	109	67,255	16.2 (13.3-19.6)	✓✓✓	*
BSHC	0	1,331	0.0 (0.0-27.7)	✓	ns	25	23,987	10.4 (6.7-15.4)	✓	ns
BSA Total	74	33,781	21.9 (17.2-27.5)	✓✓✓	*	460	294,684	15.6 (14.2-17.1)	✓✓✓	*

Poisson 95% confidence intervals presented

* Statistically different from target value, ns: not significant

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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.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 45-69 years

Table 3c.1: Proportion of invasive cancers <15 mm, 2 years

	Initial			Subsequent						
	Invasive cancers <15 mm	Total invasive cancers	% (95%CI)	Invasive cancers <15 mm	Total invasive cancers	% (95%CI)				
45-49 years										
BSWN	18	34	52.9 (35.1-70.2)	20	28	71.4 (51.3-86.8)				
BSCM	9	25	36.0 (18.0-57.5)	4	9	44.4 (13.7-78.8)				
BSAL	4	17	23.5 (6.8-49.9)	3	6	50.0 (11.8-88.2)				
BSM	13	27	48.1 (28.7-68.1)	7	19	36.8 (16.3-61.6)				
BSCtoC	7	27	25.9 (11.1-46.3)	1	4	25.0 (0.6-80.6)				
BSC	12	31	38.7 (21.8-57.8)	7	14	50.0 (23.0-77.0)				
BSSL	13	31	41.9 (24.5-60.9)	13	30	43.3 (25.5-62.6)				
BSHC	6	9	66.7 (29.9-92.5)	1	6	16.7 (0.4-64.1)				
BSA Total	82	201	40.8 (33.9-47.9)	56	116	48.3 (38.9-57.7)				
50-69 years										
BSWN	33	64	51.6 (38.7-64.2)	✓	ns	131	201	65.2 (58.2-71.7)	✓✓✓	*
BSCM	20	40	50.0 (33.8-66.2)	✓	ns	63	121	52.1 (42.8-61.2)	✓	ns
BSAL	18	37	48.6 (31.9-65.6)	✓	ns	41	95	43.2 (33.0-53.7)	✓	ns
BSM	18	36	50.0 (32.9-67.1)	✓	ns	103	185	55.7 (48.2-63.0)	✓	ns
BSCtoC	11	33	33.3 (18.0-51.8)	✓	ns	76	153	49.7 (41.5-57.9)	✓	ns
BSC	18	39	46.2 (30.1-62.8)	✓	ns	87	153	56.9 (48.6-64.8)	✓	ns
BSSL	7	18	38.9 (17.3-64.3)	✓	ns	158	245	64.5 (58.1-70.5)	✓✓✓	*
BSHC	1	7	14.3 (0.4-57.9)	✓	ns	44	84	52.4 (41.2-63.4)	✓	ns
BSA Total	126	274	46.0 (40.0-52.1)	✓	ns	703	1237	56.8 (54.0-59.6)	✓✓✓	*

Exact Binomial 95% confidence intervals presented

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Table 3c.2: Invasive cancers, <15 mm, per 10,000 screens, 2 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)				
<i>45-49 years</i>										
BSWN	18	10,056	17.9 (10.6-28.3)	20	8,697	23.0 (14.0-35.5)				
BSCM	9	6,957	12.9 (5.9-24.6)	4	4,336	9.2 (2.5-23.6)				
BSAL	4	5,689	7.0 (1.9-18.0)	3	4,222	7.1 (1.5-20.8)				
BSM	13	8,240	15.8 (8.4-27.0)	7	5,391	13.0 (5.2-26.8)				
BSCtoC	7	6,921	10.1 (4.1-20.8)	1	6,443	1.6 (0.0-8.6)				
BSC	12	6,262	19.2 (9.9-33.5)	7	5,050	13.9 (5.6-28.6)				
BSSL	13	10,122	12.8 (6.8-22.0)	13	13,608	9.6 (5.1-16.3)				
BSHC	6	3,724	16.1 (5.9-35.1)	1	3,535	2.8 (0.1-15.8)				
BSA Total	82	57,971	14.1 (11.2-17.6)	56	51,282	10.9 (8.2-14.2)				
<i>50-69 years</i>										
BSWN	33	6,822	48.4 (33.3-67.9)	✓✓✓	*	131	45,751	28.6 (23.9-34.0)	✓✓✓	*
BSCM	20	5,097	39.2 (24.0-60.6)	✓	ns	63	24,100	26.1 (20.1-33.4)	✓✓✓	*
BSAL	18	4,127	43.6 (25.8-68.9)	✓	ns	41	21,000	19.5 (14.0-26.5)	✓	ns
BSM	18	5,350	33.6 (19.9-53.2)	✓	ns	103	42,219	24.4 (19.9-29.6)	✓✓✓	*
BSCtoC	11	4,613	23.8 (11.9-42.7)	✓	ns	76	39,476	19.3 (15.2-24.1)	✓	ns
BSC	18	3,557	50.6 (30.0-80.0)	✓	ns	87	30,896	28.2 (22.6-34.7)	✓✓✓	*
BSSL	7	2,884	24.3 (9.8-50.0)	✓	ns	158	67,255	23.5 (20.0-27.5)	✓✓✓	*
BSHC	1	1,331	7.5 (0.2-41.9)	✓	ns	44	23,987	18.3 (13.3-24.6)	✓	ns
BSA Total	126	33,781	37.3 (31.1-44.4)	✓✓✓	*	703	294,684	23.9 (22.1-25.7)	✓✓✓	*

Poisson 95% confidence intervals presented

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Figure 3c.1: Proportion invasive cancers <15mm, initial screens, 2 years

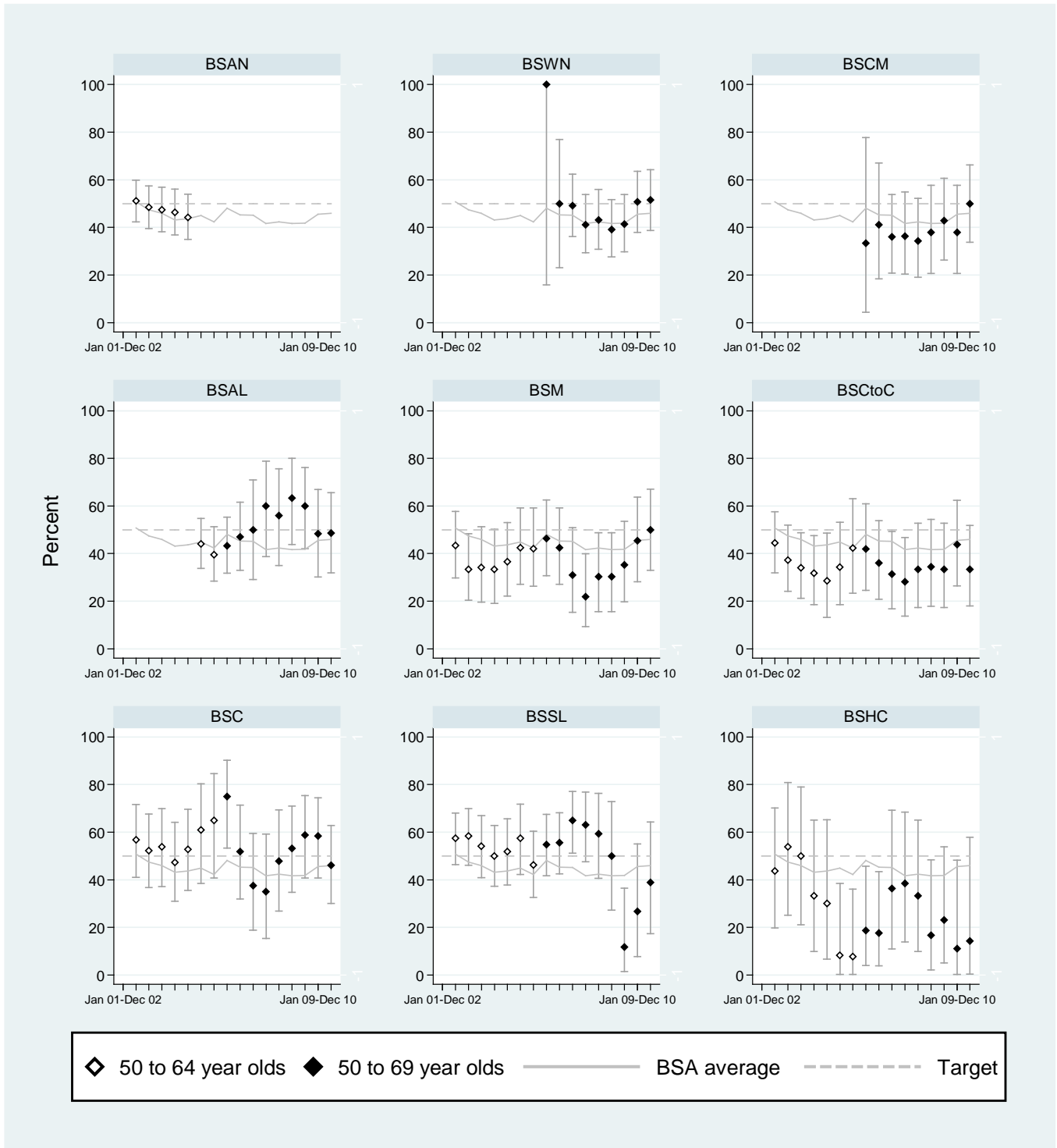


Figure 3c.1: Proportion invasive cancers <15mm, subsequent screens, 2 years

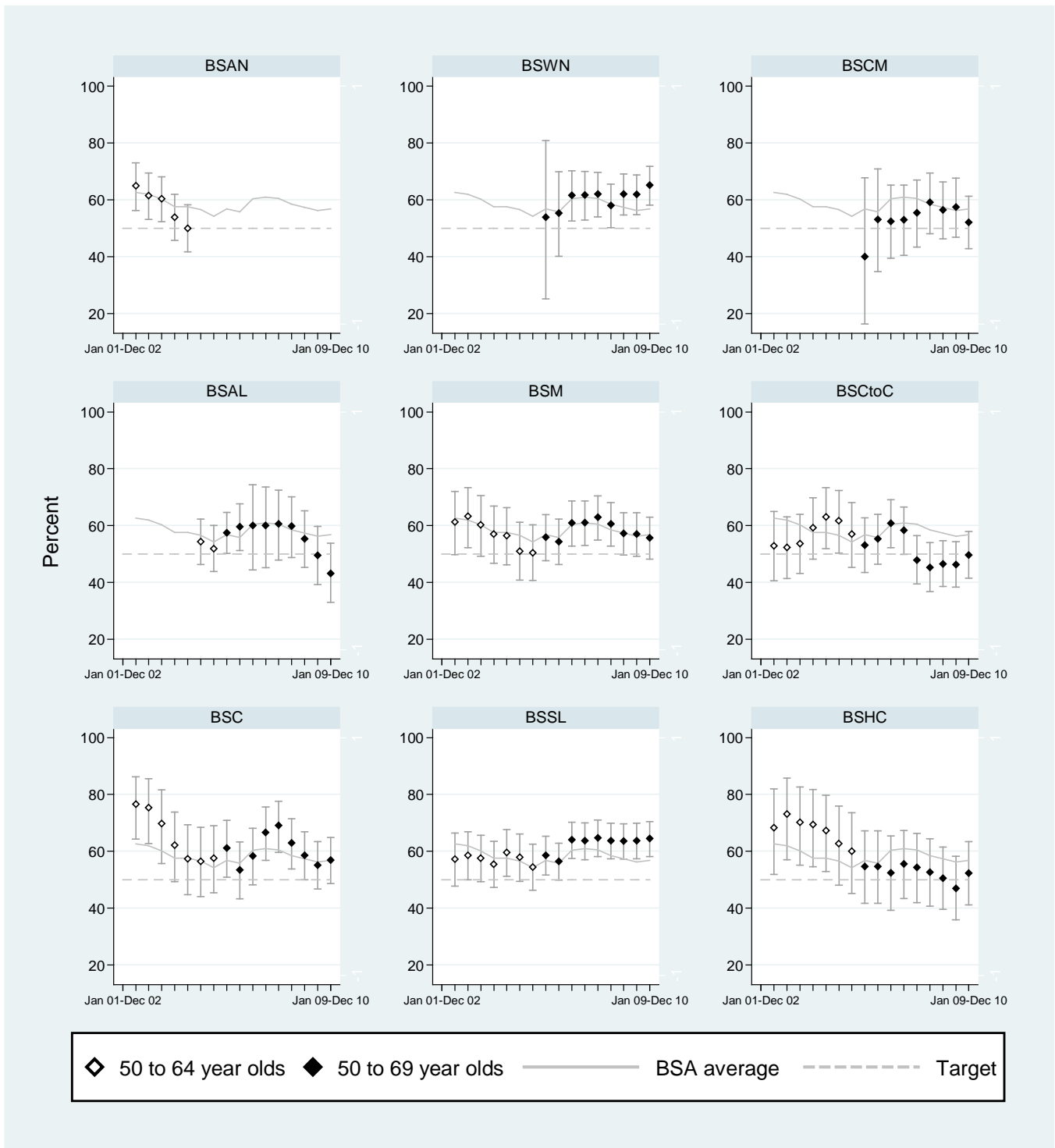
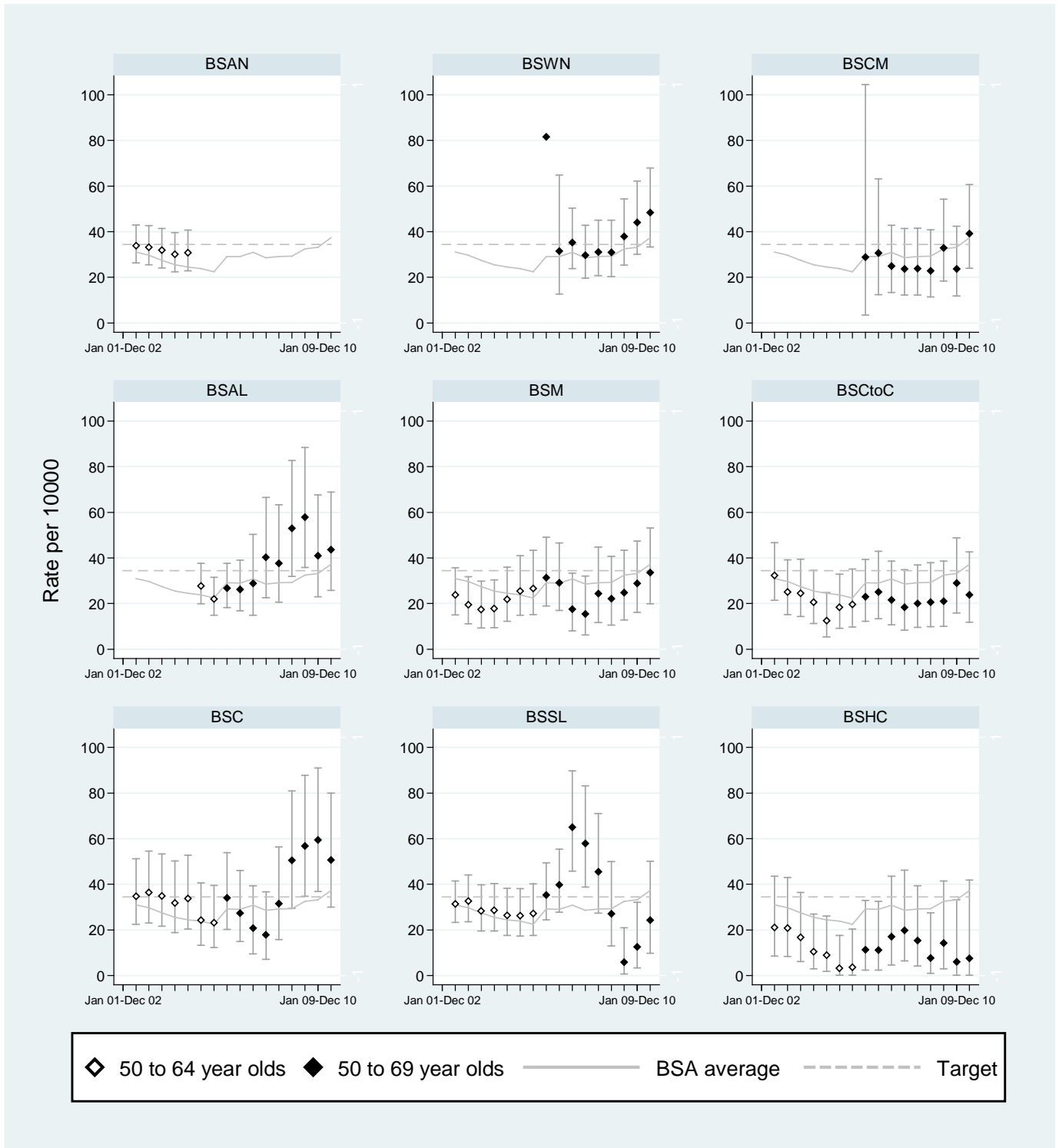
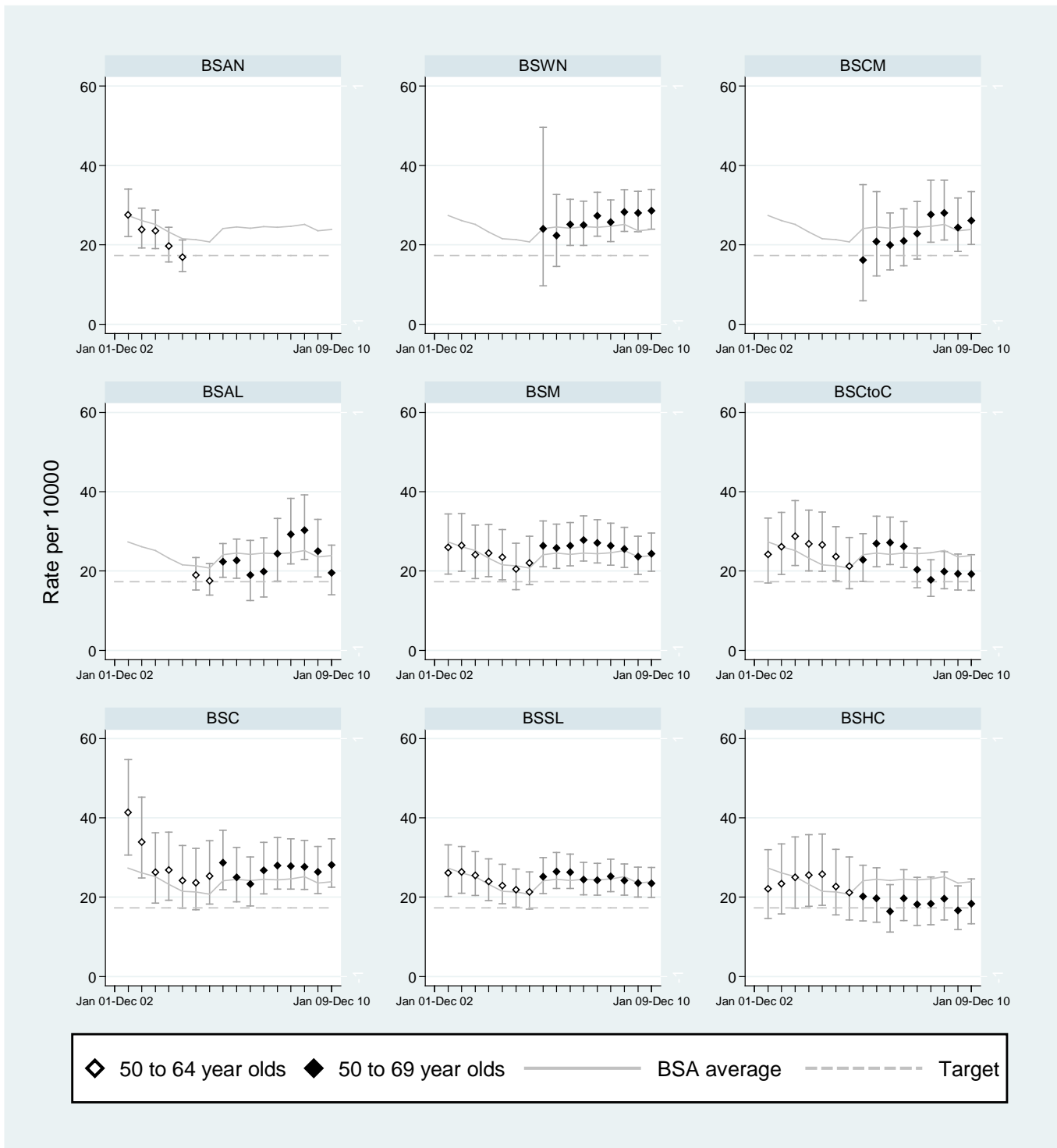


Figure 3c.2: Invasive cancers <15mm per 10,000 women screened, initial screens, 2 years



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 Jan 05-Dec 06 for BSWN was 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 45-69 years

Table 3d: Proportion of node negative invasive cancers, 2 years

	Initial			Subsequent					
	Invasive cancers, node negative	Total invasive cancers	% (95%CI)	Invasive cancers, node negative	Total invasive cancers	% (95%CI)			
<i>45-49 years</i>									
BSWN	27	34	79.4 (62.1-91.3)	20	28	71.4 (51.3-86.8)			
BSCM	14	25	56.0 (34.9-75.6)	4	9	44.4 (13.7-78.8)			
BSAL	13	17	76.5 (50.1-93.2)	5	6	83.3 (35.9-99.6)			
BSM	22	27	81.5 (61.9-93.7)	15	19	78.9 (54.4-93.9)			
BSCtoC	20	27	74.1 (53.7-88.9)	2	4	50.0 (6.8-93.2)			
BSC	21	31	67.7 (48.6-83.3)	8	14	57.1 (28.9-82.3)			
BSSL	16	31	51.6 (33.1-69.8)	22	30	73.3 (54.1-87.7)			
BSHC	5	9	55.6 (21.2-86.3)	5	6	83.3 (35.9-99.6)			
BSA Total	138	201	68.7 (61.8-75.0)	81	116	69.8 (60.6-78.0)			
<i>50-69 years</i>									
BSWN	50	64	78.1 (66.0-87.5)	✓	ns	167	201	83.1 (77.2-88.0)	✓✓✓ *
BSCM	33	40	82.5 (67.2-92.7)	✓	ns	90	121	74.4 (65.6-81.9)	✓ ns
BSAL	33	37	89.2 (74.6-97.0)	✓✓✓	*	75	95	78.9 (69.4-86.6)	✓ ns
BSM	26	36	72.2 (54.8-85.8)	✓	ns	164	185	88.6 (83.2-92.8)	✓✓✓ *
BSCtoC	22	33	66.7 (48.2-82.0)	✓	ns	122	153	79.7 (72.5-85.8)	✓ ns
BSC	28	39	71.8 (55.1-85.0)	✓	ns	116	153	75.8 (68.2-82.4)	✓ ns
BSSL	11	18	61.1 (35.7-82.7)	✓	ns	188	245	76.7 (70.9-81.9)	✓ ns
BSHC	4	7	57.1 (18.4-90.1)	✓	ns	64	84	76.2 (65.7-84.8)	✓ ns
BSA Total	207	274	75.5 (70.0-80.5)	✓✓	*	986	1237	79.7 (77.4-81.9)	✓✓ *

Exact Binomial 95% confidence intervals presented

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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.

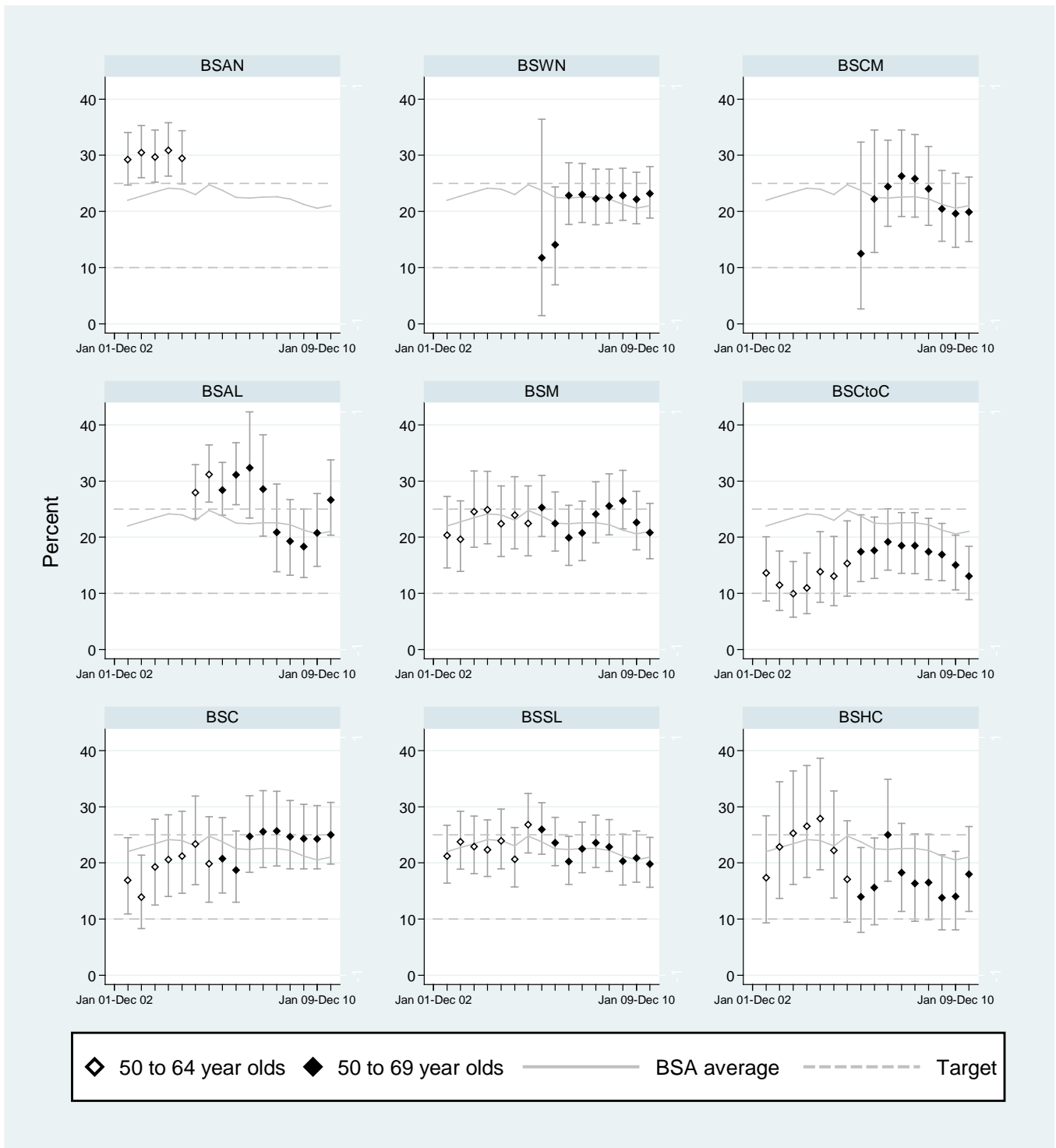
3.e. DCIS, women aged 45-69 years

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

	DCIS	Total cancers	% (95%CI)
<i>45-49 years</i>			
BSWN	29	91	31.9 (22.5-42.5)
BSCM	13	47	27.7 (15.6-42.6)
BSAL	19	42	45.2 (29.8-61.3)
BSM	14	60	23.3 (13.4-36.0)
BSCtoC	14	45	31.1 (18.2-46.6)
BSC	19	64	29.7 (18.9-42.4)
BSSL	27	88	30.7 (21.3-41.4)
BSHC	7	22	31.8 (13.9-54.9)
BSA Total	142	459	30.9 (26.7-35.4)
<i>50-69 years</i>			
BSWN	80	345	23.2 (18.8-28.0)
BSCM	40	201	19.9 (14.6-26.1)
BSAL	48	180	26.7 (20.4-33.8)
BSM	58	279	20.8 (16.2-26.0)
BSCtoC	28	214	13.1 (8.9-18.4)
BSC	64	256	25.0 (19.8-30.8)
BSSL	65	328	19.8 (15.6-24.5)
BSHC	20	111	18.0 (11.4-26.4)
BSA Total	403	1,914	21.1 (19.2-23.0)

Exact Binomial 95% confidence intervals presented

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



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)
<i>45-49 years</i>						
BSWN	5,010	5,102	98.2 (97.8-98.5)	18,477	18,753	98.5 (98.3-98.7)
BSCM	3,154	3,197	98.7 (98.2-99.0)	11,046	11,293	97.8 (97.5-98.1)
BSAL	3,227	3,382	95.4 (94.7-96.1)	9,089	9,911	91.7 (91.1-92.2)
BSM	3,118	3,268	95.4 (94.6-96.1)	13,073	13,631	95.9 (95.6-96.2)
BSCtoC	3,515	3,529	99.6 (99.3-99.8)	13,268	13,364	99.3 (99.1-99.4)
BSC	2,812	2,838	99.1 (98.7-99.4)	11,179	11,312	98.8 (98.6-99.0)
BSSL	6,664	6,739	98.9 (98.6-99.1)	23,426	23,730	98.7 (98.6-98.9)
BSHC	1,162	1,299	89.5 (87.7-91.1)	6,541	7,259	90.1 (89.4-90.8)
BSA Total	28,662	29,354	97.6 (97.5-97.8)	106,099	109,253	97.1 (97.0-97.2)
<i>50-69 years</i>						
BSWN	14,432	14,537	99.3 (99.1-99.4) ✓✓✓ *	52,196	52,573	99.3 (99.2-99.4) ✓✓✓ *
BSCM	7,581	7,654	99.0 (98.8-99.3) ✓✓✓ *	28,733	29,197	98.4 (98.3-98.6) ✓✓ *
BSAL	7,149	7,334	97.5 (97.1-97.8) ✓✓ *	23,486	25,127	93.5 (93.2-93.8) ✓ *
BSM	12,222	12,659	96.5 (96.2-96.9) ✓✓ *	46,217	47,569	97.2 (97.0-97.3) ✓✓ *
BSCtoC	11,961	11,982	99.8 (99.7-99.9) ✓✓✓ *	43,807	44,089	99.4 (99.3-99.4) ✓✓✓ *
BSC	8,335	8,391	99.3 (99.1-99.5) ✓✓✓ *	34,136	34,453	99.1 (99.0-99.2) ✓✓✓ *
BSSL	16,225	16,336	99.3 (99.2-99.4) ✓✓✓ *	69,529	70,139	99.1 (99.1-99.2) ✓✓✓ *
BSHC	5,444	5,818	93.6 (92.9-94.2) ✓ *	23,880	25,318	94.3 (94.0-94.6) ✓ *
BSA Total	83,349	84,711	98.4 (98.3-98.5) ✓✓ *	321,984	328,465	98.0 (98.0-98.1) ✓✓ *

Exact Binomial 95% confidence intervals presented

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✓✓✓ 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

Please note that data in the table above accounts for NZ National Statutory Holidays.

Figure 5a: Percentage of women notified of screening results within 10 working days, 6 months

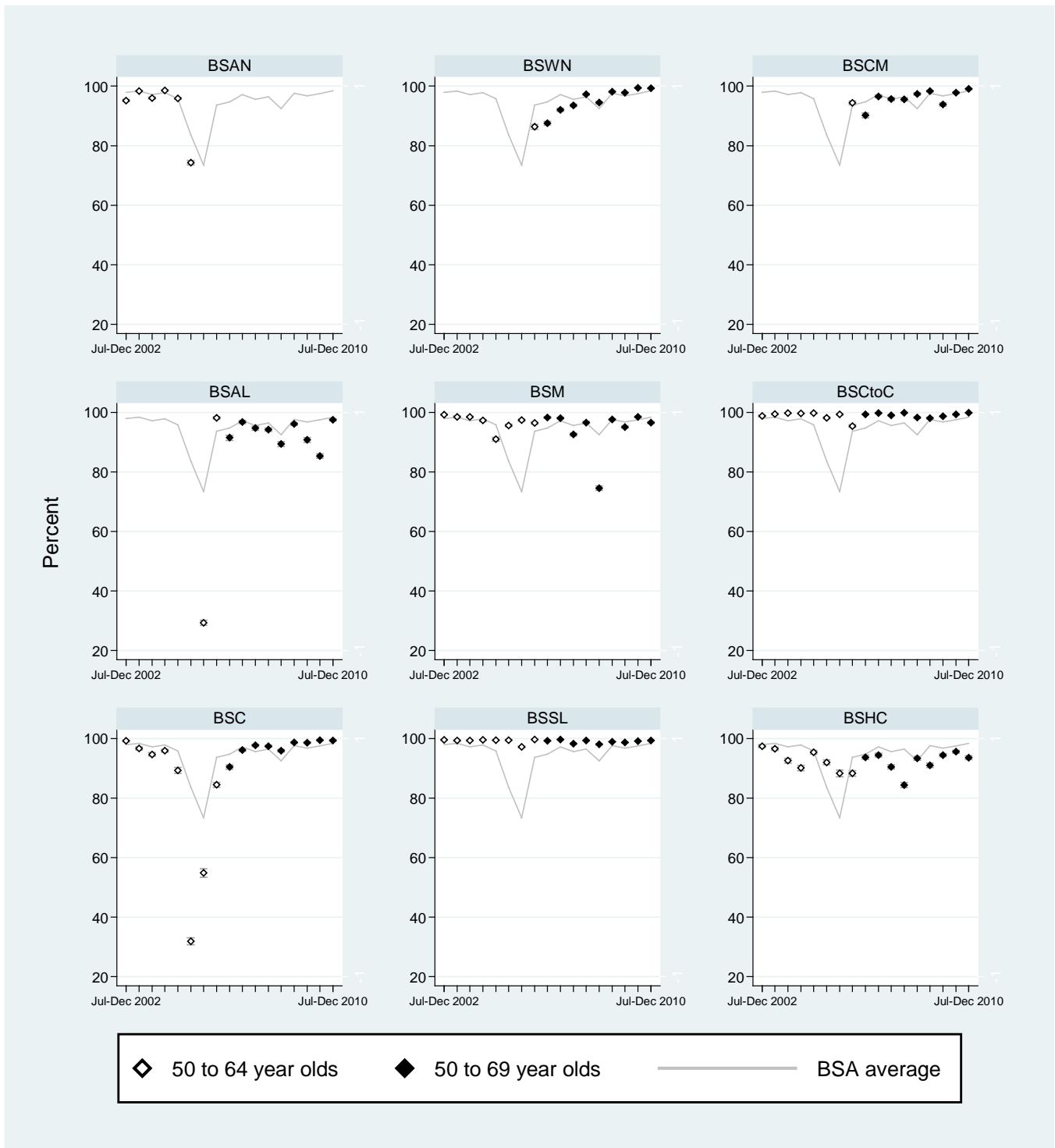
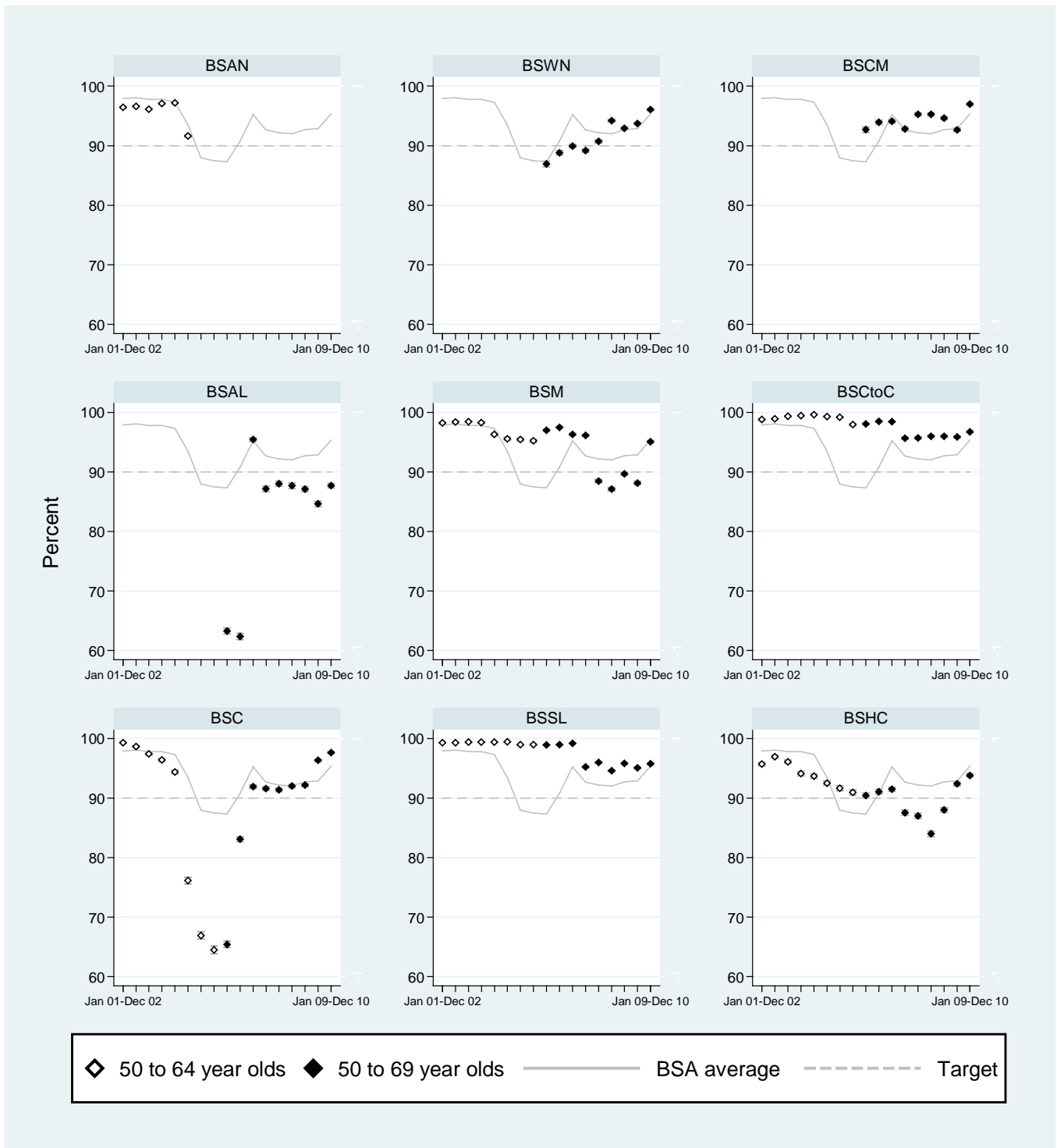


Figure 5a: Percentage of women notified of screening results within 10 working days, 2 years



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)				
<i>45-49 years</i>										
BSWN	327	366	89.3 (85.7-92.3)	1,303	1,401	93.0 (91.5-94.3)				
BSCM	271	277	97.8 (95.3-99.2)	920	974	94.5 (92.8-95.8)				
BSAL	117	185	63.2 (55.9-70.2)	428	655	65.3 (61.6-69.0)				
BSM	242	255	94.9 (91.4-97.3)	1,045	1,114	93.8 (92.2-95.1)				
BSCtoC	111	129	86.0 (78.8-91.5)	510	570	89.5 (86.7-91.9)				
BSC	166	173	96.0 (91.8-98.4)	828	857	96.6 (95.2-97.7)				
BSSL	370	385	96.1 (93.7-97.8)	1,319	1,387	95.1 (93.8-96.2)				
BSHC	65	98	66.3 (56.1-75.6)	310	595	52.1 (48.0-56.2)				
BSA Total	1,669	1,868	89.3 (87.9-90.7)	6,663	7,553	88.2 (87.5-88.9)				
<i>50-69 years</i>										
BSWN	467	520	89.8 (86.9-92.3)	✓	ns	1,943	2,088	93.1 (91.9-94.1)	✓	*
BSCM	424	434	97.7 (95.8-98.9)	✓✓	*	1,348	1,440	93.6 (92.2-94.8)	✓	*
BSAL	180	255	70.6 (64.6-76.1)	xxx	*	698	1,034	67.5 (64.6-70.4)	xxx	*
BSM	451	484	93.2 (90.6-95.3)	✓	*	1,855	1,978	93.8 (92.6-94.8)	✓	*
BSCtoC	208	240	86.7 (81.7-90.7)	✓	ns	847	935	90.6 (88.5-92.4)	✓	ns
BSC	255	272	93.8 (90.2-96.3)	✓	*	1,363	1,422	95.9 (94.7-96.8)	✓✓	*
BSSL	515	534	96.4 (94.5-97.8)	✓✓	*	1,994	2,108	94.6 (93.5-95.5)	✓✓	*
BSHC	116	174	66.7 (59.1-73.6)	xxx	*	422	774	54.5 (50.9-58.1)	xxx	*
BSA Total	2,616	2,913	89.8 (88.6-90.9)	✓	ns	10,470	11,779	88.9 (88.3-89.4)	✓	*

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

Please note that data in the table above accounts for NZ National Statutory Holidays.

Figure 5b: Percentage of women offered first assessment appointment within 15 working days, 6 months.

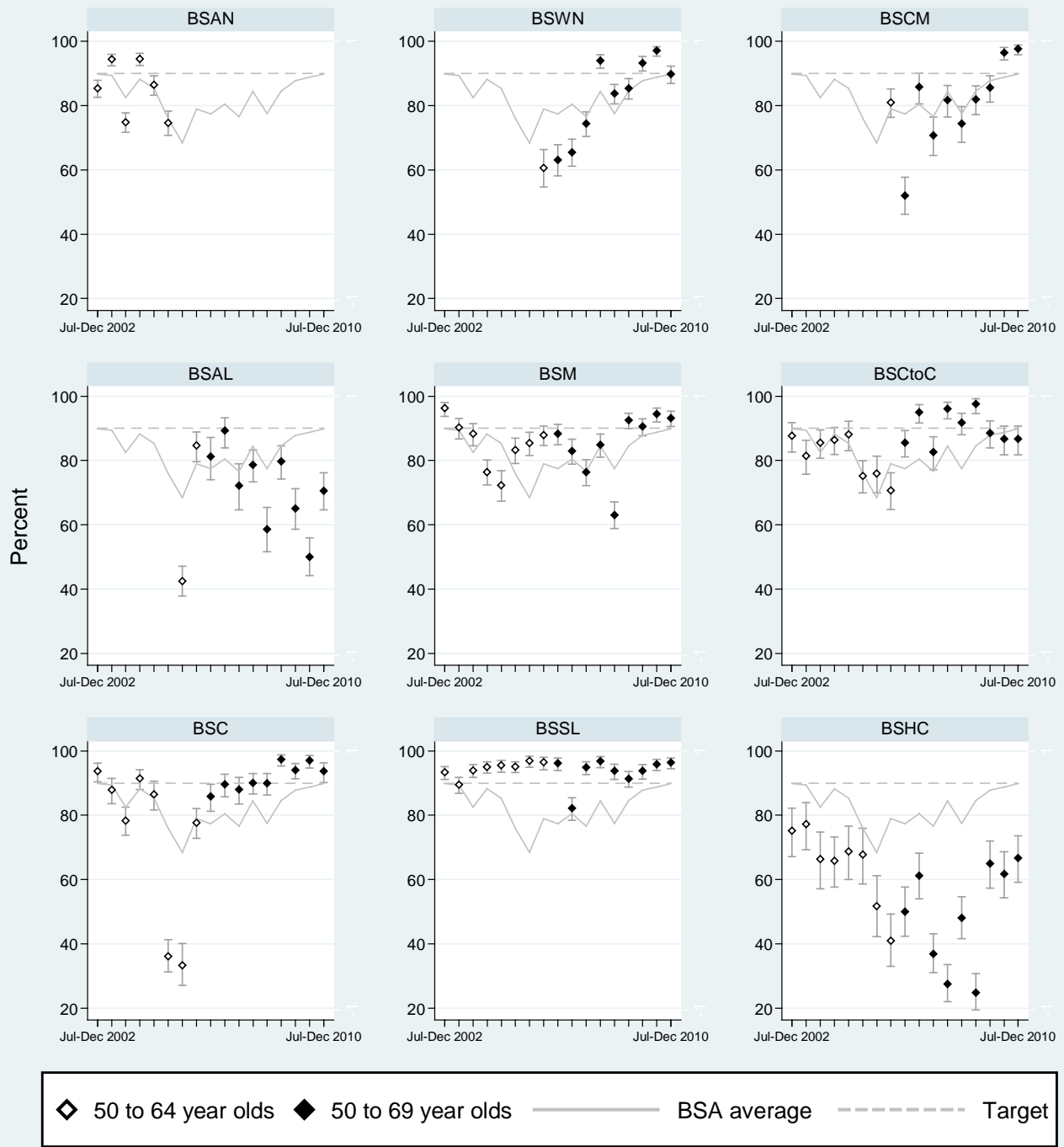
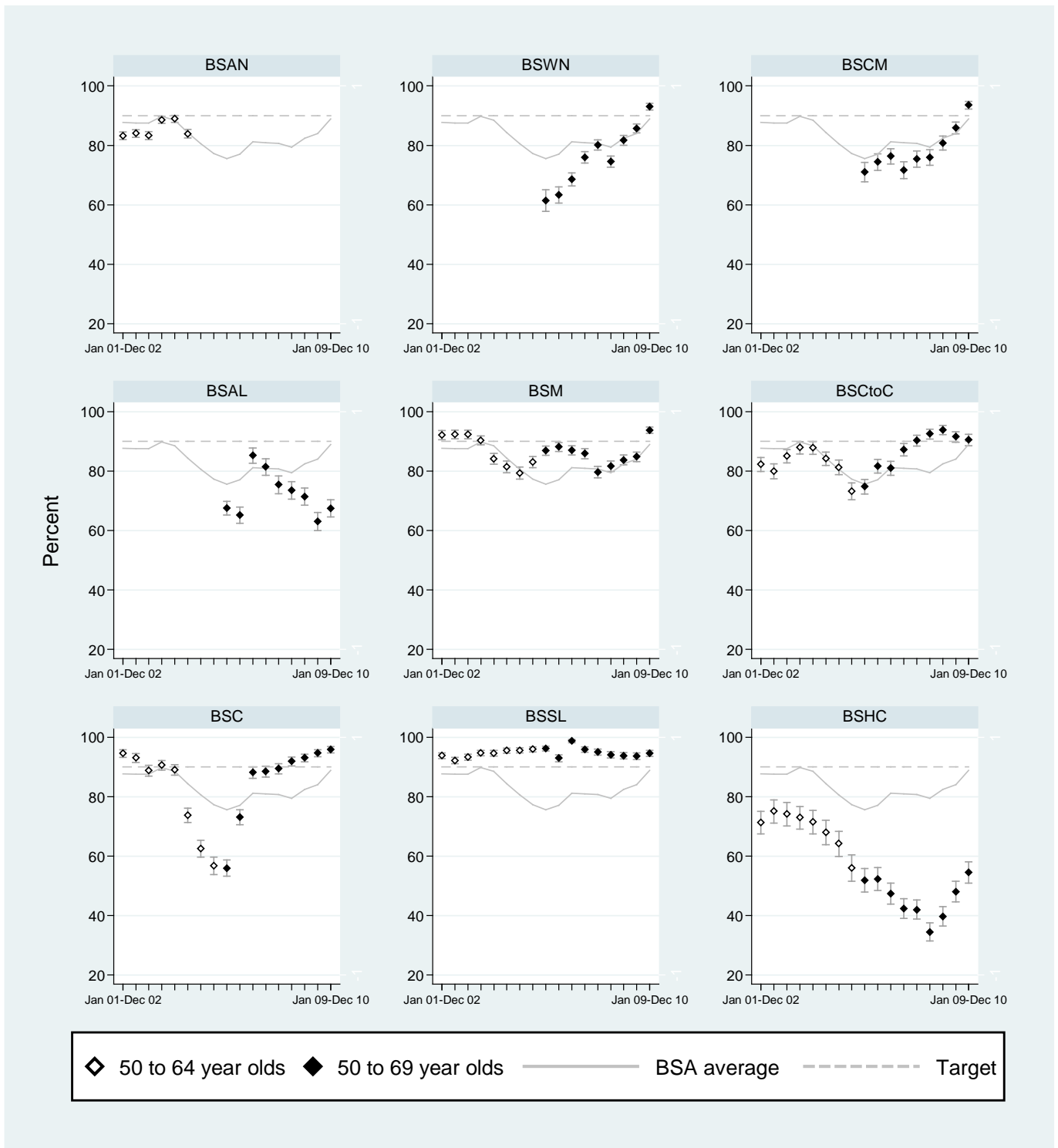


Figure 5b: Percentage of women offered first assessment appointment within 15 working days, 2 years



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 20 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)				
<i>45-49 years</i>										
BSWN	97	99	98.0 (92.9-99.8)	408	416	98.1 (96.2-99.2)				
BSCM	77	92	83.7 (74.5-90.6)	311	362	85.9 (81.9-89.3)				
BSAL	63	74	85.1 (75.0-92.3)	210	250	84.0 (78.9-88.3)				
BSM	59	64	92.2 (82.7-97.4)	256	304	84.2 (79.6-88.1)				
BSCtoC	34	37	91.9 (78.1-98.3)	149	153	97.4 (93.4-99.3)				
BSC	40	42	95.2 (83.8-99.4)	173	186	93.0 (88.3-96.2)				
BSSL	68	80	85.0 (75.3-92.0)	292	339	86.1 (82.0-89.6)				
BSHC	11	13	84.6 (54.6-98.1)	86	91	94.5 (87.6-98.2)				
BSA Total	449	501	89.6 (86.6-92.2)	1,885	2,101	89.7 (88.3-91.0)				
<i>50-69 years</i>										
BSWN	159	163	97.5 (93.8-99.3)	✓✓	*	669	679	98.5 (97.3-99.3)	✓✓	*
BSCM	175	194	90.2 (85.1-94.0)	✓	ns	516	599	86.1 (83.1-88.8)	✓	*
BSAL	106	119	89.1 (82.0-94.1)	✓	ns	401	467	85.9 (82.4-88.9)	✓	*
BSM	153	164	93.3 (88.3-96.6)	✓	ns	557	638	87.3 (84.5-89.8)	✓	*
BSCtoC	109	110	99.1 (95.0-100.0)	✓✓✓	*	385	392	98.2 (96.4-99.3)	✓✓	*
BSC	79	83	95.2 (88.1-98.7)	✓	ns	408	429	95.1 (92.6-96.9)	✓✓	*
BSSL	138	150	92.0 (86.4-95.8)	✓	ns	570	641	88.9 (86.2-91.2)	✓	ns
BSHC	46	48	95.8 (85.7-99.5)	✓	ns	181	196	92.3 (87.7-95.7)	✓	ns
BSA Total	965	1031	93.6 (91.9-95.0)	✓	*	3,687	4,041	91.2 (90.3-92.1)	✓	*

Exact Binomial 95% confidence intervals presented

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

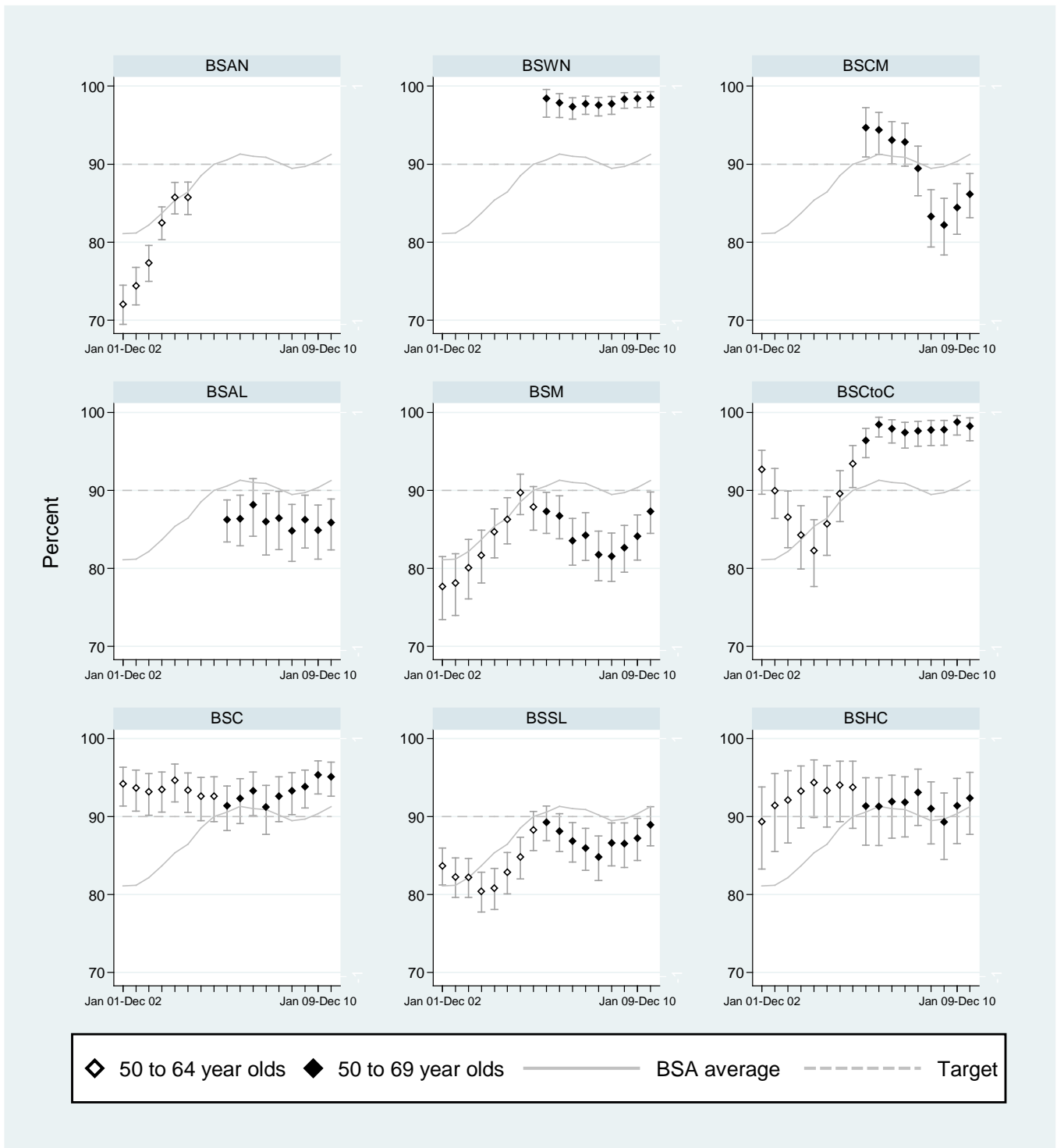
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant

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

Please note that data in the table above accounts for NZ National Statutory Holidays.

Figure 5c1: Proportion of women having a needle biopsy procedure within 5 working days, 2 years



5.c.2. Women having Open Biopsy within 20 working days

At least 90% of women requiring open biopsy should have this performed within 20 working days of being notified of the need for this operation.

This indicator has been changed from 'within 15 working days' to 'within 20 working days'. This change reflects the BSA Advisory Group recommendation that the NSU change the target to 20 days to be 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.

Table 5c.2: Proportion of women having an open biopsy procedure within 20 working days

	6 months			2 years				
	Open biopsies within 20 working days of notification	Total open biopsies	% (95%CI)	Open biopsies within 20 working days of notification	Total open biopsies	% (95%CI)		
<i>45-49 years</i>								
BSWN	7	8		35	49	71.4 (56.7-83.4)		
BSCM	2	6		13	24	54.2 (32.8-74.4)		
BSAL	5	6		18	20	90.0 (68.3-98.8)		
BSM	3	4		21	31	67.7 (48.6-83.3)		
BSCtoC	1	1		6	10	60.0 (26.2-87.8)		
BSC	1	4		11	18	61.1 (35.7-82.7)		
BSSL	5	5		26	26	100.0 (86.8-100.0)		
BSHC	2	2		15	16	93.8 (69.8-99.8)		
BSA Total	26	36	72.2 (54.8-85.8)	145	194	74.7 (68.0-80.7)		
<i>50-69 years</i>								
BSWN	14	17		48	67	71.6 (59.3-82.0)	xxx	*
BSCM	2	13		26	46	56.5 (41.1-71.1)	xxx	*
BSAL	9	10		29	33	87.9 (71.8-96.6)	✓	ns
BSM	7	13		34	56	60.7 (46.8-73.5)	xxx	*
BSCtoC	0	1		6	15	40.0 (16.3-67.7)	xxx	*
BSC	4	4		16	27	59.3 (38.8-77.6)	xxx	*
BSSL	12	13		33	38	86.8 (71.9-95.6)	✓	ns
BSHC	2	4		13	18	72.2 (46.5-90.3)	✓	ns
BSA Total	50	75	66.7 (54.8-77.1)	205	300	68.3 (62.7-73.6)	xxx	*

Note: 6 monthly proportions for Lead Providers not shown due to small numbers.

Exact Binomial 95% confidence intervals presented

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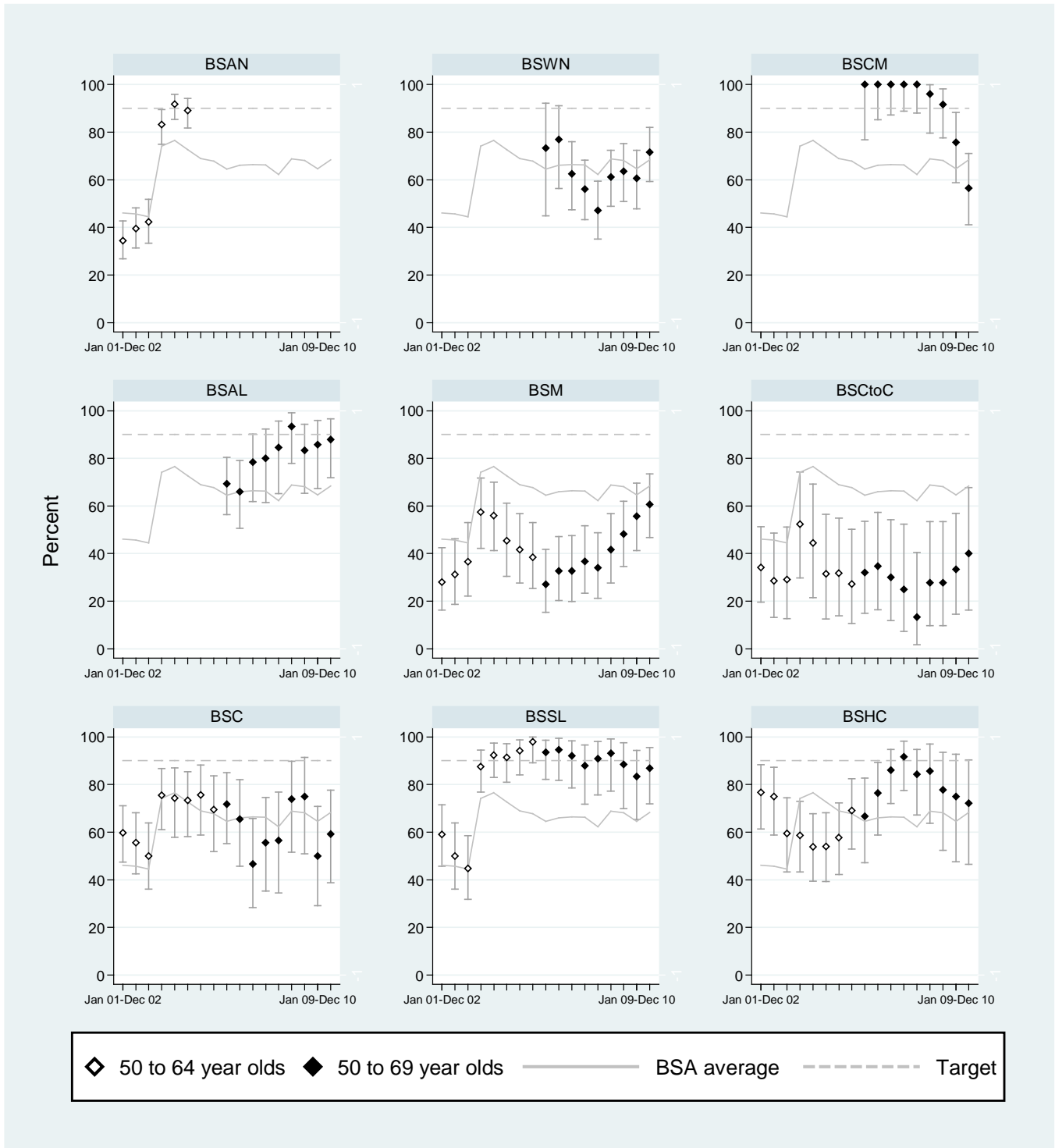
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xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Please note that data in the table above accounts for NZ National Statutory Holidays.

Figure 5c2: Proportion of women having an open biopsy procedure within 20 working days, 2 years*



*Note: Data from the Jul 07- Jun09 biennium onwards is comprised of data based on open biopsy procedures within 20 working days, and reflects the BSA Advisory Group change in this indicator from 'within 15 working days' to 'within 20 working days'

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)				
<i>45-49 years</i>										
BSWN	102	109	93.6 (87.2-97.4)	399	454	87.9 (84.5-90.7)				
BSCM	85	97	87.6 (79.4-93.4)	324	368	88.0 (84.3-91.2)				
BSAL	57	78	73.1 (61.8-82.5)	201	266	75.6 (69.9-80.6)				
BSM	57	68	83.8 (72.9-91.6)	248	315	78.7 (73.8-83.1)				
BSCtoC	33	38	86.8 (71.9-95.6)	132	159	83.0 (76.3-88.5)				
BSC	40	43	93.0 (80.9-98.5)	179	190	94.2 (89.9-97.1)				
BSSL	74	82	90.2 (81.7-95.7)	315	344	91.6 (88.1-94.3)				
BSHC	13	15	86.7 (59.5-98.3)	92	102	90.2 (82.7-95.2)				
BSA Total	461	530	87.0 (83.8-89.7)	1,890	2,198	86.0 (84.5-87.4)				
BSWN	150	176	85.2 (79.1-90.1)	✓	ns	618	719	86.0 (83.2-88.4)	✓	*
BSCM	173	198	87.4 (81.9-91.7)	✓	ns	536	615	87.2 (84.2-89.7)	✓	*
BSAL	94	127	74.0 (65.5-81.4)	xxx	*	402	492	81.7 (78.0-85.0)	xx	*
BSM	143	165	86.7 (80.5-91.5)	✓	ns	534	649	82.3 (79.1-85.1)	xx	*
BSCtoC	97	114	85.1 (77.2-91.1)	✓	ns	349	401	87.0 (83.3-90.2)	✓	ns
BSC	77	84	91.7 (83.6-96.6)	✓	ns	386	435	88.7 (85.4-91.5)	✓	ns
BSSL	138	152	90.8 (85.0-94.9)	✓	ns	588	648	90.7 (88.2-92.9)	✓	ns
BSHC	45	48	93.8 (82.8-98.7)	✓	ns	186	200	93.0 (88.5-96.1)	✓	ns
BSA Total	917	1064	86.2 (84.0-88.2)	✓	*	3,599	4,159	86.5 (85.5-87.6)	✓	*

Exact Binomial 95% confidence intervals presented

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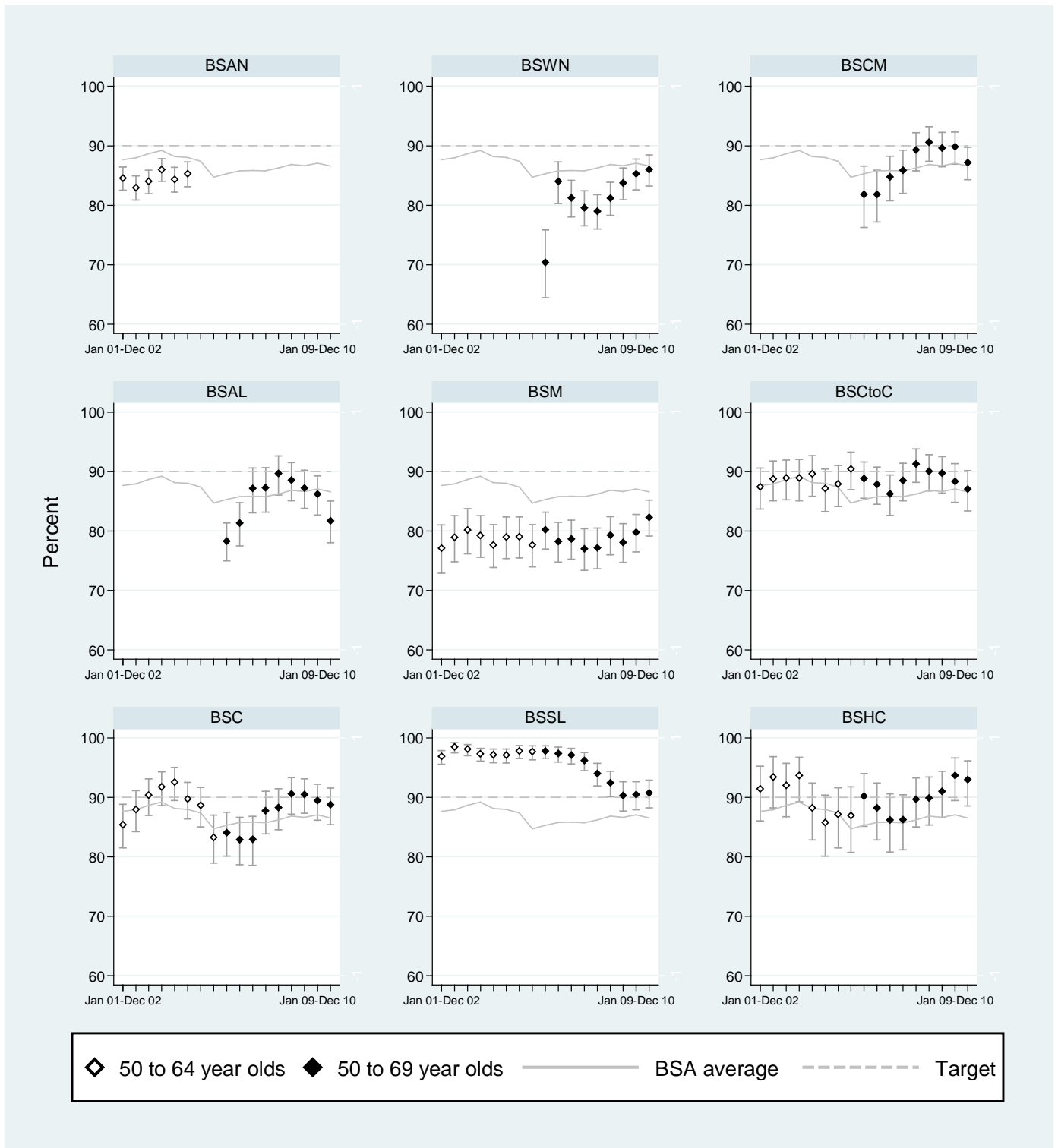
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xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Please note that data in the table above accounts for NZ National Statutory Holidays.

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*
2010	BSWN	Jul-Dec, 2010	27485	24390	20450	18795	14330	77965	27485	24390	20450	18795	14330	77965
2010	BSWN	Jan-Jun, 2010	27185	23560	20155	18030	13840	75585	27335	23975	20303	18413	14085	76775
2009	BSWN	Jul-Dec, 2009	27185	23560	20155	18030	13840	75585	27185	23560	20155	18030	13840	75585
2009	BSWN	Jan-Jun, 2009	26840	22575	19765	17310	13255	72905	27203	22980	19820	17883	13378	74060
2008	BSWN	Jul-Dec, 2008	26840	22575	19765	17310	13255	72905	26840	22575	19765	17310	13255	72905
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
2010	BSAL	Jul-Dec, 2010	17490	14460	12020	9940	7020	43440	17490	14460	12020	9940	7020	43440
2010	BSAL	Jan-Jun, 2010	17090	14040	11660	9450	6880	42030	17290	14250	11840	9695	6950	42735
2009	BSAL	Jul-Dec, 2009	17090	14040	11660	9450	6880	42030	17090	14040	11660	9450	6880	42030
2009	BSAL	Jan-Jun, 2009	16690	13620	11240	9030	6760	40650	17065	13785	11325	9375	6795	41280
2008	BSAL	Jul-Dec, 2008	16690	13620	11240	9030	6760	40650	16690	13620	11240	9030	6760	40650
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
2010	BSCM	Jul-Dec, 2010	17295	14705	12530	11030	8345	46610	17295	14705	12530	11030	8345	46610
2010	BSCM	Jan-Jun, 2010	16900	14215	12230	10610	8005	45060	17098	14460	12380	10820	8175	45835
2009	BSCM	Jul-Dec, 2009	16900	14215	12230	10610	8005	45060	16900	14215	12230	10610	8005	45060
2009	BSCM	Jan-Jun, 2009	16580	13655	11980	10175	7680	43490	16888	13845	12060	10520	7775	44200
2008	BSCM	Jul-Dec, 2008	16580	13655	11980	10175	7680	43490	16580	13655	11980	10175	7680	43490
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

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*
2010	BSM	Jul-Dec, 2010	24720	23195	20285	18320	14670	76470	24720	23195	20285	18320	14670	76470
2010	BSM	Jan-Jun, 2010	24930	22690	19720	17545	14285	74240	24825	22943	20003	17933	14478	75355
2009	BSM	Jul-Dec, 2009	24930	22690	19720	17545	14285	74240	24930	22690	19720	17545	14285	74240
2009	BSM	Jan-Jun, 2009	24770	22125	19195	16860	13880	72060	25013	22488	19320	17340	13980	73128
2008	BSM	Jul-Dec, 2008	24770	22125	19195	16860	13880	72060	24770	22125	19195	16860	13880	72060
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
2010	BSCtoC	Jul-Dec, 2010	20410	19235	16785	15170	11975	63165	20410	19235	16785	15170	11975	63165
2010	BSCtoC	Jan-Jun, 2010	20795	18765	16520	14605	11865	61755	20603	19000	16653	14888	11920	62460
2009	BSCtoC	Jul-Dec, 2009	20795	18765	16520	14605	11865	61755	20795	18765	16520	14605	11865	61755
2009	BSCtoC	Jan-Jun, 2009	20885	18320	16255	14005	11685	60265	21065	18498	16305	14398	11745	60945
2008	BSCtoC	Jul-Dec, 2008	20885	18320	16255	14005	11685	60265	20885	18320	16255	14005	11685	60265
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

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

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*
2010	BSC	Jul-Dec, 2010	18430	15895	13275	12190	9000	50360	18430	15895	13275	12190	9000	50360
2010	BSC	Jan-Jun, 2010	18560	15205	13110	11755	8810	48880	18495	15550	13193	11973	8905	49620
2009	BSC	Jul-Dec, 2009	18560	15205	13110	11755	8810	48880	18560	15205	13110	11755	8810	48880
2009	BSC	Jan-Jun, 2009	18125	14855	13075	11145	8650	47725	18415	15020	13038	11550	8728	48335
2008	BSC	Jul-Dec, 2008	18125	14855	13075	11145	8650	47725	18125	14855	13075	11145	8650	47725
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
2010	BSSL	Jul-Dec, 2010	27570	25780	22545	21100	15720	85145	27570	25780	22545	21100	15720	85145
2010	BSSL	Jan-Jun, 2010	27600	25185	22370	20145	15380	83080	27585	25483	22458	20623	15550	84113
2009	BSSL	Jul-Dec, 2009	27600	25185	22370	20145	15380	83080	27600	25185	22370	20145	15380	83080
2009	BSSL	Jan-Jun, 2009	27320	24460	22175	19025	14995	80655	27503	24768	22240	19700	15103	81810
2008	BSSL	Jul-Dec, 2008	27320	24460	22175	19025	14995	80655	27320	24460	22175	19025	14995	80655
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

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

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*
2010	BSHC	Jul-Dec, 2010	11055	10330	8880	8180	6365	33755	11055	10330	8880	8180	6365	33755
2010	BSHC	Jan-Jun, 2010	11285	10125	8690	7950	6275	33040	11170	10228	8785	8065	6320	33398
2009	BSHC	Jul-Dec, 2009	11285	10125	8690	7950	6275	33040	11285	10125	8690	7950	6275	33040
2009	BSHC	Jan-Jun, 2009	11255	9840	8690	7545	6250	32325	11293	9993	8653	7790	6258	32693
2008	BSHC	Jul-Dec, 2008	11255	9840	8690	7545	6250	32325	11255	9840	8690	7545	6250	32325
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
2010	BSA Total	Jul-Dec, 2010	164455	14799	12677	11472	87425	476910	16445	14799	12677	11472	87425	476910
2010	BSA Total	Jan-Jun, 2010	164345	14378	12445	11009	85340	463670	16440	14588	12561	11240	86383	470290
2009	BSA Total	Jul-Dec, 2009	164345	14378	12445	11009	85340	463670	16434	14378	12445	11009	85340	463670
2009	BSA Total	Jan-Jun, 2009	162465	13945	12237	10509	83155	450075	16444	14137	12276	10855	83760	456450
2008	BSA Total	Jul-Dec, 2008	162465	13945	12237	10509	83155	450075	16246	13945	12237	10509	83155	450075
2008	BSA Total	Jan-Jun, 2008	158510	13560	12160	98175	81945	437325	16094	13737	12178	10082	83710	443690
2007	BSA Total	Jul-Dec, 2007	158510	13560	12160	98175	81945	437325	15851	13560	12160	98175	81945	437325
2007	BSA Total	Jan-Jun, 2007	153640	13206	12125	92870	78415	424595	15607	13383	12142	95523	80180	430960
2006	BSA Total	Jul-Dec, 2006	153640	13206	12125	92870	78415	424595	15364	13206	12125	92870	78415	424595
2006	BSA Total	Jan-Jun, 2006		12868	11770	91210		337595		13037	11947	92040		341888
2005	BSA Total	Jul-Dec, 2005		12868	11770	91210		337595		12868	11770	91210		337595
2005	BSA Total	Jan-Jun, 2005		12631	11292	89045		328280		12728	11488	89913		332080
2004	BSA Total	Jul-Dec, 2004		12631	11292	89045		328280		12631	11292	89045		328280
2004	BSA Total	Jan-Jun, 2004		12411	10777	86735		318625		12521	11035	87890		323453
2003	BSA Total	Jul-Dec, 2003		12411	10777	86735		318625		12411	10777	86735		318625
2003	BSA Total	Jan-Jun, 2003		12497	10373	84750		313460		12302	10301	84181		310212
2002	BSA Total	Jul-Dec, 2002		12192	98247	81626		301798		12192	98247	81626		301798

*Note: age 45-69 year populations are 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						Smoothed 6 monthly population estimates					
			45-49			50-69*			45-49			50-69*		
			Māori	Pacific	Other	Māori	Pacific	Other	Māori	Pacific	Other	Māori	Pacific	Other
2010	BSWN	Jul-Dec, 2010	3520	1325	22640	7350	2885	67730	3520	1325	22640	7350	2885	67730
2010	BSWN	Jan-Jun, 2010	3460	1265	22460	7080	2745	65760	3490	1295	22550	7215	2815	66745
2009	BSWN	Jul-Dec, 2009	3460	1265	22460	7080	2745	65760	3460	1265	22460	7080	2745	65760
2009	BSWN	Jan-Jun, 2009	3400	1210	22230	6670	2585	63650	3500	1243	22460	6790	2655	64615
2008	BSWN	Jul-Dec, 2008	3400	1210	22230	6670	2585	63650	3400	1210	22230	6670	2585	63650
2008	BSWN	Jan-Jun, 2008	3200	1145	21770	6430	2445	61720	3300	1178	22000	6550	2515	62685
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
2010	BSAL	Jul-Dec, 2010	1170	1790	14530	2780	3790	36870	1170	1790	14530	2780	3790	36870
2010	BSAL	Jan-Jun, 2010	1160	1730	14200	2670	3660	35700	1165	1760	14365	2725	3725	36285
2009	BSAL	Jul-Dec, 2009	1160	1730	14200	2670	3660	35700	1160	1730	14200	2670	3660	35700
2009	BSAL	Jan-Jun, 2009	1160	1710	13820	2560	3550	34540	1190	1750	3600	2615	3600	35065
2008	BSAL	Jul-Dec, 2008	1160	1710	13820	2560	3550	34540	1160	1710	13820	2560	3550	34540
2008	BSAL	Jan-Jun, 2008	1100	1630	13210	2450	3450	33490	1130	1670	13515	2505	3500	34015
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
2010	BSCM	Jul-Dec, 2010	2510	2965	11820	5240	6420	34950	2510	2965	11820	5240	6420	34950
2010	BSCM	Jan-Jun, 2010	2450	2790	11660	4960	6100	34000	2480	2878	11740	5100	6260	34475
2009	BSCM	Jul-Dec, 2009	2450	2790	11660	4960	6100	34000	2450	2790	11660	4960	6100	34000
2009	BSCM	Jan-Jun, 2009	2350	2670	11560	4750	5800	32940	2415	2743	11730	4850	5945	33405
2008	BSCM	Jul-Dec, 2008	2350	2670	11560	4750	5800	32940	2350	2670	11560	4750	5800	32940
2008	BSCM	Jan-Jun, 2008	2220	2525	11220	4550	5510	32010	2285	2598	11390	4650	5655	32475
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	31050	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

*Note: age 45-69 year populations are 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*		
			Māori	Pacific	Other	Māori	Pacific	Other	Māori	Pacific	Other	Māori	Pacific	Other
2010	BSM	Jul-Dec, 2010	5380	400	18940	12230	810	63430	5380	400	18940	12230	810	63430
2010	BSM	Jan-Jun, 2010	5380	360	19190	11670	790	61780	5380	380	19065	11950	800	62605
2009	BSM	Jul-Dec, 2009	5380	360	19190	11670	790	61780	5380	360	19190	11670	790	61780
2009	BSM	Jan-Jun, 2009	5230	310	19230	11140	750	60170	5340	293	19380	11400	768	60960
2008	BSM	Jul-Dec, 2008	5230	310	19230	11140	750	60170	5230	310	19230	11140	750	60170
2008	BSM	Jan-Jun, 2008	5010	345	18930	10620	715	58590	5120	328	19080	10880	733	59380
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
2010	BSCtoC	Jul-Dec, 2010	4105	340	15965	9095	700	53370	4105	340	15965	9095	700	53370
2010	BSCtoC	Jan-Jun, 2010	4135	325	16335	8665	620	52470	4120	333	16150	8880	660	52920
2009	BSCtoC	Jul-Dec, 2009	4135	325	16335	8665	620	52470	4135	325	16335	8665	620	52470
2009	BSCtoC	Jan-Jun, 2009	4075	310	16500	8270	635	51360	4190	310	16565	8400	658	51888
2008	BSCtoC	Jul-Dec, 2008	4075	310	16500	8270	635	51360	4075	310	16500	8270	635	51360
2008	BSCtoC	Jan-Jun, 2008	3845	310	16370	8010	590	50305	3960	310	16435	8140	613	50833
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

*Note: age 45-69 year populations are 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*		
			Māori	Pacific	Other	Māori	Pacific	Other	Māori	Pacific	Other	Māori	Pacific	Other
2010	BSC	Jul-Dec, 2010	2010	1080	15340	4120	2540	43700	2010	1080	15340	4120	2540	43700
2010	BSC	Jan-Jun, 2010	2010	1040	15510	3860	2430	42590	2010	1060	15425	3990	2485	43145
2009	BSC	Jul-Dec, 2009	2010	1040	15510	3860	2430	42590	2010	1040	15510	3860	2430	42590
2009	BSC	Jan-Jun, 2009	2015	970	15140	3640	2385	41700	2070	990	15355	3725	2435	42175
2008	BSC	Jul-Dec, 2008	2015	970	15140	3640	2385	41700	2015	970	15140	3640	2385	41700
2008	BSC	Jan-Jun, 2008	1905	930	14710	3470	2285	40750	1960	950	14925	3555	2335	41225
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
2010	BSSL	Jul-Dec, 2010	1645	335	25590	3450	615	81080	1645	335	25590	3450	615	81080
2010	BSSL	Jan-Jun, 2010	1620	340	25640	3295	585	79200	1633	338	25615	3373	600	80140
2009	BSSL	Jul-Dec, 2009	1620	340	25640	3295	585	79200	1620	340	25640	3295	585	79200
2009	BSSL	Jan-Jun, 2009	1545	305	25470	3070	565	77020	1565	318	25620	3175	575	78060
2008	BSSL	Jul-Dec, 2008	1545	305	25470	3070	565	77020	1545	305	25470	3070	565	77020
2008	BSSL	Jan-Jun, 2008	1505	280	25170	2860	545	74940	1525	293	25320	2965	555	75980
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: age 45-69 year populations are 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*		
			Māori	Pacific	Other	Māori	Pacific	Other	Māori	Pacific	Other	Māori	Pacific	Other
2010	BSHC	Jul-Dec, 2010	745	60	10250	1405	180	32170	745	60	10250	1405	180	32170
2010	BSHC	Jan-Jun, 2010	745	70	10470	1350	180	31510	745	65	10360	1378	180	31840
2009	BSHC	Jul-Dec, 2009	745	70	10470	1350	180	31510	745	70	10470	1350	180	31510
2009	BSHC	Jan-Jun, 2009	720	75	10460	1315	150	30860	745	73	10475	1360	153	31180
2008	BSHC	Jul-Dec, 2008	720	75	10460	1315	150	30860	720	75	10460	1315	150	30860
2008	BSHC	Jan-Jun, 2008	670	80	10430	1225	145	30220	695	78	10445	1270	148	30540
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
2010	BSA Total	Jul-Dec, 2010	21085	8295	135075	45670	17940	413300	21085	8295	135075	45670	17940	413300
2010	BSA Total	Jan-Jun, 2010	20960	7920	135465	43550	17110	403010	21023	8108	135270	44610	17525	408155
2009	BSA Total	Jul-Dec, 2009	20960	7920	135465	43550	17110	403010	20960	7920	135465	43550	17110	403010
2009	BSA Total	Jan-Jun, 2009	20495	7560	134410	41415	16420	392240	21015	7718	135710	42315	16788	397348
2008	BSA Total	Jul-Dec, 2008	20495	7560	134410	41415	16420	392240	20495	7560	134410	41415	16420	392240
2008	BSA Total	Jan-Jun, 2008	19455	7245	131810	39615	15685	382025	19975	7403	133110	40515	16053	387133
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: age 45-69 year populations are 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 in instances where lesions are benign.

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.

Smoothed 6 monthly population estimates

Populations for 6 month periods are estimated by averaging populations from the preceding, current and succeeding calendar year in order to provide more accurate population denominators for 6 monthly periods (and multiples of these) for use in calculations of population rates, such as coverage.

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.

Statistical significance

For the purposes of this report, statistical significance refers to instances where the upper or lower estimate of a 95% confidence interval for an observed proportion does not overlap with the target value for any given indicator, and that there is a 5% (or 1 in 20 chance) that the true value lies outside the range of the confidence interval.

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

