BREASTSCREEN AOTEAROA

INDEPENDENT MONITORING REPORT:

SCREENING AND ASSESSMENT REPORT OF WOMEN ATTENDING BSA

(WOMEN SCREENED JULY 2008 TO JUNE 2010)

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EXECUTIVE SUMMARY

This report presents cross-sectional data for the period January-June 2010 (6 months) and July 2008 to June 2010 (2 years), and trend data from programme inception to June 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 118,153 women aged 45-69 years over the 6-month period from January to June 2010, of which 89,665 were aged between 50 and 69 years. For women in this age group, the biennial participation of 68.7% was not substantially different from the target of 70%. Of biennial screens, 10.7% were initial screens and 89.3% 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 (57.2% and 61.5% respectively), compared with the remaining ethnic groups (70.1%). However, biennial coverage in Māori and Pacific groups continues show a sustained increase over time. Only BSSL is above target for Māori and Pacific coverage. Following on sustained increases in coverage for Māori and Pacific women, BSWN is now on target for this indicator, as is BSHC (Pacific women only).

BSSL continues to exceed the biennial coverage target of 70% reaching 82.9%, and has consistently had higher biennial coverage relative to other lead providers. BSHC also continues to exceed the biennial coverage target of 70% and for this reporting period reached 75.8%. 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 88.3% within 27 months (target >85%). Of those who attended for re-screen, 84.1% attended within 20-24 months (target >75%). The biennial re-screen rate (86.1%) 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 July 2007-June 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 10.1% (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 BSHC (14.3%), BSC (11.1%), and BSCM (11.4%).

False positives and positive predictive value
The proportion of false positives for women aged 50-69 years for the 6 month period was 8.8% for initial screens (target <9%), and 2.1% for subsequent screens (target <4%). The positive predictive value (PPV) for the programme for the 6 month reporting period was 8.6% for initial screens and 18.5% 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 471 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 8.7 per 1,000 for initial screens and 4.9 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 9.9 per 1,000 for initial screens and 5.5 per 1,000 for subsequent screens. This represented 1,903 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.

The proportion of DCIS of all cancers for women aged 50-69 over the biennium was 20.6%, ranging from 14.0% to 24.3% across Lead Providers. The proportion of DCIS of all cancers has remained relatively stable for BSA overall.

Invasive cancer detection rate
The BSA biennial invasive cancer detection for women aged 50-69 years was 7.3 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 1,441 invasive cancers detected by BSA for the 2-year reporting period. The overall proportion of node negative cancers (of all invasive cancers) was 74.2% for initial screens (target >70%) and 79.9% for subsequent screens (target >75%).

Invasive cancer detected ≤ 10mm
For women 50-69 years the overall proportion of screen detected invasive cancers ≤ 10mm in size for the 2-year period was 26.6% for initial screens (target ≥ 25%) and 38.7% for subsequent screens (target ≥ 30%). The corresponding detection rates per 10,000 women screened for invasive cancers ≤ 10mm were better than the target value at 19.4 for initial screens (target ≥ 15.2 per 10,000 screens) and 16.2 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 45.6% for initial screens (which continues to be below the target value of >50%) and 56.2% 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 33.2 for initial screens (target value >30.5 per 10,000 screens) and 23.6 for subsequent screens (target value >17.3 per 10,000 screens).

4. Provision of an appropriate and acceptable service

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

The overall proportion of women in the 6-month period who were notified of screening results within 10 working days was 97.5% for women 50-69 years, which was higher than the target value of ≥ 90%.

Assessment
The overall proportion of women offered a first assessment within 15 working days for the biennium for women 50-69 years was 84.0%, which significantly below the target value of 90%. Trend data for this indicator show stable estimates for the programme overall in the most recent period. There is a continued significant decline in BSAL.

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 64.6%. For the 6-month period the overall proportion receiving an open biopsy within 20 working days was 63.4% for women 50-69 years.

The proportion of women who received their final diagnostic biopsy results within 5 working days was 87.1% for 2 year data, which was on target for this indicator (target value 90%). The overall proportion for the 6-month period was also 87.5% for women aged 50-69 years. BSWN 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 ≥10% and was statistically significant), or (ii) Lead Providers were below target (≥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, proportion of node negative cancers for 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, and preoperative diagnosis of cancer. Following on sustained increases in coverage for Māori and Pacific women, BSWN is now on target for both these indicators. Targets were not achieved the percentage of women receiving an open biopsy within 20 working days (60.6%, target 90%).

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, small invasive cancer detection 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 (59.5%, target value 70%), Pacific coverage (58.2%, target value 70%) and Māori coverage (55.6%, target value 70%), and also the percentage of women eligible for re-screen who were re-screened within 27 months (73.7%, target 85%) - with a declining trend, percentage of women referred to assessment for initial screens (11.4, target value <10%), percentage of false positives for initial screens (9.9%, target value <9%), and percentage of women receiving a needle biopsy within 5 working days of assessment (84.4%, target value 90%).

and percentage of women receiving an open biopsy within 20 working days (75.7%, 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 subsequent screens, small cancer detection per 10,000 screens for both initial and subsequent 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 (55.4%, target value 70%), Pacific coverage (60.3%, target value 70%) and Māori coverage (47.2%, target value 70%), technical recall rates for mobile sites (4.8%, target value <3%), the percentage of women offered first assessment within 15 working days (63.0%, target value 90%) with a continued significant decline, and percentage of women receiving a needle biopsy within 5 working days of assessment (84.9%, 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 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, proportion of node negative cancers for subsequent screens, and benign open biopsies for subsequent screens. Targets were not achieved for overall coverage (62.9%, target value 70%), Pacific coverage (58.7%, target value 70%) and Māori coverage (47.1%, target value 70%), technical recall rates for fixed sites (0.7%, target value <0.5%) and mobile sites (5.5%, target value <3%), the percentage of women receiving needle biopsy within 5 working days (84.1%, target 90%), the percentage of women offered first assessment within 15 working days (84.8%, target 90%), the percentage of women receiving an open biopsy within 20 working days (55.8%, target 90%), and the proportion of women receiving final biopsy results within 5 working days (79.8%, target 90%). The percentage of women eligible for re-screen who were re-screened within 27 months was below target (76.0%, target 85%) and 20-24 months re-screen was also below target (51.9%, target 75%); although there is an 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 (both initial and subsequent screens), invasive cancer detection rates for 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, and preoperative diagnosis of cancer. Biennial coverage BSCtoC continues to increase and is now on target. Targets were not achieved for Pacific coverage (58.9%, target value 70%) and Māori coverage (54.4%, target value 70%), technical recall rates for mobile sites (3.6%, target value <3%), and the percentage of women receiving an open biopsy within 20 working days (33.3%, 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 cancer 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 initial and subsequent screens, preoperative diagnosis of cancer, and false positive rates for subsequent screens. Biennial coverage in BSC continues to increase it is now on target. Targets were not achieved for Pacific coverage (54.4%, target value 70%) and Māori coverage (61.7%, target value 70%), technical recall rates for mobile sites (4.4%, target value <3%), referrals to assessment for initial screens (11.1%, target value 10%), and the percentage of women receiving an open biopsy within 20 working days (50.0%, 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, small cancer detection for subsequent screens, benign open biopsy rates in women attending for initial and 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, and preoperative diagnosis of cancer.

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 a subsequent screen, 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 (60.4%, target value 70%), technical recall rates for mobile sites (3.8%, target value <3%), and false positive rates for initial screens (13.2%, target <9%). Additional targets not achieved included the percentage of women referred to assessment for initial screens (14.3%, target <10%), percentage of cancers from referral to assessment for initial screens (4.6%, target ≥9%), the proportion (15.4%, target 50%) and rate per 10,000 screens (7.6, target value 30.5) for small invasive cancer detection (<15mm) for initial screens, the estimated specificity (the proportion of women without breast cancer at screening who have a negative screen result) for initial screens (86.9%, target value >93%), and the percentage of women offered first assessment within 15 working days (48.0%, 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 services are now on target. Consideration is being given to determine the appropriate date for introduction population projections from the 2006 census as denominators for population based rates.

There is also a continued upward trend in coverage for Māori women (2 services on target) and Pacific women (3 services on target) (1a.7). However, despite increases, the overall coverage is still below the target of 70% and coverage for Māori is less than 50% in two services. Disparities in coverage for Māori and Pacific women still exist.

The BSA Advisory Group recommends that Lead Providers simplify their enrolment processes and reduce multiple points of contact with women. The BSA Advisory Group requests the National Screening Unit to obtain maps of enrolment processes from each Lead Provider, according to a common schedule, to be presented and discussed at the next BSA Advisory Group meeting.

2. Time from Screening to First Offered Assessment (5b)

The BSA Advisory Group notes the deterioration in time from screening to offer of assessment in BSAL for the most recent available 6 month data and the two yearly data. BSHC 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. These data need to be re-considered at the next BSA Advisory Group meeting after non-working days due to NZ National Statutory Holidays, are deducted.

3. Re-screening (1b.1)

The re-screen rate is below target for 6 month and 2 yearly data for BSCM and BSM without recent improvement. Reasons for these low re-screen rates require investigation. These data have been noted by the relevant Lead Providers and undertakings have been given that these indicators will improve.

4. Timeliness of Open Biopsy (5c.2)

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 services are on target and the BSA total is below target, with no uniform improvement compared with previous data. These data need to be re-considered at the next BSA Advisory Group meeting after non-working days due to NZ National Statutory Holidays, are deducted.

5. Technical recall rates, 50-69 years (2b.1, 2b.2)

There is an increasing trend in BSM for both 2 year and 6 month recall rates for both fixed and mobile sites which requires investigation. Such trends may relate to less experienced radiographers not performing a repeat mammogram when required leading to the necessity for recall. The introduction of digital mammography may solve these difficulties.

6. Percentage of women receiving final diagnostic biopsy results within 5 working days, 2 years (5d)

BSM has demonstrated a persistently low percentage with no trend for improvement. These data need to be re-considered at the next BSA Advisory Group meeting after non-working days due to NZ National Statutory Holidays, are deducted.

7. Timeliness targets in this report are affected by working day calculations not being adjusted for NZ National Statutory Holidays. These indicators will be rectified in the next report.

8. In response to 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 23 May 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% CI's have been reported for all indicators in this report. From the Central Limit Theorem, the estimate for a particular indicator - for example, invasive cancer detection rate in a 6 month period - is assumed to come from a hypothetical distribution of values for that indicator. The overall average value of this hypothetical distribution is the universal or 'true' invasive cancer detection rate for the population being studied. The 95% confidence interval indicates that there is a 1 in 20 chance that the 'true' population rate (or proportion, or mean) lies outside the range of values contained by the 95% confidence interval. Thus, the wider the 95% confidence interval, the less precise the estimate is to the true population parameter. Additionally, different statistical distributions provide more accurate and appropriate estimations of the 95% confidence intervals, and depend upon the type of indicator being studied, and the frequency of the event. For this report, 95% confidence intervals for rare events occurring in a population have been calculated using the Poisson distribution. For indicators with small numbers where proportions represent cases and non-cases the 95% confidence interval is based on the Exact Binomial distribution.

Differences between observed and target values

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

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

For each indicator, differences in magnitude between the observed value and the target value need to be interpreted in the context and meaning of the indicator under investigation. If the standard is 80% then a 10% difference in magnitude would contain values ranging from 72%-88%. If the standard is 10%, then a 10% difference in magnitude would contain values ranging from 9%-11%. As a guide, slight differences can be considered to be of a relative magnitude of 0-4%, 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.

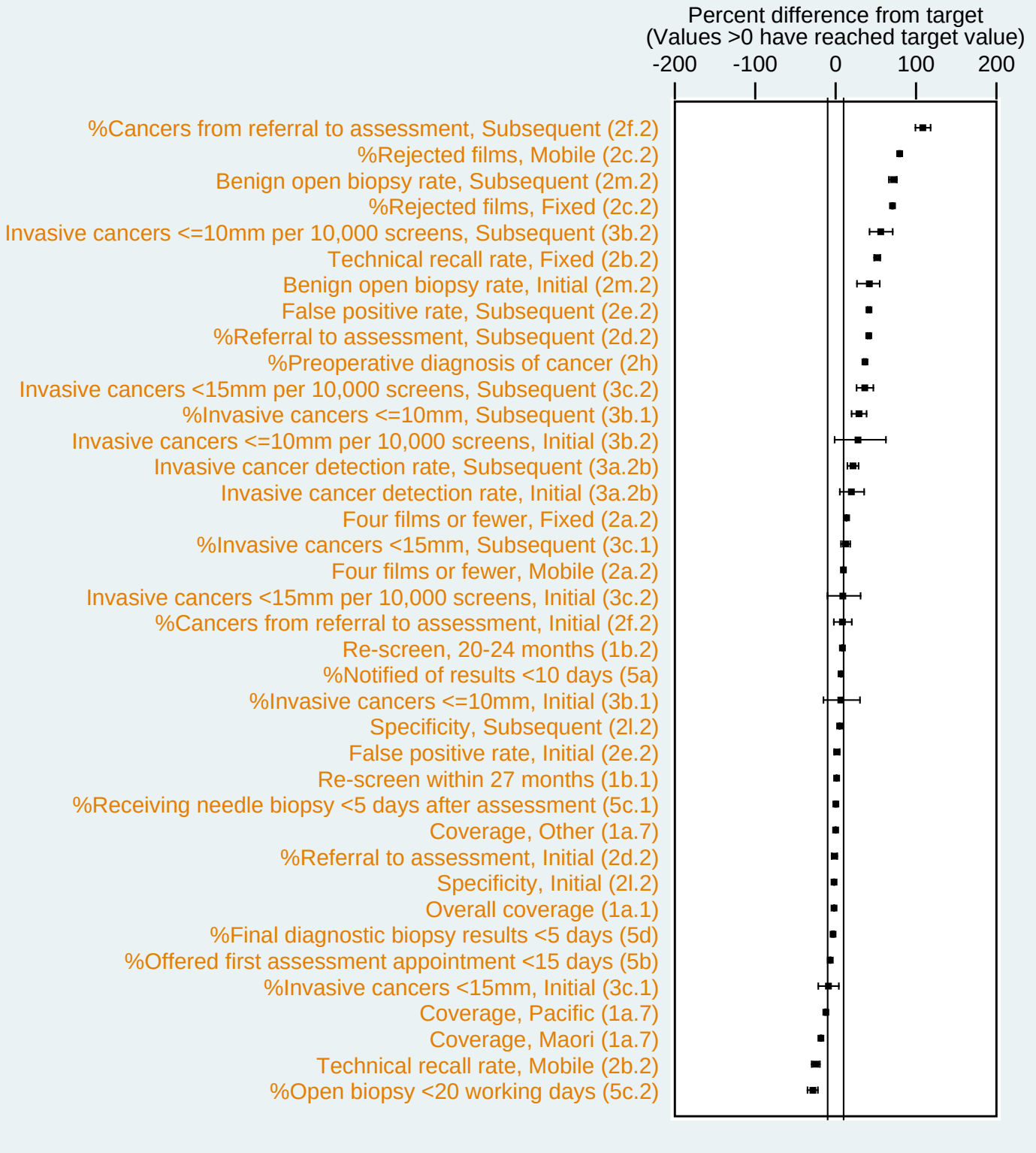
Target values relate only to biennial rates for women in the target age-group (50-69 years) for all indicators, and ticks and crosses for 6-month rates are not presented.

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.

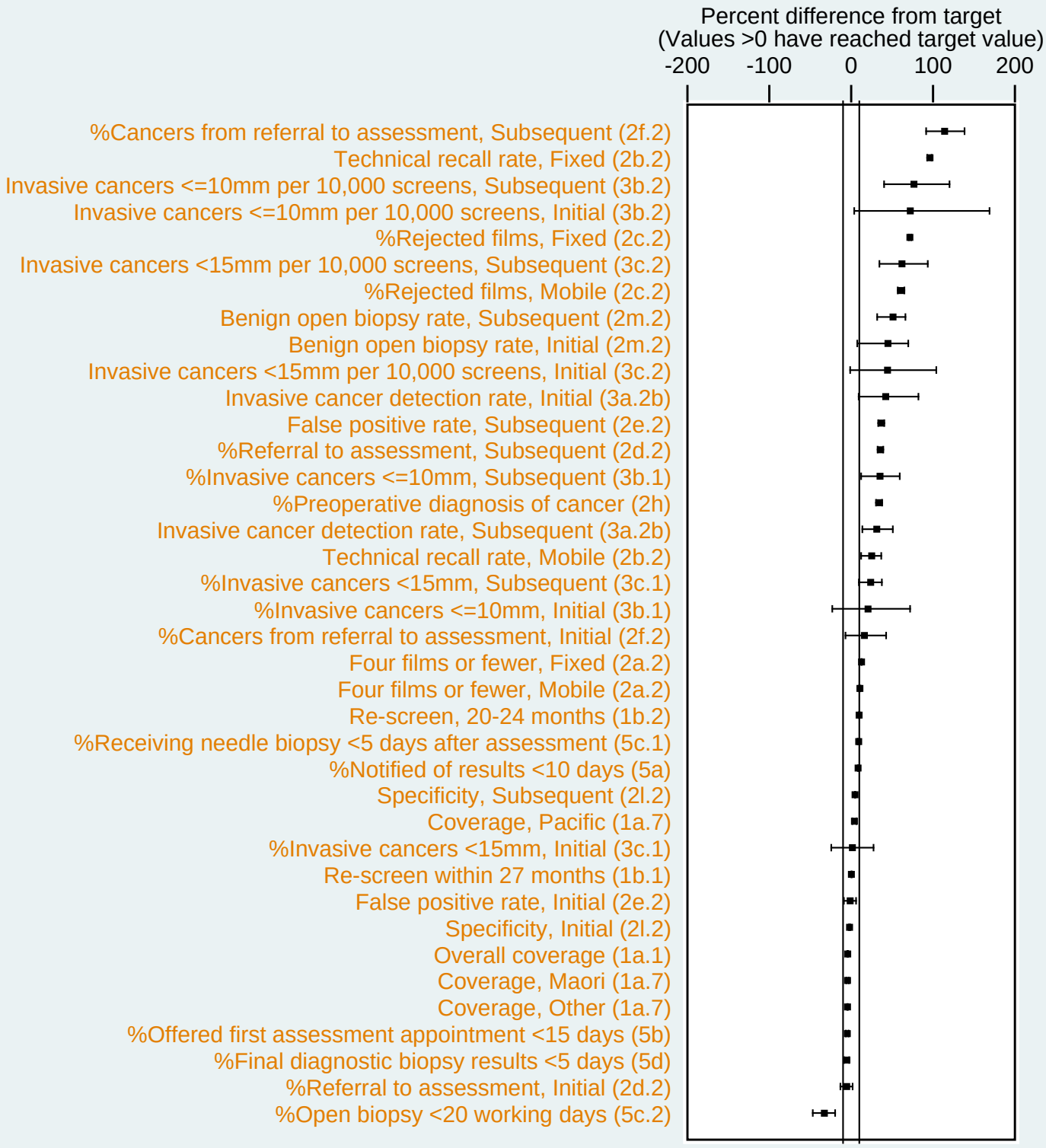
AT A GLANCE: BIENNIAL INDICATORS FOR WOMEN 50-69 YEARS

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)



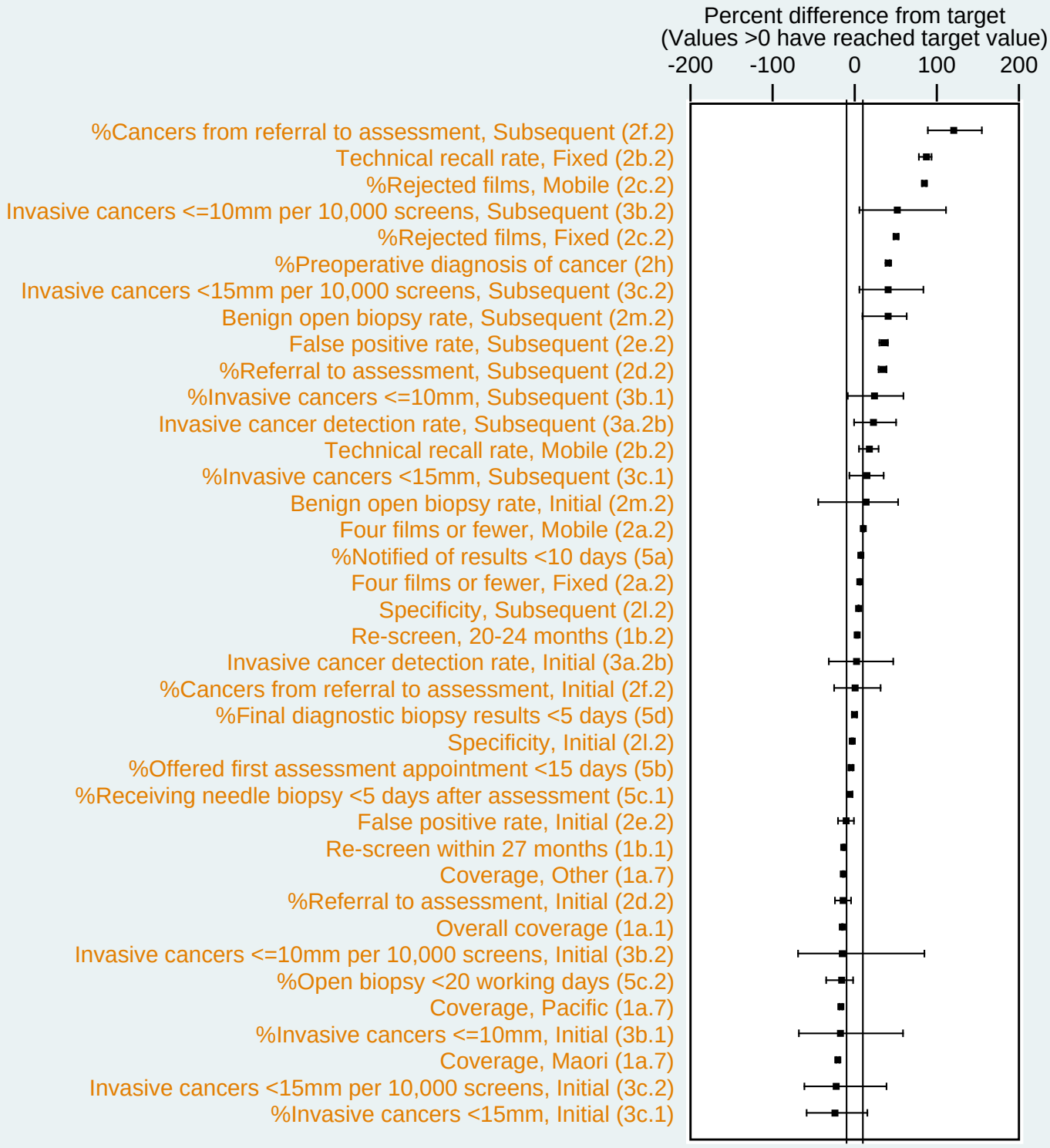
NB: The vertical line represent a ± 10% difference between the observed value and the target value.

Figure 2: Biennial indicators women 50-69 years: '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)



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

Figure 3: Biennial indicators women 50-69 years: '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)

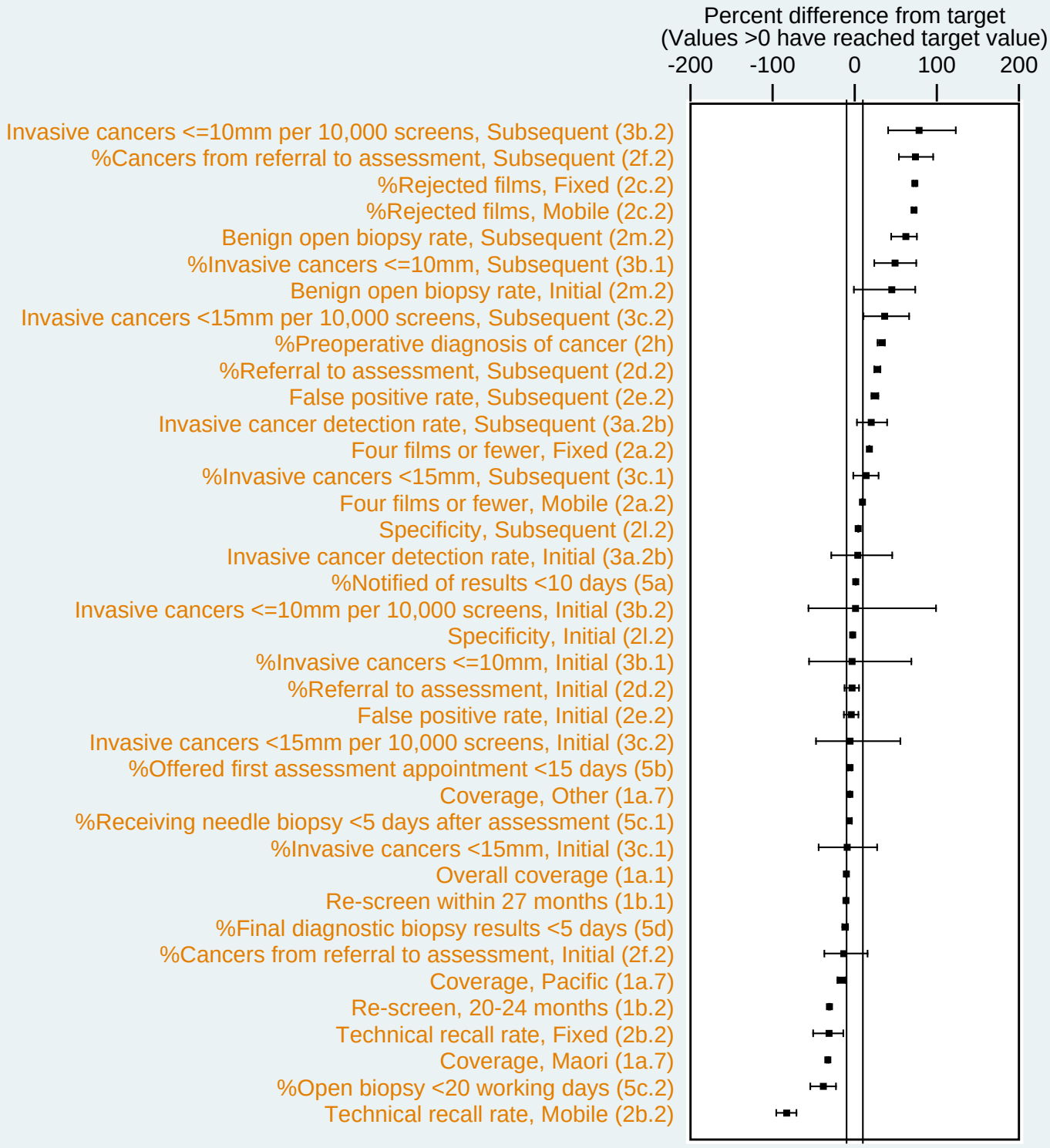


NB: The vertical line represent a ± 10% difference between the observed value and the target value.

Figure 4: Biennial indicators women 50-69 years: '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)

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

Figure 5: Biennial indicators women 50-69 years: '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)



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

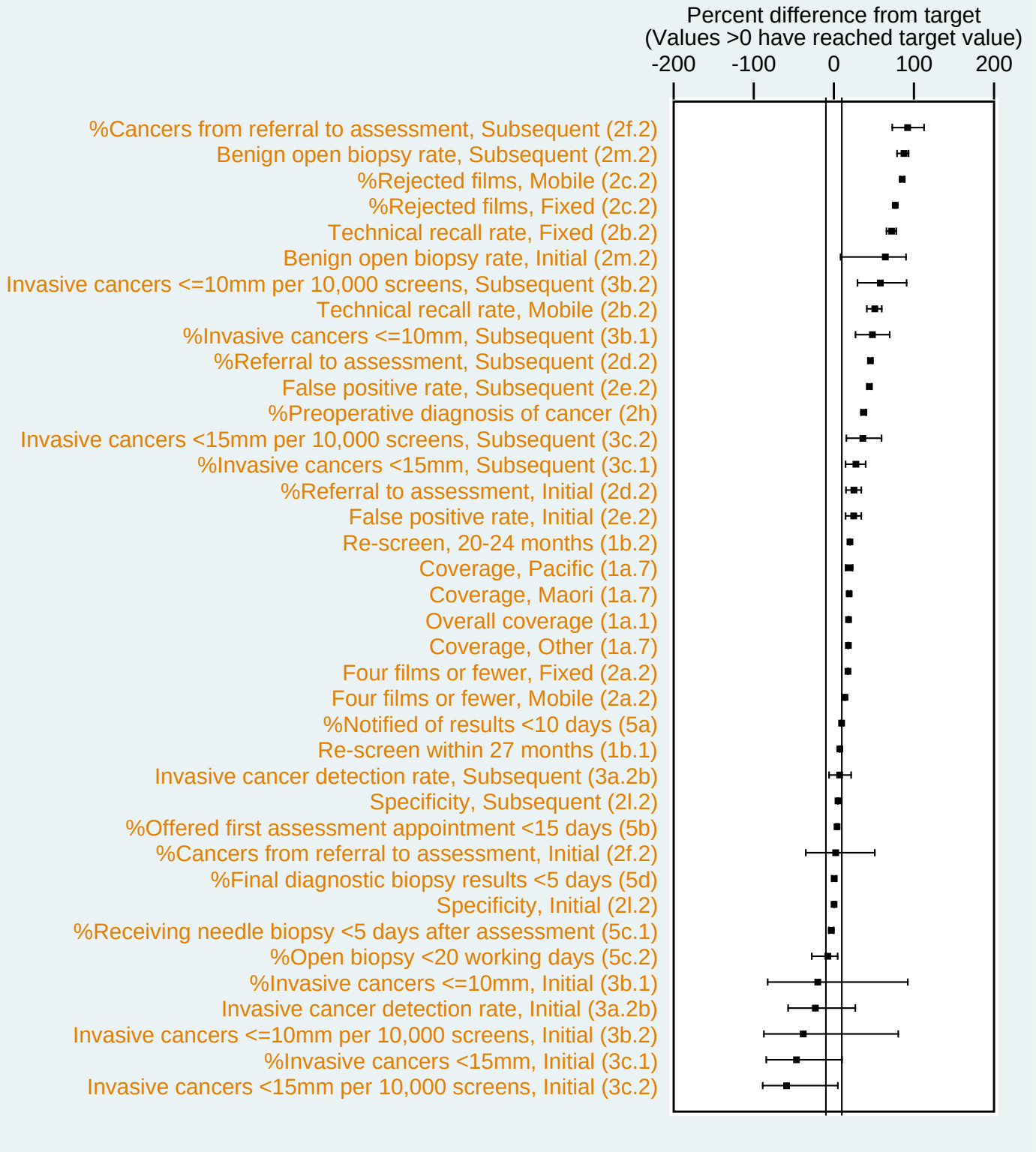
Figure 6: Biennial indicators women 50-69 years: 'on target', 'better than target', or 'worse than target' for BSCtoC as measured by percent difference between observed and target value and 95% confidence intervals (Table reference)

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

Figure 7: Biennial indicators women 50-69 years: '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)

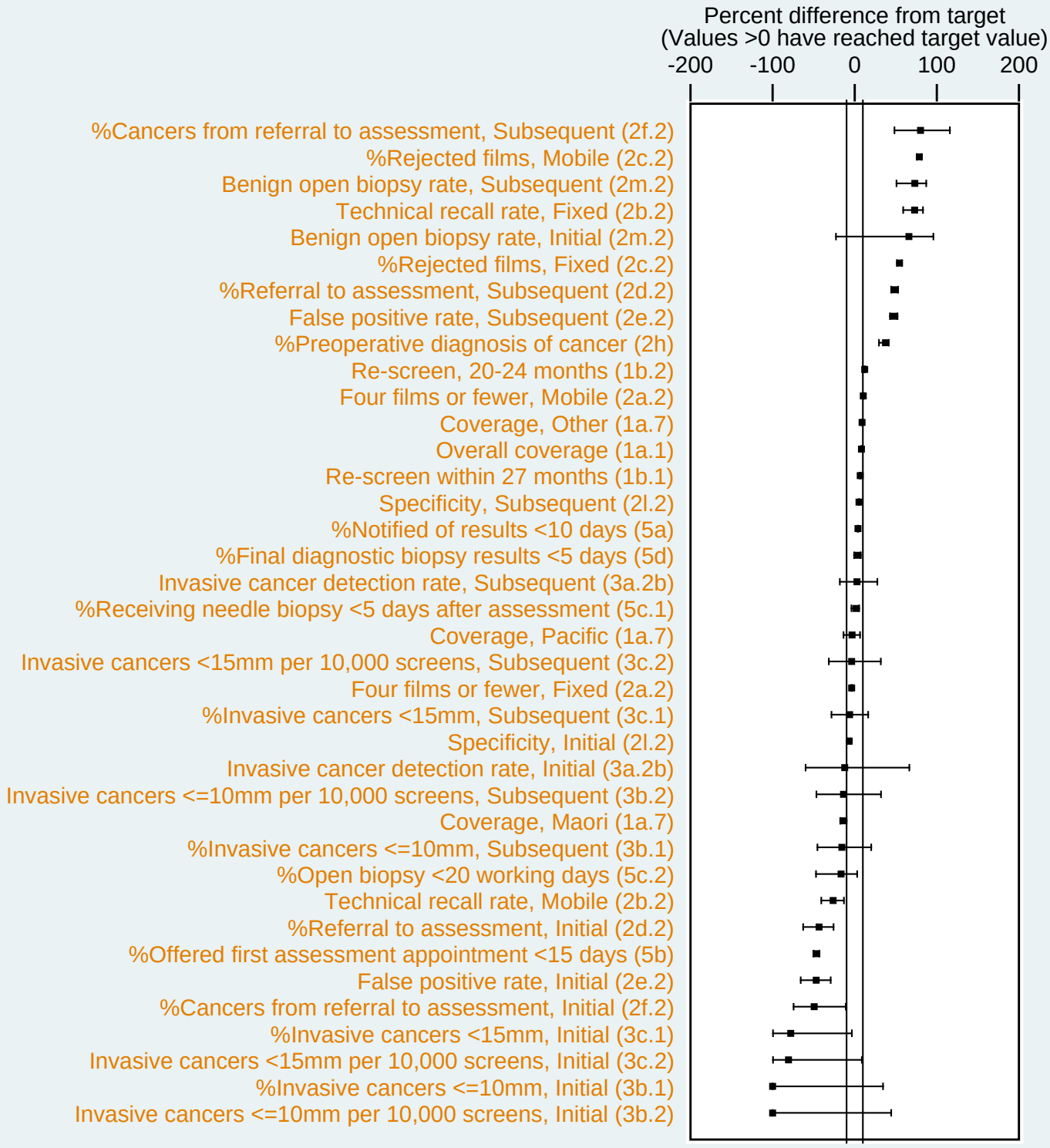
NB: The vertical line represent a ± 10% difference between the observed value and the target value.

Figure 8: Biennial indicators women 50-69 years: '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)



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

Figure 9: Biennial indicators women 50-69 years: '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)



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

1. COVERAGE

1.a.1. Overall coverage of eligible women

Description: This is a population-based measure of the percentage of women in the target age group (45-49, 50-69 years) who have had a screening mammogram in the programme

Target: ≥ 70% of eligible women receive a screen within the programme in the most recent 24-month period

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

	6 months			2 years				
	Number of women screened	Eligible Population	% (95%CI)	Number of women screened	Eligible Population	% (95%CI)		
45-49 years								
BSWN	4,984	27,185	18.3 (17.9-18.8)	18,126	27,185	66.7 (66.1-67.2)		
BSCM	2,778	16,900	16.4 (15.9-17.0)	9,938	16,900	58.8 (58.1-59.5)		
BSAL	2,733	17,090	16.0 (15.4-16.6)	8,920	17,090	52.2 (51.4-52.9)		
BSM	3,475	24,930	13.9 (13.5-14.4)	13,236	24,930	53.1 (52.5-53.7)		
BSCtoC	3,229	20,795	15.5 (15.0-16.0)	12,816	20,795	61.6 (61.0-62.3)		
BSC	2,706	18,560	14.6 (14.1-15.1)	10,832	18,560	58.4 (57.6-59.1)		
BSSL	6,791	27,600	24.6 (24.1-25.1)	24,012	27,600	87.0 (86.6-87.4)		
BSHC	1,792	11,285	15.9 (15.2-16.6)	7,471	11,285	66.2 (65.3-67.1)		
BSA Total	28,488	164,345	17.3 (17.2-17.5)	105,351	164,345	64.1 (63.9-64.3)		
50-69 years								
BSWN	14,449	75,585	19.1 (18.8-19.4)	50,762	75,585	67.2 (66.8-67.5)	✓	*
BSCM	8,275	45,060	18.4 (18.0-18.7)	26,815	45,060	59.5 (59.1-60.0)	×××	*
BSAL	8,192	42,030	19.5 (19.1-19.9)	23,283	42,030	55.4 (54.9-55.9)	×××	*
BSM	12,128	74,240	16.3 (16.1-16.6)	46,701	74,240	62.9 (62.6-63.3)	×××	*
BSCtoC	11,904	61,755	19.3 (19.0-19.6)	43,091	61,755	69.8 (69.4-70.1)	✓	ns
BSC	8,463	48,880	17.3 (17.0-17.7)	33,880	48,880	69.3 (68.9-69.7)	✓	*
BSSL	19,329	83,080	23.3 (23.0-23.6)	68,906	83,080	82.9 (82.7-83.2)	✓✓✓	*
BSHC	6,925	33,040	21.0 (20.5-21.4)	25,054	33,040	75.8 (75.4-76.3)	✓✓	*
BSA Total	89,665	463,670	19.3 (19.2-19.5)	318,492	463,670	68.7 (68.6-68.8)	✓	*

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

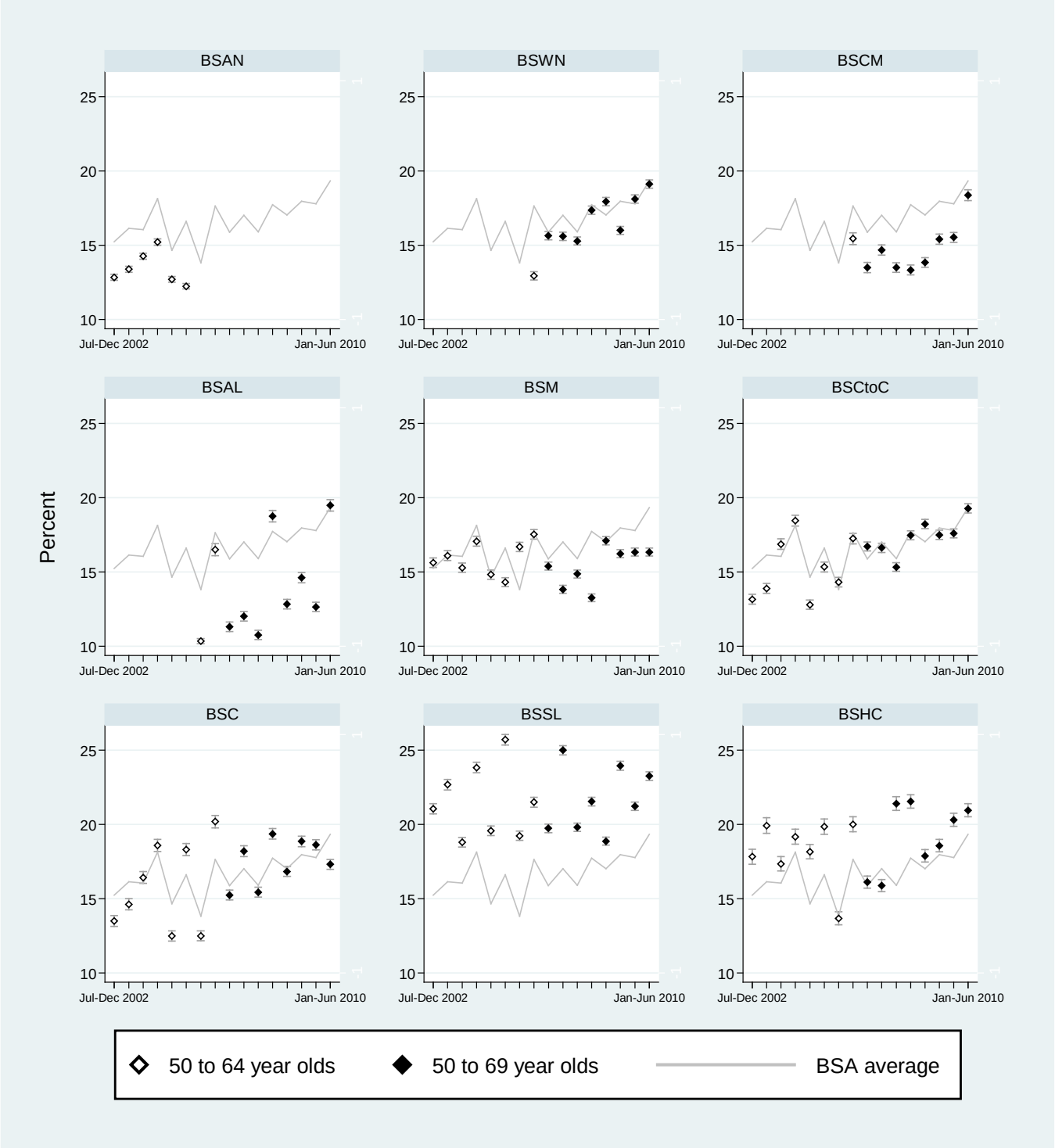
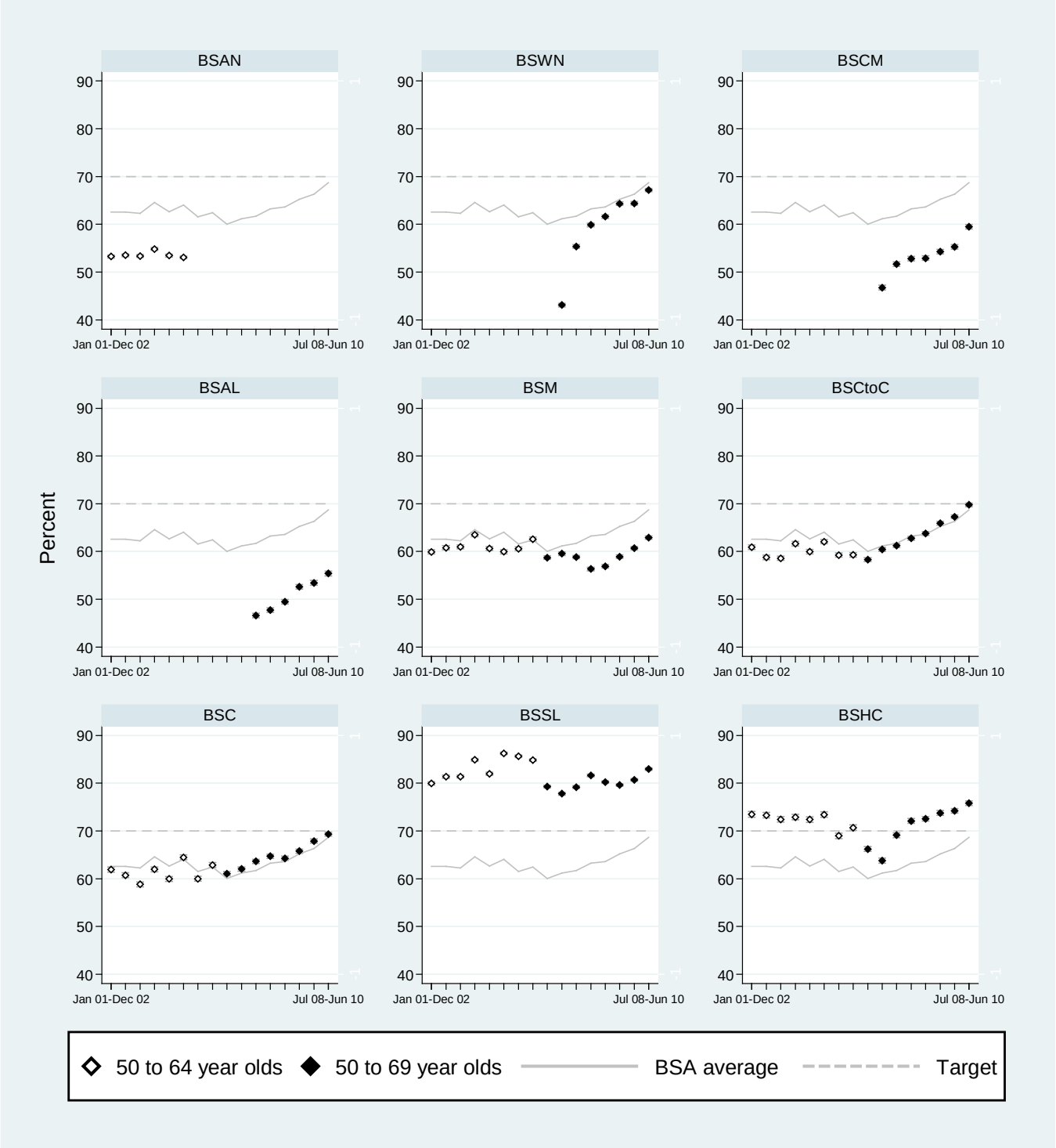


Figure 1a.1: Trends in biennial coverage of eligible women



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)
45-49 years						
BSWN	10,021	18,126	55.3 (54.6-56.0)	8,105	18,126	44.7 (44.0-45.4)
BSCM	6,236	9,938	62.7 (61.8-63.7)	3,702	9,938	37.3 (36.3-38.2)
BSAL	5,224	8,920	58.6 (57.5-59.6)	3,696	8,920	41.4 (40.4-42.5)
BSM	7,868	13,236	59.4 (58.6-60.3)	5,368	13,236	40.6 (39.7-41.4)
BSCtoC	7,070	12,816	55.2 (54.3-56.0)	5,746	12,816	44.8 (44.0-45.7)
BSC	6,019	10,832	55.6 (54.6-56.5)	4,813	10,832	44.4 (43.5-45.4)
BSSL	10,864	24,012	45.2 (44.6-45.9)	13,148	24,012	54.8 (54.1-55.4)
BSHC	4,070	7,471	54.5 (53.3-55.6)	3,401	7,471	45.5 (44.4-46.7)
BSA Total	57,372	105,351	54.5 (54.2-54.8)	47,979	105,351	45.5 (45.2-45.8)
50-69 years						
BSWN	7,257	50,762	14.3 (14.0-14.6)	43,505	50,762	85.7 (85.4-86.0)
BSCM	4,648	26,815	17.3 (16.9-17.8)	22,167	26,815	82.7 (82.2-83.1)
BSAL	3,656	23,283	15.7 (15.2-16.2)	19,627	23,283	84.3 (83.8-84.8)
BSM	5,211	46,701	11.2 (10.9-11.4)	41,490	46,701	88.8 (88.6-89.1)
BSCtoC	4,818	43,091	11.2 (10.9-11.5)	38,273	43,091	88.8 (88.5-89.1)
BSC	3,530	33,880	10.4 (10.1-10.7)	30,350	33,880	89.6 (89.3-89.9)
BSSL	3,195	68,906	4.6 (4.5-4.8)	65,711	68,906	95.4 (95.2-95.5)
BSHC	1,681	25,054	6.7 (6.4-7.0)	23,373	25,054	93.3 (93.0-93.6)
BSA Total	33,996	318,492	10.7 (10.6-10.8)	284,496	318,492	89.3 (89.2-89.4)

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

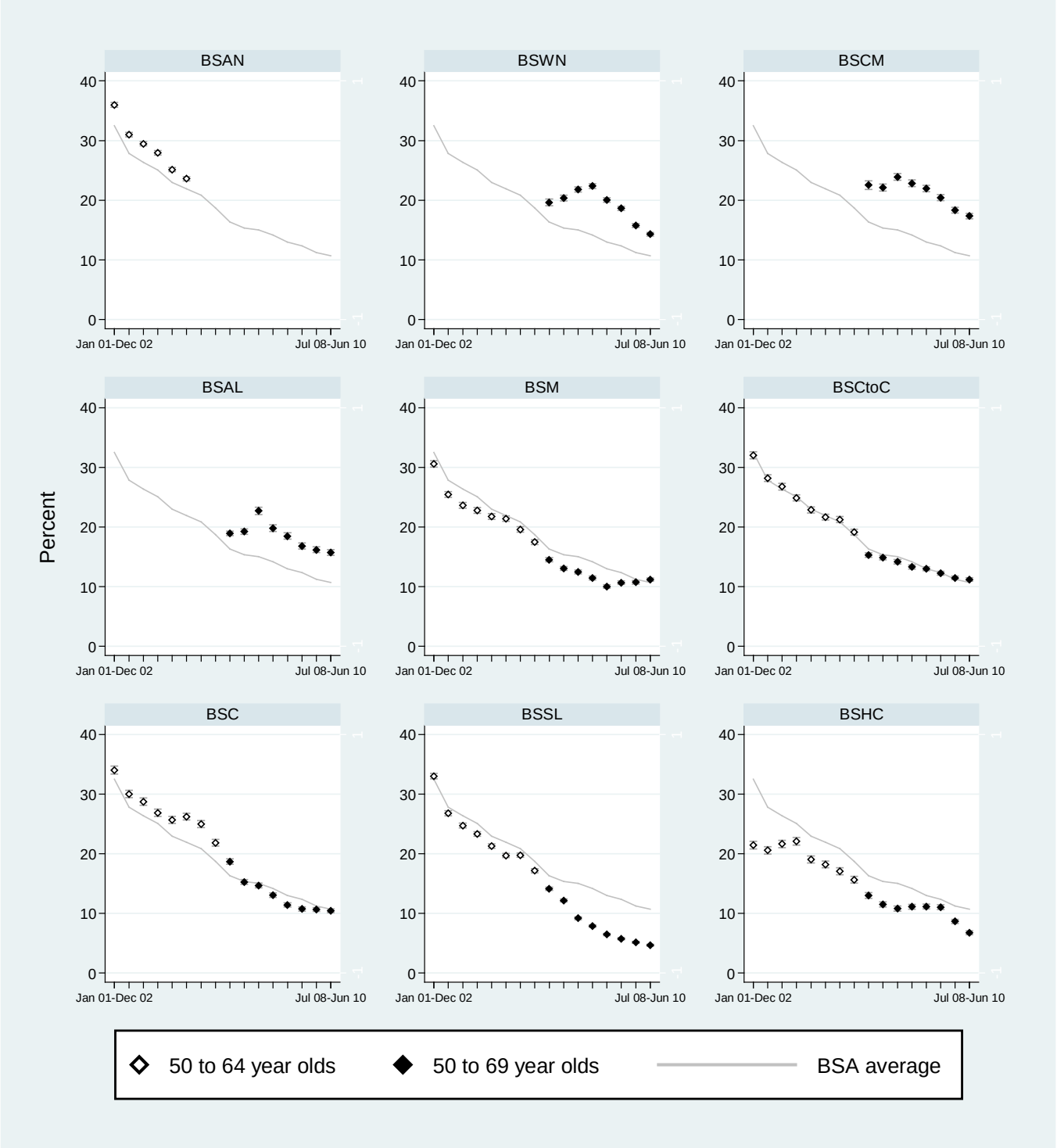
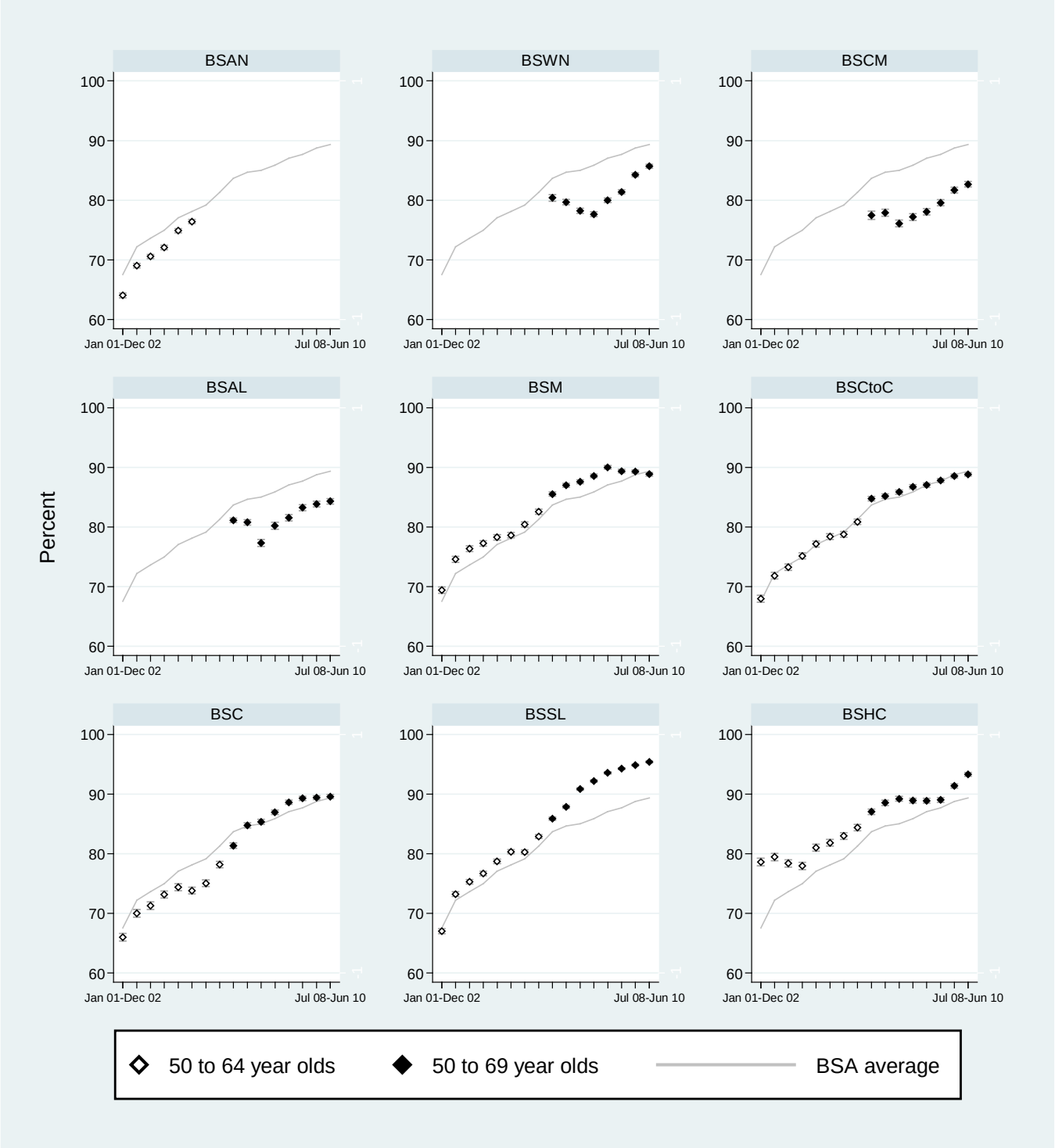


Figure 1a.2: Percentage of subsequent screens for each screening biennium



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)
45-49 years						
BSWN	15,877	18,126	87.6 (87.1-88.1)	2,249	18,126	12.4 (11.9-12.9)
BSCM	6,878	9,938	69.2 (68.3-70.1)	3,060	9,938	30.8 (29.9-31.7)
BSAL	7,437	8,920	83.4 (82.6-84.1)	1,483	8,920	16.6 (15.9-17.4)
BSM	8,887	13,236	67.1 (66.3-67.9)	4,349	13,236	32.9 (32.1-33.7)
BSCtoC	10,972	12,816	85.6 (85.0-86.2)	1,844	12,816	14.4 (13.8-15.0)
BSC	8,826	10,832	81.5 (80.7-82.2)	2,006	10,832	18.5 (17.8-19.3)
BSSL	21,376	24,012	89.0 (88.6-89.4)	2,636	24,012	11.0 (10.6-11.4)
BSHC	4,779	7,471	64.0 (62.9-65.1)	2,692	7,471	36.0 (34.9-37.1)
BSA Total	85,032	105,351	80.7 (80.5-81.0)	20,319	105,351	19.3 (19.0-19.5)
50-69 years						
BSWN	44,171	50,762	87.0 (86.7-87.3)	6,591	50,762	13.0 (12.7-13.3)
BSCM	19,143	26,815	71.4 (70.8-71.9)	7,672	26,815	28.6 (28.1-29.2)
BSAL	19,549	23,283	84.0 (83.5-84.4)	3,734	23,283	16.0 (15.6-16.5)
BSM	30,938	46,701	66.2 (65.8-66.7)	15,763	46,701	33.8 (33.3-34.2)
BSCtoC	36,856	43,091	85.5 (85.2-85.9)	6,235	43,091	14.5 (14.1-14.8)
BSC	25,815	33,880	76.2 (75.7-76.6)	8,065	33,880	23.8 (23.4-24.3)
BSSL	61,455	68,906	89.2 (89.0-89.4)	7,451	68,906	10.8 (10.6-11.0)
BSHC	16,315	25,054	65.1 (64.5-65.7)	8,739	25,054	34.9 (34.3-35.5)
BSA Total	254,242	318,492	79.8 (79.7-80.0)	64,250	318,492	20.2 (20.0-20.3)

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)		
50-54 years								
BSWN	4,289	23,560	18.2 (17.7-18.7)	15,012	23,560	63.7 (63.1-64.3)	××	*
BSCM	2,441	14,215	17.2 (16.6-17.8)	8,094	14,215	56.9 (56.1-57.8)	×××	*
BSAL	2,487	14,040	17.7 (17.1-18.4)	7,199	14,040	51.3 (50.4-52.1)	×××	*
BSM	3,184	22,690	14.0 (13.6-14.5)	12,748	22,690	56.2 (55.5-56.8)	×××	*
BSCtoC	3,201	18,765	17.1 (16.5-17.6)	12,392	18,765	66.0 (65.4-66.7)	××	*
BSC	2,390	15,205	15.7 (15.1-16.3)	9,975	15,205	65.6 (64.8-66.4)	××	*
BSSL	5,806	25,185	23.1 (22.5-23.6)	20,668	25,185	82.1 (81.6-82.5)	✓✓✓	*
BSHC	1,959	10,125	19.3 (18.6-20.1)	7,628	10,125	75.3 (74.5-76.2)	✓✓	*
BSA Total	25,757	143,785	17.9 (17.7-18.1)	93,716	143,785	65.2 (64.9-65.4)	××	*
55-59 years								
BSWN	3,770	20,155	18.7 (18.2-19.3)	13,343	20,155	66.2 (65.5-66.9)	××	*
BSCM	2,265	12,230	18.5 (17.8-19.2)	7,164	12,230	58.6 (57.7-59.5)	×××	*
BSAL	2,543	11,660	21.8 (21.1-22.6)	6,552	11,660	56.2 (55.3-57.1)	×××	*
BSM	2,965	19,720	15.0 (14.5-15.5)	12,007	19,720	60.9 (60.2-61.6)	×××	*
BSCtoC	3,104	16,520	18.8 (18.2-19.4)	11,211	16,520	67.9 (67.1-68.6)	✓	*
BSC	2,317	13,110	17.7 (17.0-18.3)	9,048	13,110	69.0 (68.2-69.8)	✓	*
BSSL	4,863	22,370	21.7 (21.2-22.3)	17,926	22,370	80.1 (79.6-80.7)	✓✓✓	*
BSHC	1,738	8,690	20.0 (19.2-20.9)	6,500	8,690	74.8 (73.9-75.7)	✓✓	*
BSA Total	23,565	124,455	18.9 (18.7-19.2)	83,751	124,455	67.3 (67.0-67.6)	✓	*
60-64 years								
BSWN	3,668	18,030	20.3 (19.8-20.9)	12,631	18,030	70.1 (69.4-70.7)	✓	ns
BSCM	2,125	10,610	20.0 (19.3-20.8)	6,652	10,610	62.7 (61.8-63.6)	×××	*
BSAL	1,915	9,450	20.3 (19.5-21.1)	5,606	9,450	59.3 (58.3-60.3)	×××	*
BSM	3,099	17,545	17.7 (17.1-18.2)	11,840	17,545	67.5 (66.8-68.2)	✓	*
BSCtoC	3,236	14,605	22.2 (21.5-22.8)	10,908	14,605	74.7 (74.0-75.4)	✓✓	*
BSC	2,206	11,755	18.8 (18.1-19.5)	8,501	11,755	72.3 (71.5-73.1)	✓	*
BSSL	5,016	20,145	24.9 (24.3-25.5)	17,314	20,145	85.9 (85.5-86.4)	✓✓✓	*
BSHC	1,836	7,950	23.1 (22.2-24.0)	6,181	7,950	77.7 (76.8-78.7)	✓✓✓	*
BSA Total	23,101	110,090	21.0 (20.7-21.2)	79,633	110,090	72.3 (72.1-72.6)	✓	*
65-69 years								
BSWN	2,722	13,840	19.7 (19.0-20.3)	9,776	13,840	70.6 (69.9-71.4)	✓	ns
BSCM	1,444	8,005	18.0 (17.2-18.9)	4,905	8,005	61.3 (60.2-62.3)	×××	*
BSAL	1,247	6,880	18.1 (17.2-19.1)	3,926	6,880	57.1 (55.9-58.2)	×××	*
BSM	2,880	14,285	20.2 (19.5-20.8)	10,106	14,285	70.7 (70.0-71.5)	✓	ns
BSCtoC	2,363	11,865	19.9 (19.2-20.6)	8,580	11,865	72.3 (71.5-73.1)	✓	*
BSC	1,550	8,810	17.6 (16.8-18.4)	6,356	8,810	72.1 (71.2-73.1)	✓	*
BSSL	3,644	15,380	23.7 (23.0-24.4)	12,998	15,380	84.5 (83.9-85.1)	✓✓✓	*
BSHC	1,392	6,275	22.2 (21.2-23.2)	4,745	6,275	75.6 (74.5-76.7)	✓✓	*
BSA Total	17,242	85,340	20.2 (19.9-20.5)	61,392	85,340	71.9 (71.6-72.2)	✓	*

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)
Maori						
BSWN	600	3,460	17.3 (16.1-18.6)	2,127	3,460	61.5 (59.8-63.1)
BSCM	306	2,450	12.5 (11.2-13.9)	1,125	2,450	45.9 (43.9-47.9)
BSAL	183	1,160	15.8 (13.7-18.0)	599	1,160	51.6 (48.7-54.5)
BSM	591	5,380	11.0 (10.2-11.9)	2,033	5,380	37.8 (36.5-39.1)
BSCtoC	513	4,135	12.4 (11.4-13.4)	1,934	4,135	46.8 (45.2-48.3)
BSC	307	2,010	15.3 (13.7-16.9)	1,025	2,010	51.0 (48.8-53.2)
BSSL	406	1,620	25.1 (23.0-27.2)	1,333	1,620	82.3 (80.3-84.1)
BSHC	94	745	12.6 (10.3-15.2)	340	745	45.6 (42.0-49.3)
BSA Total	3,000	20,960	14.3 (13.8-14.8)	10,516	20,960	50.2 (49.5-50.9)
Pacific						
BSWN	225	1,265	17.8 (15.7-20.0)	874	1,265	69.1 (66.5-71.6)
BSCM	526	2,790	18.9 (17.4-20.4)	1,583	2,790	56.7 (54.9-58.6)
BSAL	302	1,730	17.5 (15.7-19.3)	987	1,730	57.1 (54.7-59.4)
BSM	41	360	11.4 (8.3-15.1)	145	360	40.3 (35.2-45.5)
BSCtoC	52	325	16.0 (12.2-20.4)	165	325	50.8 (45.2-56.3)
BSC	118	1,040	11.3 (9.5-13.4)	497	1,040	47.8 (44.7-50.9)
BSSL	85	340	25.0 (20.5-30.0)	249	340	73.2 (68.2-77.9)
BSHC	9	70	12.9 (6.1-23.0)	46	70	65.7 (53.4-76.7)
BSA Total	1,358	7,920	17.1 (16.3-18.0)	4,546	7,920	57.4 (56.3-58.5)
Other						
BSWN	4,156	22,460	18.5 (18.0-19.0)	15,089	22,460	67.2 (66.6-67.8)
BSCM	1,946	11,660	16.7 (16.0-17.4)	7,229	11,660	62.0 (61.1-62.9)
BSAL	2,246	14,200	15.8 (15.2-16.4)	7,300	14,200	51.4 (50.6-52.2)
BSM	2,831	19,190	14.8 (14.3-15.3)	10,991	19,190	57.3 (56.6-58.0)
BSCtoC	2,646	16,335	16.2 (15.6-16.8)	10,678	16,335	65.4 (64.6-66.1)
BSC	2,260	15,510	14.6 (14.0-15.1)	9,251	15,510	59.6 (58.9-60.4)
BSSL	6,286	25,640	24.5 (24.0-25.0)	22,359	25,640	87.2 (86.8-87.6)
BSHC	1,677	10,470	16.0 (15.3-16.7)	7,058	10,470	67.4 (66.5-68.3)
BSA Total	24,048	135,465	17.8 (17.5-18.0)	89,955	135,465	66.4 (66.2-66.7)

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)		
Maori								
BSWN	1,363	7,080	19.3 (18.3-20.2)	4,737	7,080	66.9 (65.8-68.0)	✓	*
BSCM	856	4,960	17.3 (16.2-18.3)	2,759	4,960	55.6 (54.2-57.0)	×××	*
BSAL	441	2,670	16.5 (15.1-18.0)	1,261	2,670	47.2 (45.3-49.1)	×××	*
BSM	1,599	11,670	13.7 (13.1-14.3)	5,499	11,670	47.1 (46.2-48.0)	×××	*
BSCtoC	1,344	8,665	15.5 (14.8-16.3)	4,712	8,665	54.4 (53.3-55.4)	×××	*
BSC	655	3,860	17.0 (15.8-18.2)	2,383	3,860	61.7 (60.2-63.3)	×××	*
BSSL	899	3,295	27.3 (25.8-28.8)	2,750	3,295	83.5 (82.1-84.7)	✓✓✓	*
BSHC	238	1,350	17.6 (15.6-19.8)	815	1,350	60.4 (57.7-63.0)	×××	*
BSA Total	7,395	43,550	17.0 (16.6-17.3)	24,916	43,550	57.2 (56.7-57.7)	×××	*
Pacific								
BSWN	573	2,745	20.9 (19.4-22.4)	2,000	2,745	72.9 (71.2-74.5)	✓	*
BSCM	1,176	6,100	19.3 (18.3-20.3)	3,551	6,100	58.2 (57.0-59.5)	×××	*
BSAL	763	3,660	20.8 (19.5-22.2)	2,207	3,660	60.3 (58.7-61.9)	×××	*
BSM	110	790	13.9 (11.6-16.5)	464	790	58.7 (55.2-62.2)	×××	*
BSCtoC	110	620	17.7 (14.8-21.0)	365	620	58.9 (54.9-62.8)	×××	*
BSC	278	2,430	11.4 (10.2-12.8)	1,322	2,430	54.4 (52.4-56.4)	×××	*
BSSL	104	585	17.8 (14.8-21.1)	489	585	83.6 (80.3-86.5)	✓✓✓	*
BSHC	36	180	20.0 (14.4-26.6)	122	180	67.8 (60.4-74.5)	✓	ns
BSA Total	3,150	17,110	18.4 (17.8-19.0)	10,520	17,110	61.5 (60.8-62.2)	×××	*
Other								
BSWN	12,508	65,760	19.0 (18.7-19.3)	43,960	65,760	66.8 (66.5-67.2)	✓	*
BSCM	6,242	34,000	18.4 (17.9-18.8)	20,503	34,000	60.3 (59.8-60.8)	×××	*
BSAL	6,978	35,700	19.5 (19.1-20.0)	19,767	35,700	55.4 (54.9-55.9)	×××	*
BSM	10,408	61,780	16.8 (16.6-17.1)	40,659	61,780	65.8 (65.4-66.2)	××	*
BSCtoC	10,408	52,470	19.8 (19.5-20.2)	37,901	52,470	72.2 (71.8-72.6)	✓	*
BSC	7,497	42,590	17.6 (17.2-18.0)	30,071	42,590	70.6 (70.2-71.0)	✓	*
BSSL	18,280	79,200	23.1 (22.8-23.4)	65,491	79,200	82.7 (82.4-83.0)	✓✓✓	*
BSHC	6,634	31,510	21.1 (20.6-21.5)	24,056	31,510	76.3 (75.9-76.8)	✓✓	*
BSA Total	78,955	403,010	19.6 (19.5-19.7)	282,408	403,010	70.1 (69.9-70.2)	✓	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

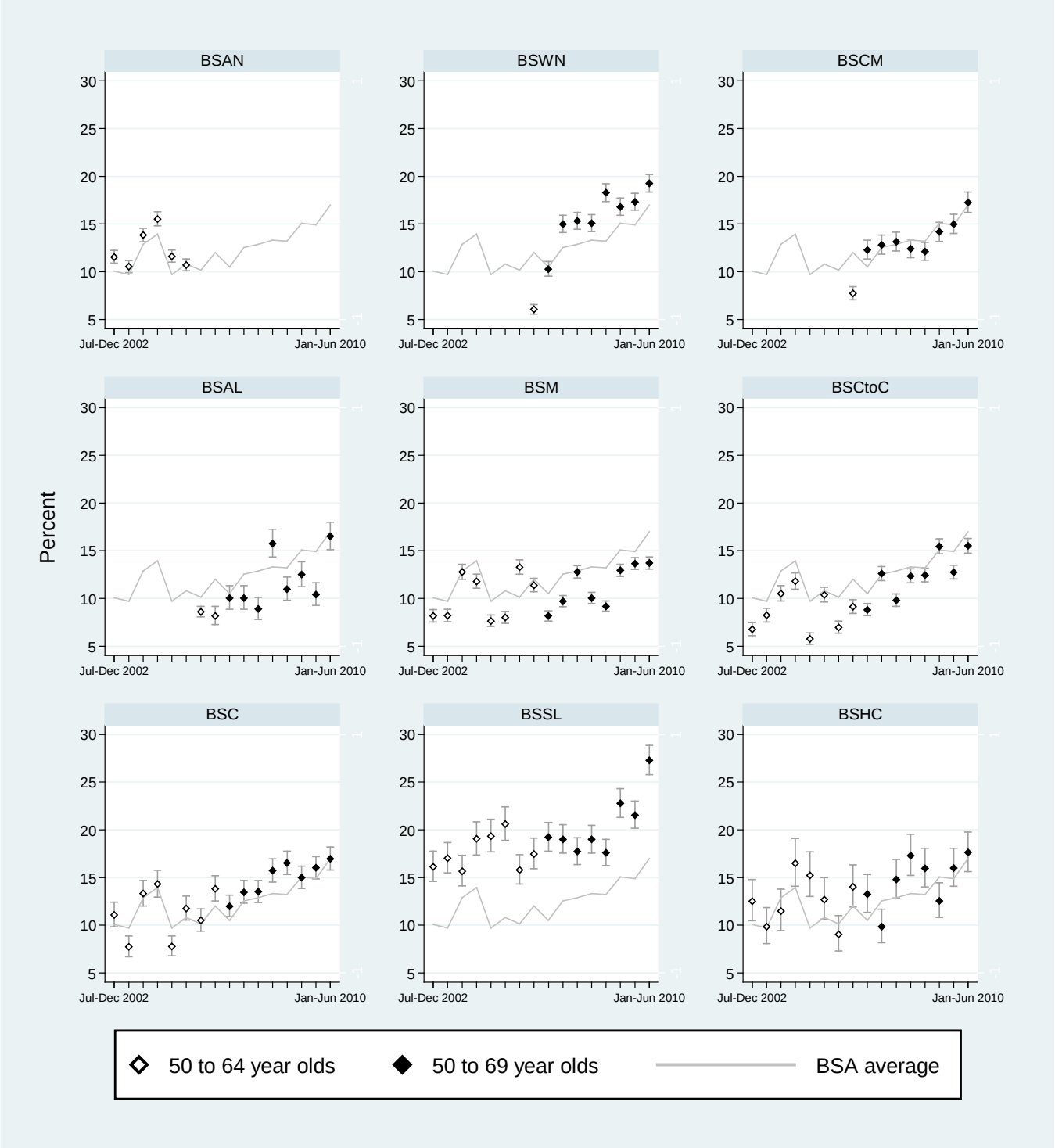


Figure 1a7.1: Trends in biennial coverage for Māori

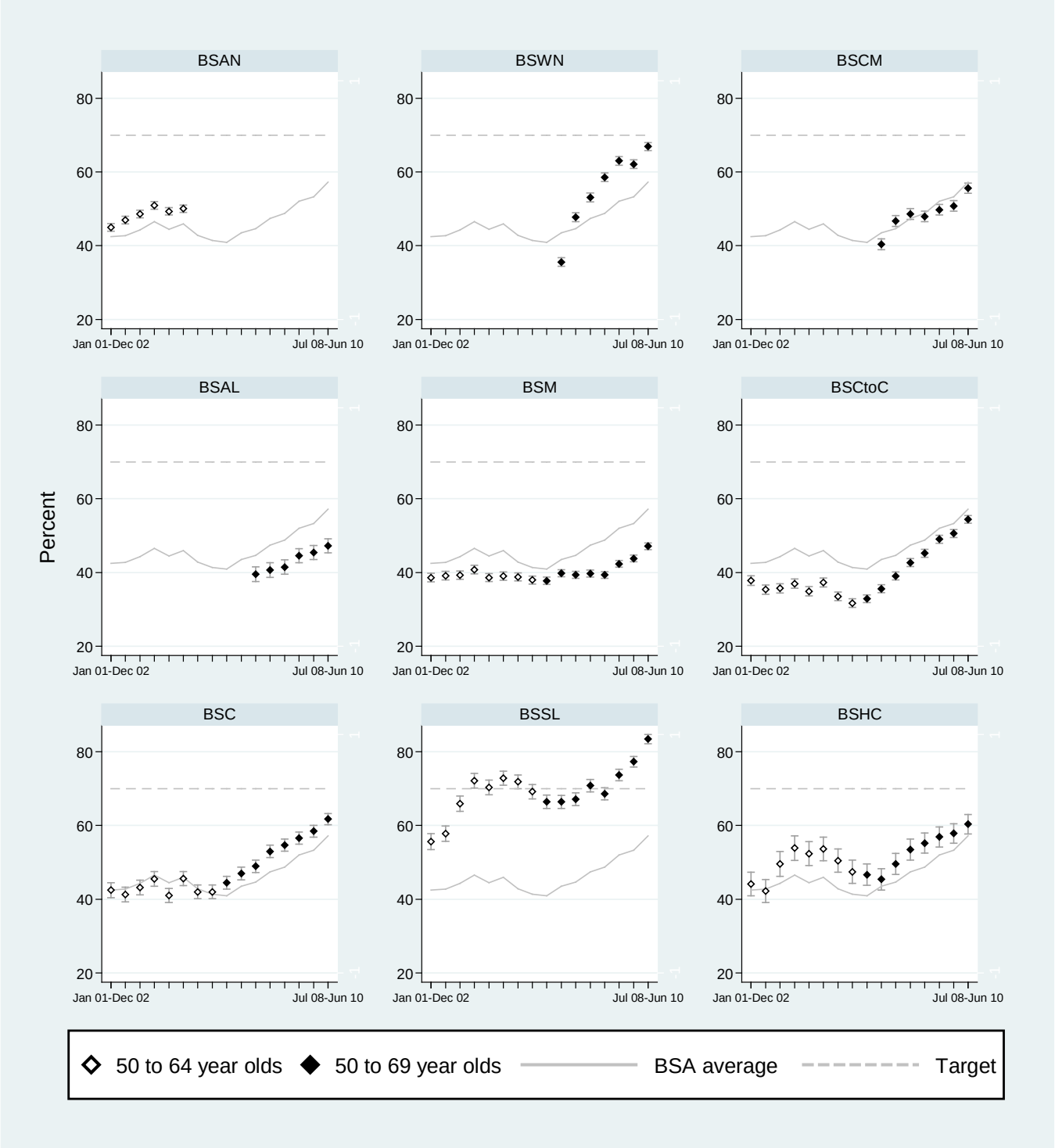


Figure 1a7.1: Trends in 6 month coverage for Pacific

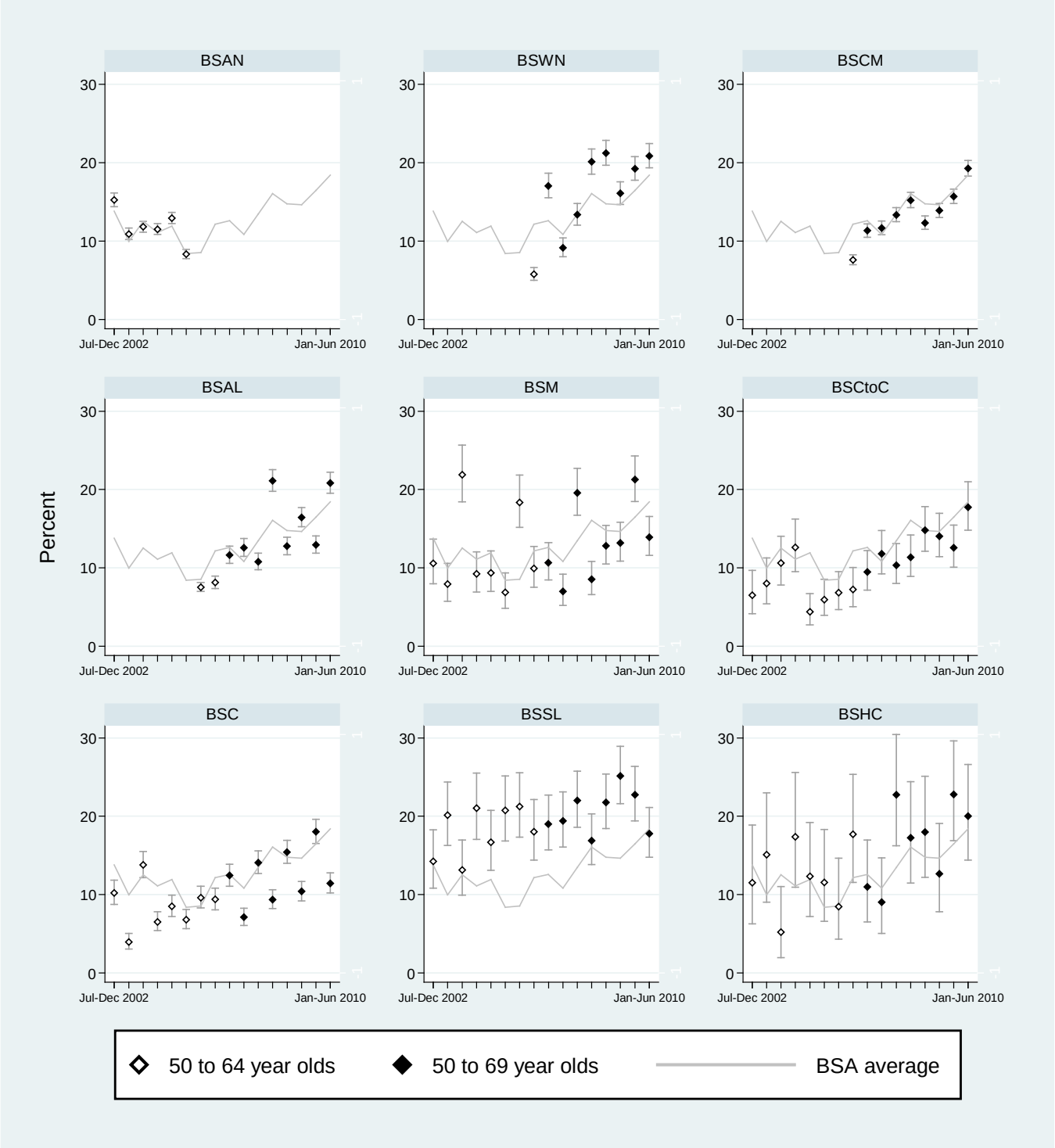


Figure 1a7.1: Trends in biennial coverage for Pacific

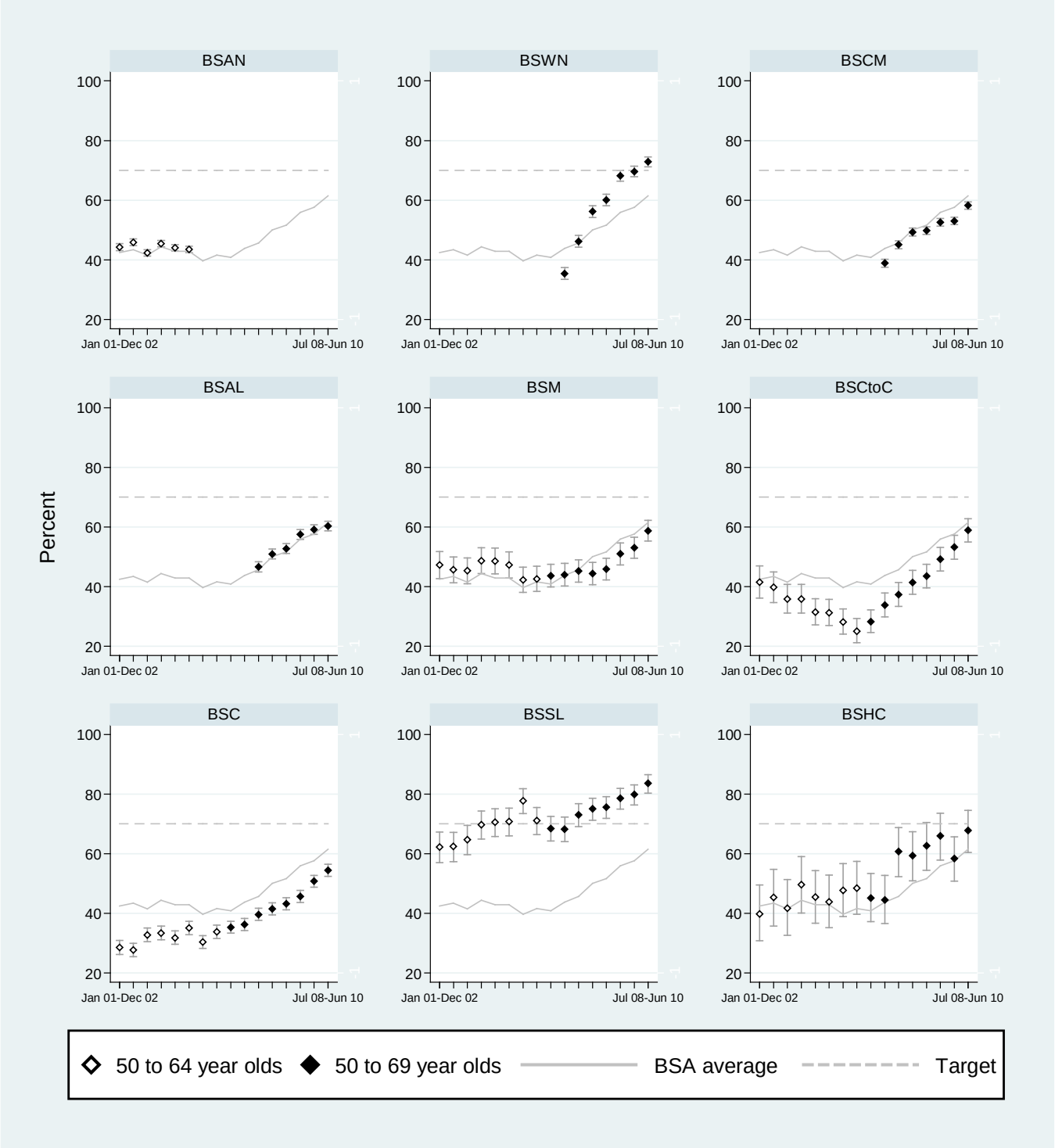


Figure 1a7.1: Trends in 6 month coverage for other ethnic groups

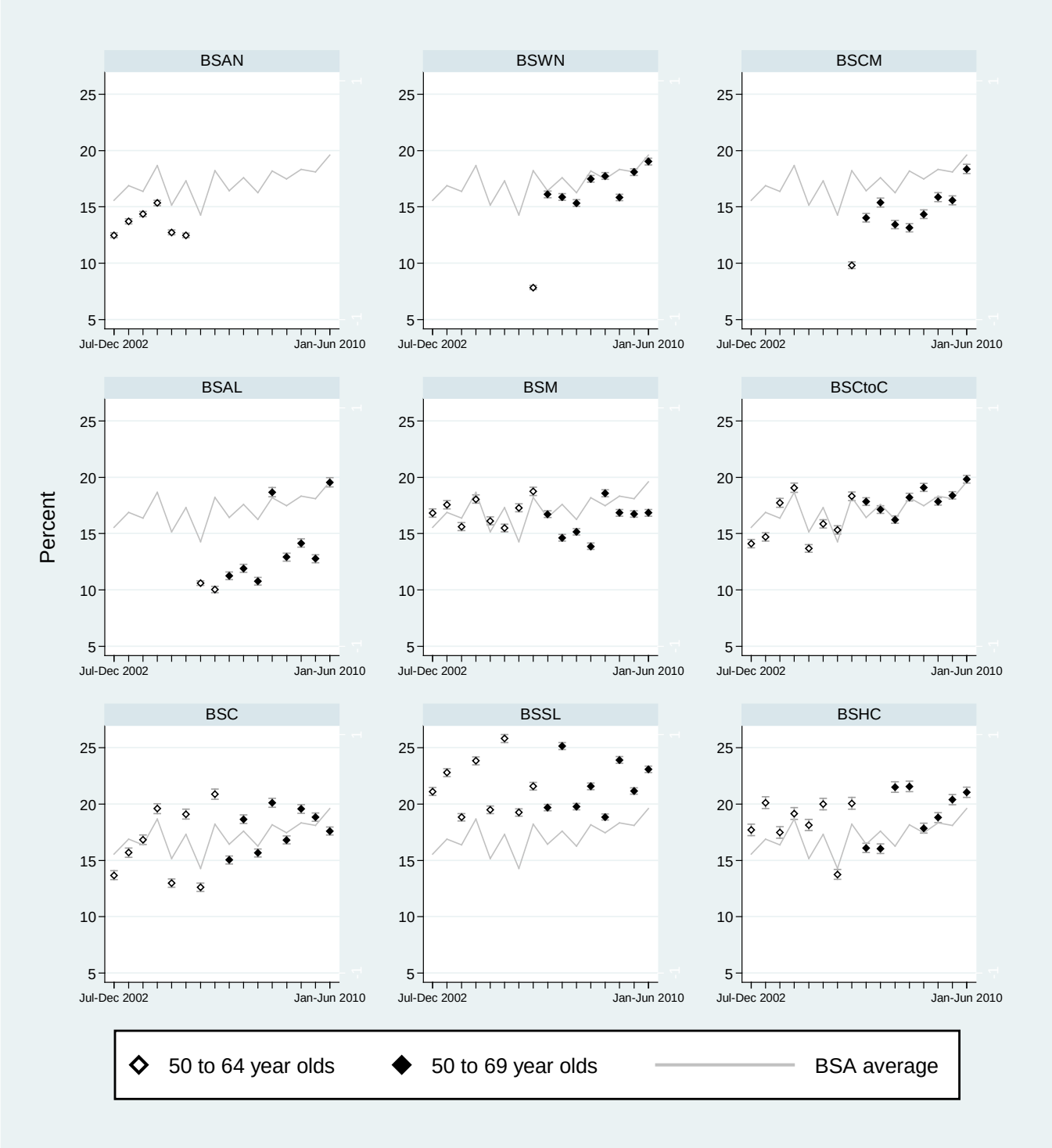
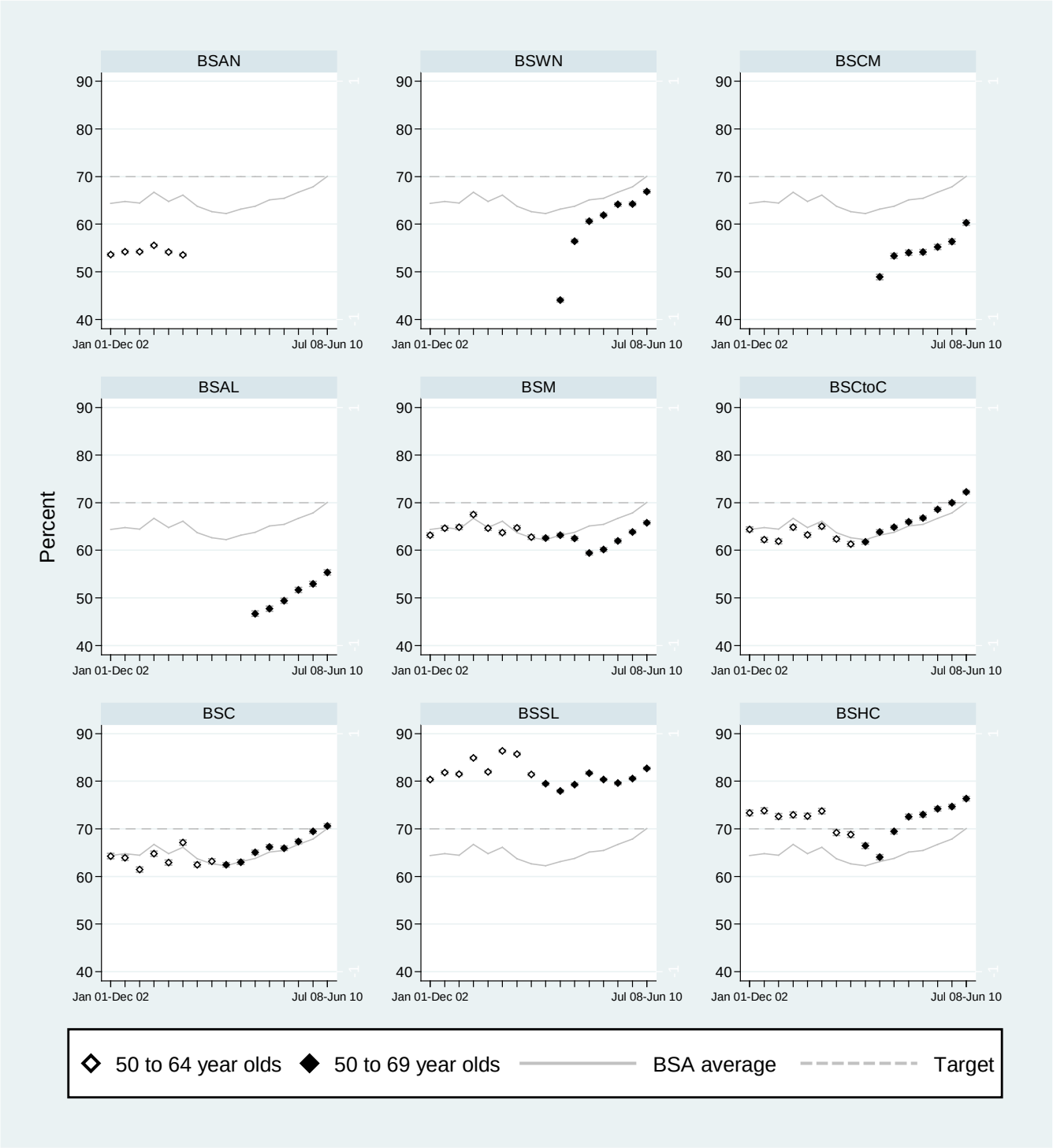


Figure 1a7.1: Trends in biennial coverage for other ethnic groups



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)		
45-49 years								
BSWN	1,886	3,324	56.7 (55.0-58.4)	6,830	12,881	53.0 (52.2-53.9)		
BSCM	807	1,711	47.2 (44.8-49.6)	2,865	6,495	44.1 (42.9-45.3)		
BSAL	833	1,461	57.0 (54.4-59.6)	3,174	5,976	53.1 (51.8-54.4)		
BSM	1,114	2,493	44.7 (42.7-46.7)	4,450	11,094	40.1 (39.2-41.0)		
BSCtoC	1,502	2,739	54.8 (53.0-56.7)	5,096	9,593	53.1 (52.1-54.1)		
BSC	1,185	2,018	58.7 (56.5-60.9)	4,223	7,953	53.1 (52.0-54.2)		
BSSL	2,807	5,200	54.0 (52.6-55.3)	12,250	22,293	54.9 (54.3-55.6)		
BSHC	1,405	2,449	57.4 (55.4-59.3)	3,072	6,235	49.3 (48.0-50.5)		
BSA Total	11,539	21,395	53.9 (53.3-54.6)	41,960	82,520	50.8 (50.5-51.2)		
50-69 years								
BSWN	6,827	7,759	88.0 (87.2-88.7)	25,152	29,457	85.4 (85.0-85.8)	✓	ns
BSCM	3,073	4,066	75.6 (74.2-76.9)	12,026	16,310	73.7 (73.1-74.4)	×××	*
BSAL	3,667	4,173	87.9 (86.8-88.9)	12,339	14,595	84.5 (83.9-85.1)	✓	ns
BSM	4,954	6,095	81.3 (80.3-82.3)	20,985	27,620	76.0 (75.5-76.5)	×××	*
BSCtoC	5,740	6,186	92.8 (92.1-93.4)	23,709	26,037	91.1 (90.7-91.4)	✓✓	*
BSC	5,250	5,726	91.7 (90.9-92.4)	19,128	21,484	89.0 (88.6-89.4)	✓	*
BSSL	9,637	10,463	92.1 (91.6-92.6)	42,337	46,288	91.5 (91.2-91.7)	✓✓	*
BSHC	4,143	4,536	91.3 (90.5-92.1)	14,891	16,404	90.8 (90.3-91.2)	✓✓	*
BSA Total	43,291	49,004	88.3 (88.1-88.6)	170,567	198,195	86.1 (85.9-86.2)	✓	*

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

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

	6 months			2 years				
	Women screened within 20-24 months	Women re-screened within 27 months	% (95% CI)	Women screened within 20-24 months	Women re-screened within 27 months	% (95% CI)		
45-49 years								
BSWN	1,545	1,886	81.9 (80.1-83.6)	5,448	6,830	79.8 (78.8-80.7)		
BSCM	649	807	80.4 (77.5-83.1)	2,211	2,865	77.2 (75.6-78.7)		
BSAL	758	833	91.0 (88.8-92.9)	2,954	3,174	93.1 (92.1-93.9)		
BSM	678	1,114	60.9 (57.9-63.7)	2,296	4,450	51.6 (50.1-53.1)		
BSCtoC	1,141	1,502	76.0 (73.7-78.1)	3,930	5,096	77.1 (75.9-78.3)		
BSC	1,084	1,185	91.5 (89.7-93.0)	3,689	4,223	87.4 (86.3-88.3)		
BSSL	2,545	2,807	90.7 (89.5-91.7)	10,941	12,250	89.3 (88.8-89.9)		
BSHC	1,264	1,405	90.0 (88.3-91.5)	2,503	3,072	81.5 (80.1-82.8)		
BSA Total	9,664	11,539	83.8 (83.1-84.4)	33,972	41,960	80.2 (79.8-80.6)		
50-69 years								
BSWN	5,764	6,827	84.4 (83.5-85.3)	20,717	25,152	82.4 (81.9-82.8)	✓✓	*
BSCM	2,521	3,073	82.0 (80.6-83.4)	9,284	12,026	77.2 (76.4-77.9)	✓	*
BSAL	3,367	3,667	91.8 (90.9-92.7)	11,337	12,339	91.9 (91.4-92.4)	✓✓✓	*
BSM	2,945	4,954	59.4 (58.1-60.8)	10,885	20,985	51.9 (51.2-52.5)	×××	*
BSCtoC	4,596	5,740	80.1 (79.0-81.1)	19,147	23,709	80.8 (80.3-81.3)	✓✓	*
BSC	4,782	5,250	91.1 (90.3-91.8)	16,838	19,128	88.0 (87.6-88.5)	✓✓✓	*
BSSL	8,923	9,637	92.6 (92.0-93.1)	38,154	42,337	90.1 (89.8-90.4)	✓✓✓	*
BSHC	3,530	4,143	85.2 (84.1-86.3)	12,520	14,891	84.1 (83.5-84.7)	✓✓✓	*
BSA Total	36,428	43,291	84.1 (83.8-84.5)	138,882	170,567	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

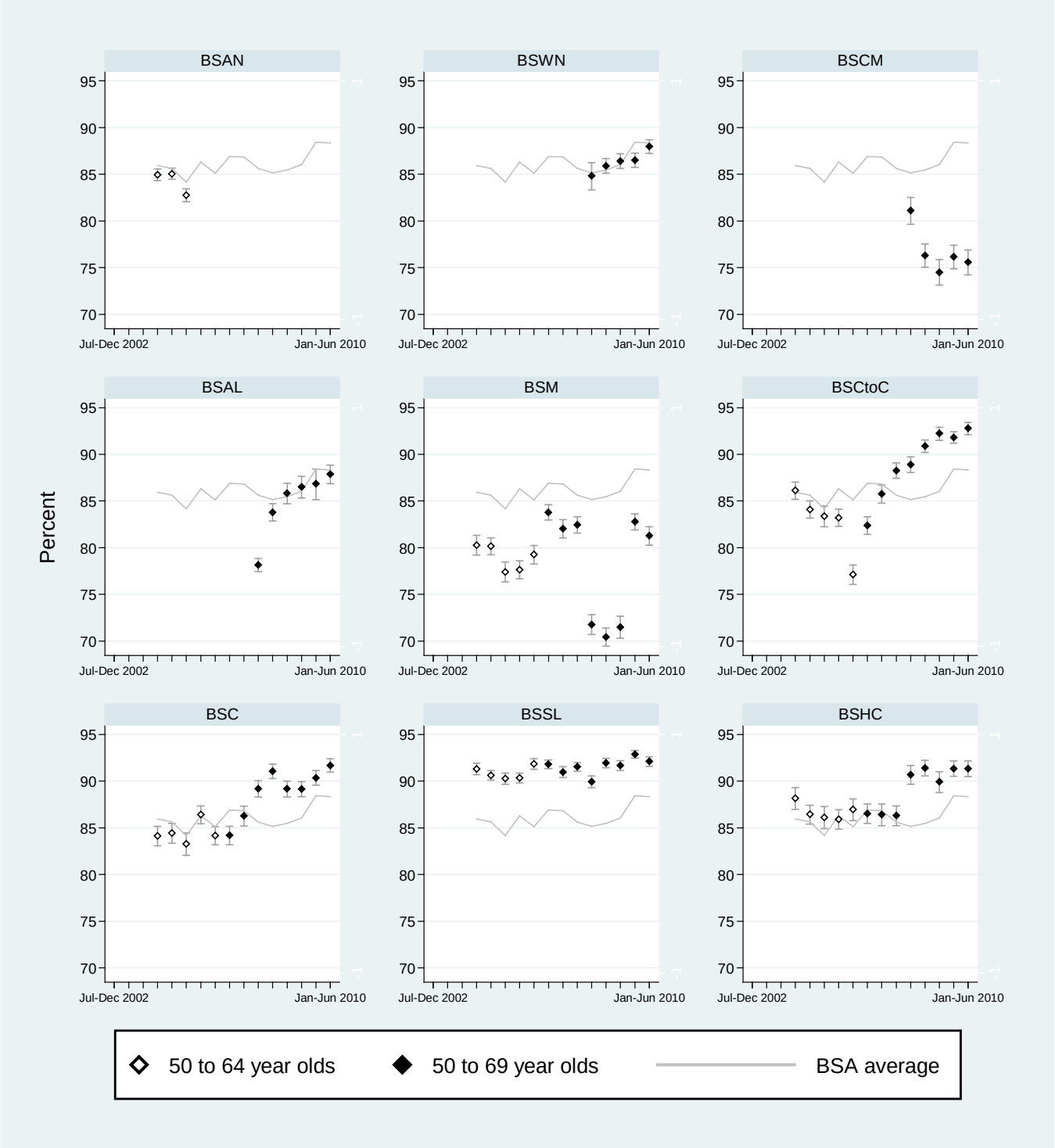
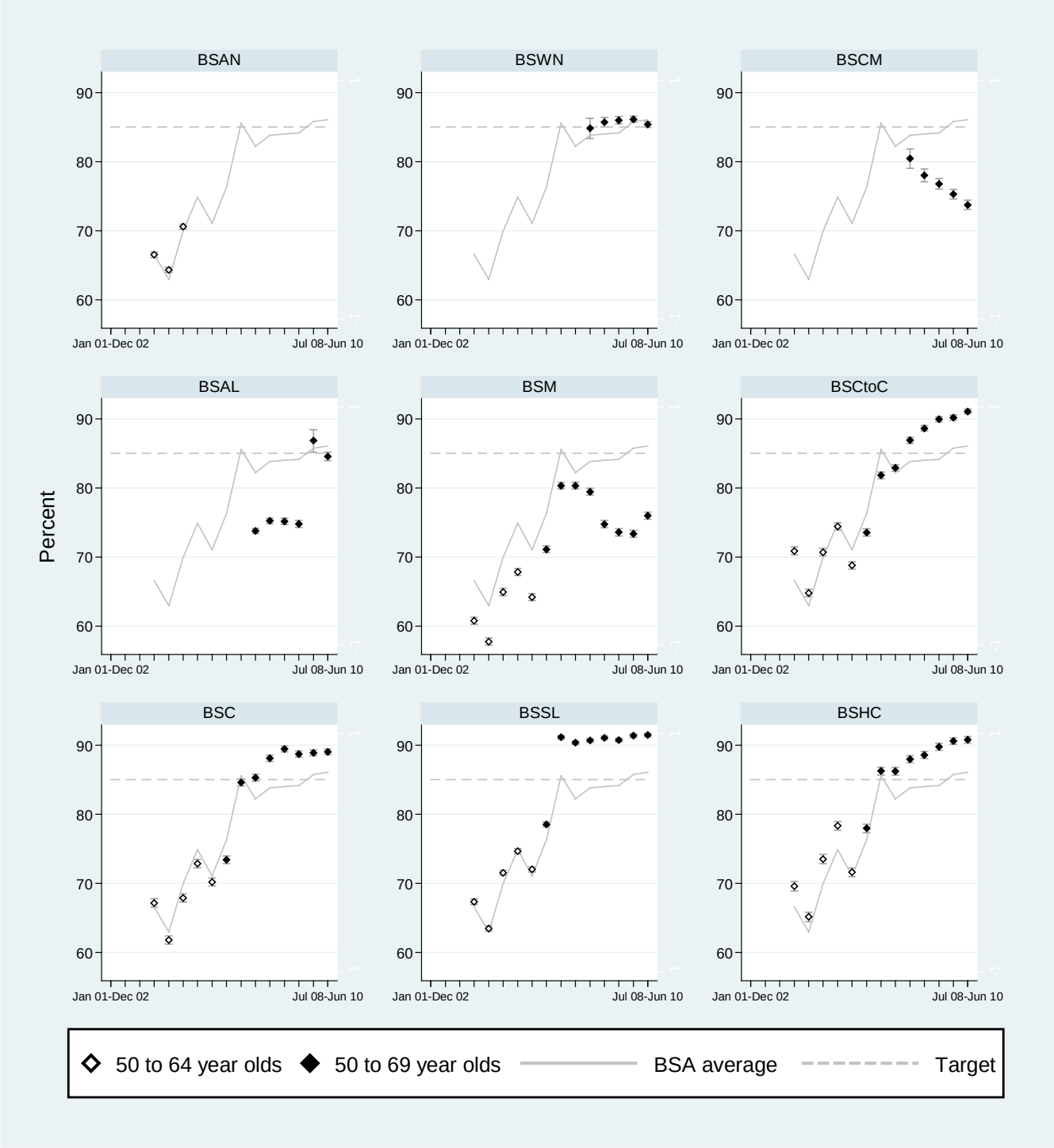


Figure 1b.1: Trends in re-screen rates (within 27 months), 2 years



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)
45-49 years						
BSWN	3,727	4,273	87.2 (86.2-88.2)	591	711	83.1 (80.2-85.8)
BSCM	1,486	1,911	77.8 (75.8-79.6)	742	867	85.6 (83.1-87.9)
BSAL	1,862	2,210	84.3 (82.7-85.7)	470	523	89.9 (87.0-92.3)
BSM	2,267	2,501	90.6 (89.4-91.8)	819	974	84.1 (81.6-86.3)
BSCtoC	2,472	2,662	92.9 (91.8-93.8)	461	567	81.3 (77.8-84.4)
BSC	1,765	2,090	84.4 (82.8-86.0)	543	616	88.1 (85.3-90.6)
BSSL	5,571	6,164	90.4 (89.6-91.1)	565	627	90.1 (87.5-92.3)
BSHC	887	1,048	84.6 (82.3-86.8)	686	744	92.2 (90.0-94.0)
BSA Total	20,037	22,859	87.7 (87.2-88.1)	4,877	5,629	86.6 (85.7-87.5)
50-69 years						
BSWN	10,941	12,612	86.8 (86.1-87.3)	1,443	1,837	78.6 (76.6-80.4)
BSCM	4,557	6,012	75.8 (74.7-76.9)	1,921	2,263	84.9 (83.3-86.3)
BSAL	5,690	6,765	84.1 (83.2-85.0)	1,180	1,427	82.7 (80.6-84.6)
BSM	7,798	8,481	91.9 (91.3-92.5)	3,076	3,647	84.3 (83.1-85.5)
BSCtoC	9,051	9,865	91.7 (91.2-92.3)	1,663	2,039	81.6 (79.8-83.2)
BSC	4,941	5,726	86.3 (85.4-87.2)	2,437	2,737	89.0 (87.8-90.2)
BSSL	15,618	17,251	90.5 (90.1-91.0)	1,853	2,078	89.2 (87.8-90.5)
BSHC	3,538	4,388	80.6 (79.4-81.8)	2,307	2,537	90.9 (89.7-92.0)
BSA Total	62,134	71,100	87.4 (87.1-87.6)	15,880	18,565	85.5 (85.0-86.0)

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

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

	Fixed site					Mobile site				
	Women having ≤ 4 films	Women screened	% (95%CI)			Women having ≤ 4 films	Women screened	% (95%CI)		
45-49 years										
BSWN	14,315	15,877	90.2 (89.7-90.6)			2,008	2,249	89.3 (87.9-90.5)		
BSCM	5,698	6,878	82.8 (81.9-83.7)			2,691	3,060	87.9 (86.7-89.1)		
BSAL	6,720	7,437	90.4 (89.7-91.0)			1,302	1,483	87.8 (86.0-89.4)		
BSM	8,161	8,887	91.8 (91.2-92.4)			3,762	4,349	86.5 (85.5-87.5)		
BSCtoC	10,175	10,972	92.7 (92.2-93.2)			1,544	1,844	83.7 (82.0-85.4)		
BSC	7,718	8,826	87.4 (86.7-88.1)			1,759	2,006	87.7 (86.2-89.1)		
BSSL	19,872	21,376	93.0 (92.6-93.3)			2,367	2,636	89.8 (88.6-90.9)		
BSHC	3,804	4,779	79.6 (78.4-80.7)			2,434	2,692	90.4 (89.2-91.5)		
BSA Total	76,463	85,032	89.9 (89.7-90.1)			17,867	20,319	87.9 (87.5-88.4)		
50-69 years										
BSWN	39,834	44,171	90.2 (89.9-90.5)	✓✓✓	*	5,834	6,591	88.5 (87.7-89.3)	✓✓✓	*
BSCM	16,269	19,143	85.0 (84.5-85.5)	✓✓	*	6,780	7,672	88.4 (87.6-89.1)	✓✓✓	*
BSAL	17,798	19,549	91.0 (90.6-91.4)	✓✓✓	*	3,240	3,734	86.8 (85.6-87.8)	✓✓	*
BSM	29,179	30,938	94.3 (94.1-94.6)	✓✓✓	*	13,804	15,763	87.6 (87.0-88.1)	✓✓	*
BSCtoC	34,508	36,856	93.6 (93.4-93.9)	✓✓✓	*	5,128	6,235	82.2 (81.3-83.2)	✓	*
BSC	23,043	25,815	89.3 (88.9-89.6)	✓✓✓	*	7,136	8,065	88.5 (87.8-89.2)	✓✓✓	*
BSSL	57,849	61,455	94.1 (93.9-94.3)	✓✓✓	*	6,794	7,451	91.2 (90.5-91.8)	✓✓✓	*
BSHC	12,584	16,315	77.1 (76.5-77.8)	✓	*	7,724	8,739	88.4 (87.7-89.0)	✓✓✓	*
BSA Total	231,064	254,242	90.9 (90.8-91.0)	✓✓✓	*	56,440	64,250	87.8 (87.6-88.1)	✓✓	*

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

2.b. Technical recall rate

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

Target:

Fixed: <0.5%

Mobile: <3%

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

	Fixed site			Mobile site		
	Women having technical recall	Women screened	% (95%CI)	Women having technical recall	Women screened	% (95%CI)
45-49 years						
BSWN	1	4,273	0.0 (0.0-0.1)	1	711	0.1 (0.0-0.8)
BSCM	0	1,911	0.0 (0.0-0.2)	11	867	1.3 (0.6-2.3)
BSAL	10	2,210	0.5 (0.2-0.8)	18	523	3.4 (2.0-5.4)
BSM	16	2,501	0.6 (0.4-1.0)	59	974	6.1 (4.6-7.8)
BSCtoC	3	2,662	0.1 (0.0-0.3)	20	567	3.5 (2.2-5.4)
BSC	14	2,090	0.7 (0.4-1.1)	39	616	6.3 (4.5-8.7)
BSSL	8	6,164	0.1 (0.1-0.3)	12	627	1.9 (1.0-3.3)
BSHC	0	1,048	0.0 (0.0-0.4)	16	744	2.2 (1.2-3.5)
BSA Total	52	22,859	0.2 (0.2-0.3)	176	5,629	3.1 (2.7-3.6)
50-69 years						
BSWN	1	12,612	0.0 (0.0-0.0)	2	1,837	0.1 (0.0-0.4)
BSCM	2	6,012	0.0 (0.0-0.1)	44	2,263	1.9 (1.4-2.6)
BSAL	21	6,765	0.3 (0.2-0.5)	77	1,427	5.4 (4.3-6.7)
BSM	73	8,481	0.9 (0.7-1.1)	217	3,647	6.0 (5.2-6.8)
BSCtoC	14	9,865	0.1 (0.1-0.2)	72	2,039	3.5 (2.8-4.4)
BSC	22	5,726	0.4 (0.2-0.6)	100	2,737	3.7 (3.0-4.4)
BSSL	30	17,251	0.2 (0.1-0.2)	20	2,078	1.0 (0.6-1.5)
BSHC	4	4,388	0.1 (0.0-0.2)	45	2,537	1.8 (1.3-2.4)
BSA Total	167	71,100	0.2 (0.2-0.3)	577	18,565	3.1 (2.9-3.4)

Poisson 95% confidence intervals presented

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

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

	Fixed site					Mobile site				
	Women having technical recall	Women screened	% (95%CI)			Women having technical recall	Women screened	% (95%CI)		
45-49 years										
BSWN	7	15,877	0.0 (0.0-0.1)			42	2,249	1.9 (1.3-2.5)		
BSCM	7	6,878	0.1 (0.0-0.2)			64	3,060	2.1 (1.6-2.7)		
BSAL	32	7,437	0.4 (0.3-0.6)			53	1,483	3.6 (2.7-4.7)		
BSM	63	8,887	0.7 (0.5-0.9)			250	4,349	5.7 (5.1-6.5)		
BSCtoC	24	10,972	0.2 (0.1-0.3)			64	1,844	3.5 (2.7-4.4)		
BSC	88	8,826	1.0 (0.8-1.2)			103	2,006	5.1 (4.2-6.2)		
BSSL	46	21,376	0.2 (0.2-0.3)			54	2,636	2.0 (1.5-2.7)		
BSHC	9	4,779	0.2 (0.1-0.4)			102	2,692	3.8 (3.1-4.6)		
BSA Total	276	85,032	0.3 (0.3-0.4)			732	20,319	3.6 (3.3-3.9)		
50-69 years										
BSWN	8	44,171	0.0 (0.0-0.0)	✓✓✓	*	148	6,591	2.2 (1.9-2.6)	✓✓✓	*
BSCM	12	19,143	0.1 (0.0-0.1)	✓✓✓	*	189	7,672	2.5 (2.1-2.8)	✓✓✓	*
BSAL	58	19,549	0.3 (0.2-0.4)	✓✓✓	*	180	3,734	4.8 (4.1-5.6)	×××	*
BSM	203	30,938	0.7 (0.6-0.8)	×××	*	865	15,763	5.5 (5.1-5.9)	×××	*
BSCtoC	89	36,856	0.2 (0.2-0.3)	✓✓✓	*	222	6,235	3.6 (3.1-4.1)	×××	*
BSC	136	25,815	0.5 (0.4-0.6)	✓	ns	358	8,065	4.4 (4.0-4.9)	×××	*
BSSL	85	61,455	0.1 (0.1-0.2)	✓✓✓	*	109	7,451	1.5 (1.2-1.8)	✓✓✓	*
BSHC	22	16,315	0.1 (0.1-0.2)	✓✓✓	*	331	8,739	3.8 (3.4-4.2)	×××	*
BSA Total	613	254,242	0.2 (0.2-0.3)	✓✓✓	*	2,402	64,250	3.7 (3.6-3.9)	×××	*

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 2b1: Technical recall rates for fixed sites, women aged 50-69 years, fixed sites, 6 months

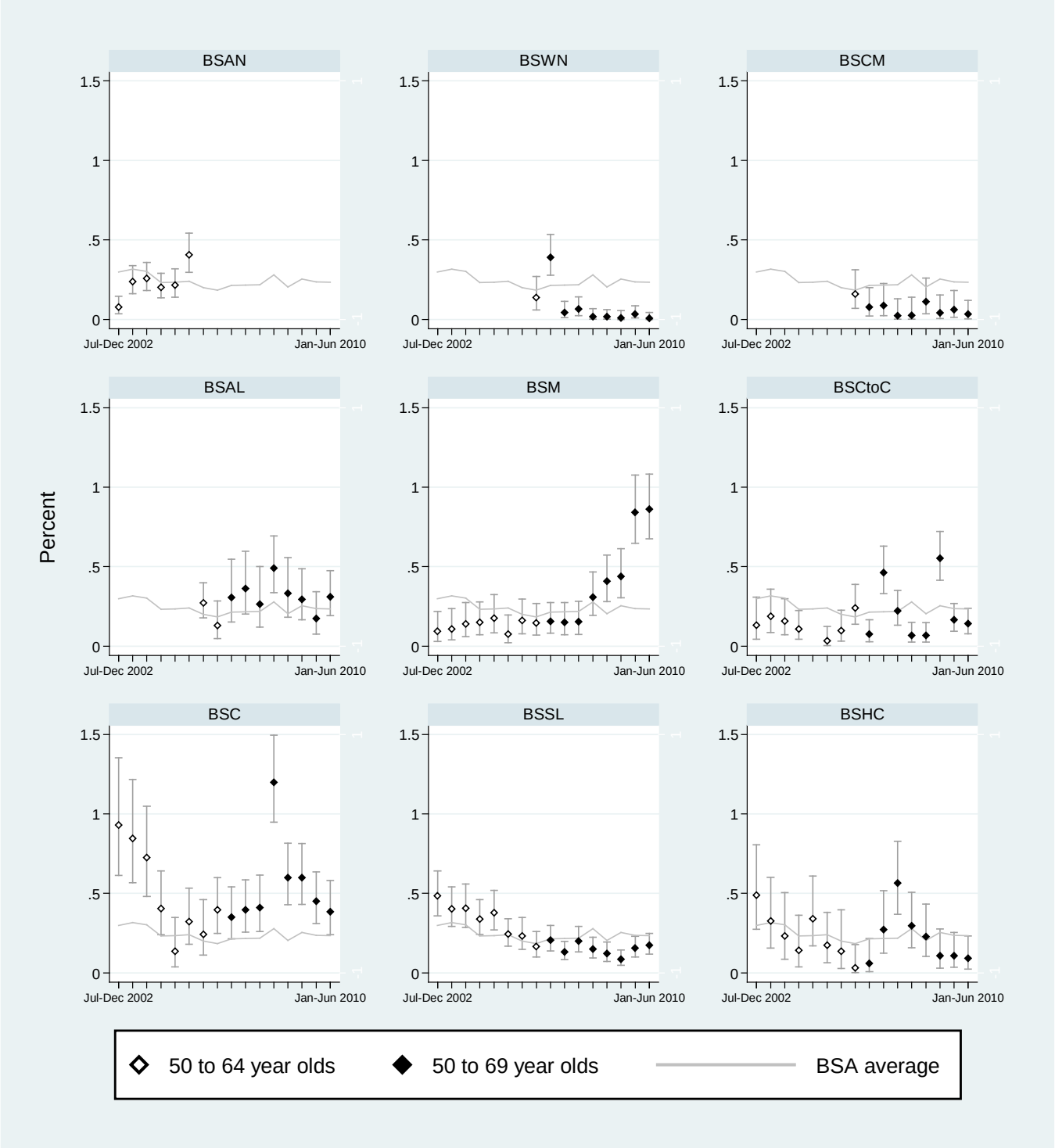


Figure 2b1: Technical recall rates for fixed sites, women aged 50-69 years, fixed sites, 2 years

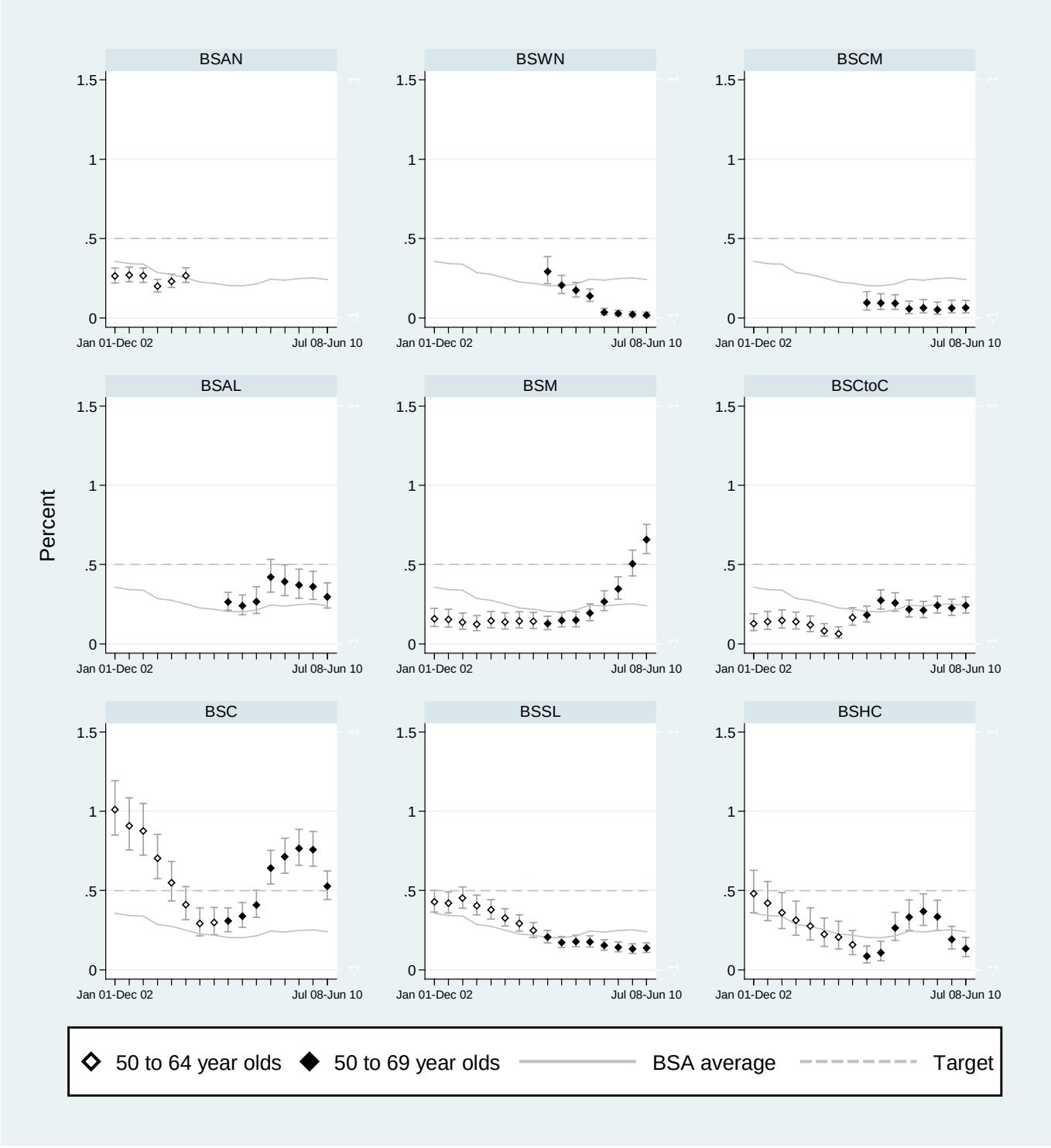


Figure 2b.2: Technical recall rates for mobile sites, women aged 50-69 years, 6 months

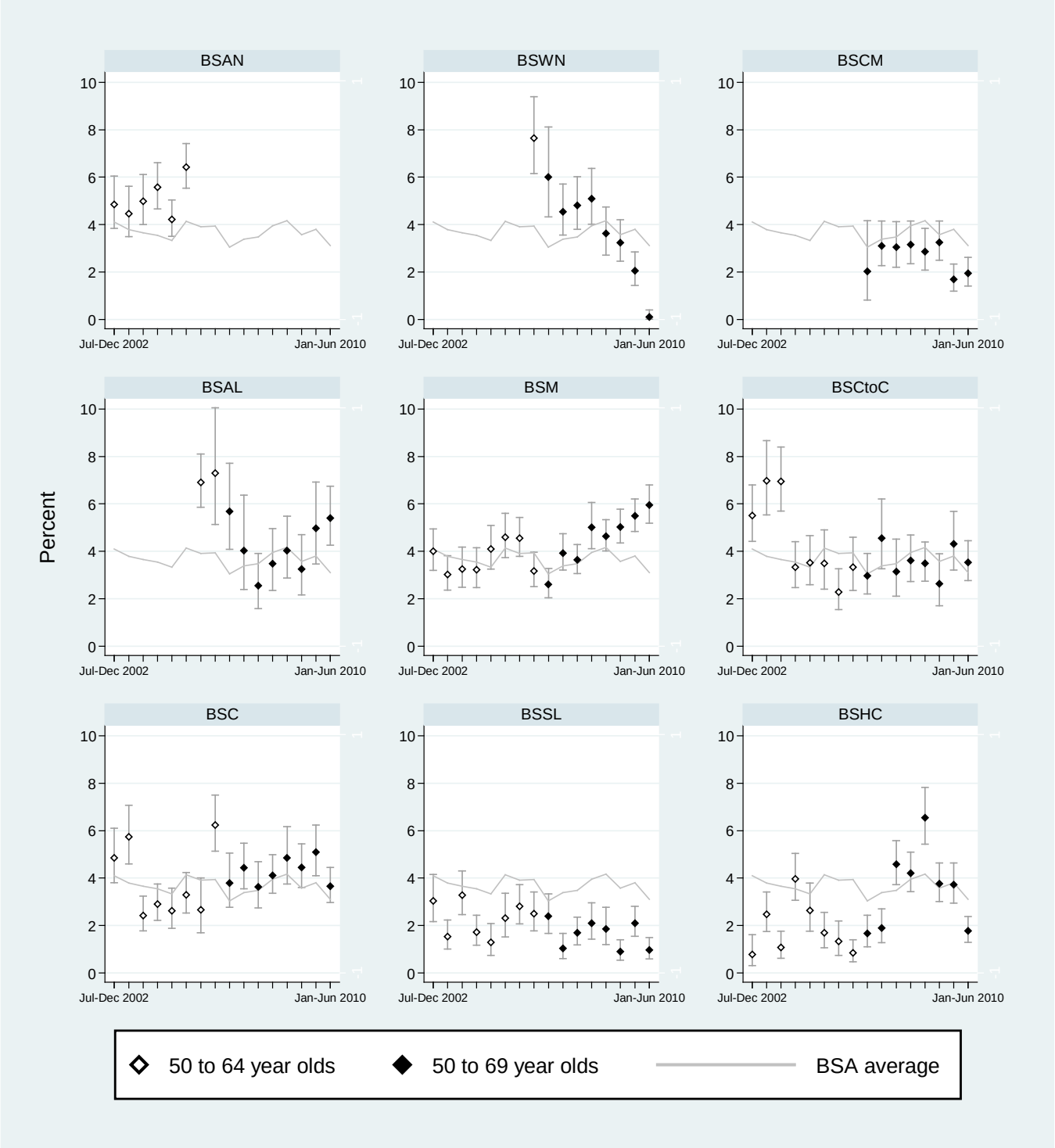
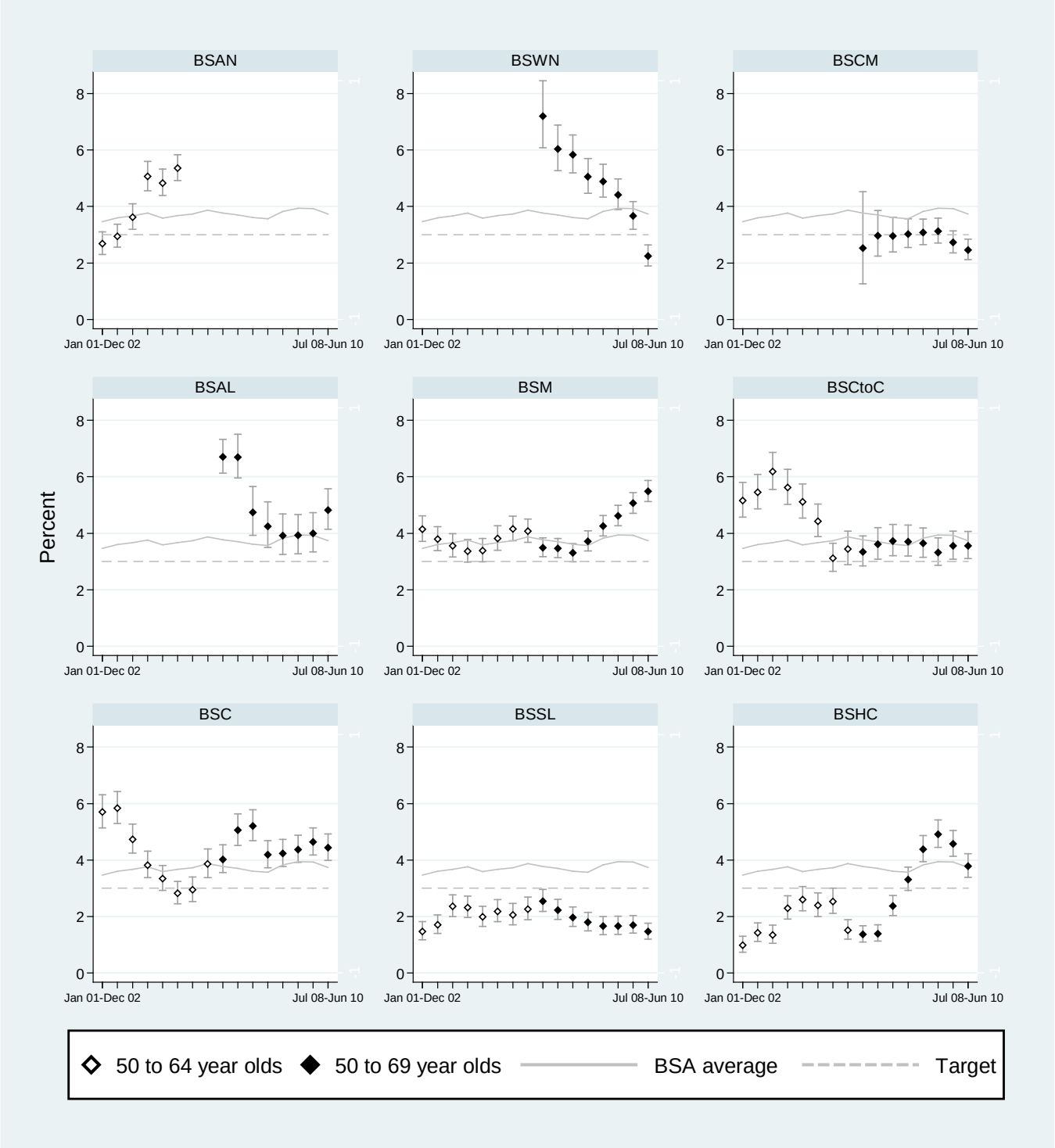


Figure 2b.2: Technical recall rates for mobile sites, women aged 50-69 years, 2 years



2.c. Technical reject rate

Description: The number of films rejected as a percentage of the number of films taken, calculated separately for women who are screened in a fixed unit and a mobile unit.
Target:
Fixed: <3%
Mobile: <3%

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

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

	Fixed site			Mobile site		
	Films rejected	Total films taken	% (95%CI)	Films rejected	Total films taken	% (95%CI)
45-49 years						
BSWN	162	18,118	0.9 (0.8-1.0)	24	3,018	0.8 (0.5-1.2)
BSCM	101	8,321	1.2 (1.0-1.5)	8	3,681	0.2 (0.1-0.4)
BSAL	80	9,478	0.8 (0.7-1.1)	2	2,195	0.1 (0.0-0.3)
BSM	107	10,441	1.0 (0.8-1.2)	44	4,156	1.1 (0.8-1.4)
BSCtoC	56	10,940	0.5 (0.4-0.7)	29	2,476	1.2 (0.8-1.7)
BSC	128	8,827	1.5 (1.2-1.7)	2	2,587	0.1 (0.0-0.3)
BSSL	149	25,544	0.6 (0.5-0.7)	5	2,617	0.2 (0.1-0.4)
BSHC	34	4,459	0.8 (0.5-1.1)	6	3,053	0.2 (0.1-0.4)
BSA Total	817	96,128	0.8 (0.8-0.9)	120	23,783	0.5 (0.4-0.6)
50-69 years						
BSWN	478	53,038	0.9 (0.8-1.0)	61	7,943	0.8 (0.6-1.0)
BSCM	416	26,296	1.6 (1.4-1.7)	38	9,654	0.4 (0.3-0.5)
BSAL	194	28,873	0.7 (0.6-0.8)	5	6,178	0.1 (0.0-0.2)
BSM	259	34,982	0.7 (0.7-0.8)	138	15,498	0.9 (0.7-1.1)
BSCtoC	257	40,610	0.6 (0.6-0.7)	49	8,797	0.6 (0.4-0.7)
BSC	197	24,047	0.8 (0.7-0.9)	19	11,408	0.2 (0.1-0.3)
BSSL	464	71,329	0.7 (0.6-0.7)	28	8,672	0.3 (0.2-0.5)
BSHC	202	18,773	1.1 (0.9-1.2)	24	10,482	0.2 (0.1-0.3)
BSA Total	2,467	297,948	0.8 (0.8-0.9)	362	78,632	0.5 (0.4-0.5)

Poisson 95% confidence intervals presented

Description: The number of films rejected as a percentage of the number of films taken, calculated separately for women who are screened in a fixed unit and a mobile unit.
Target:
Fixed: <3%
Mobile: <3%

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

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

	Fixed site					Mobile site				
	Films rejected	Total films taken	% (95%CI)			Films rejected	Total films taken	% (95%CI)		
45-49 years										
BSWN	551	68,684	0.8 (0.7-0.9)			113	9,705	1.2 (1.0-1.4)		
BSCM	471	30,413	1.5 (1.4-1.7)			69	13,148	0.5 (0.4-0.7)		
BSAL	265	32,846	0.8 (0.7-0.9)			4	6,627	0.1 (0.0-0.2)		
BSM	366	37,202	1.0 (0.9-1.1)			171	18,898	0.9 (0.8-1.1)		
BSCtoC	339	46,185	0.7 (0.7-0.8)			67	7,956	0.8 (0.7-1.1)		
BSC	439	37,762	1.2 (1.1-1.3)			11	8,426	0.1 (0.1-0.2)		
BSSL	677	91,286	0.7 (0.7-0.8)			68	11,221	0.6 (0.5-0.8)		
BSHC	229	20,812	1.1 (1.0-1.3)			67	11,394	0.6 (0.5-0.7)		
BSA Total	3,337	365,190	0.9 (0.9-0.9)			570	87,375	0.7 (0.6-0.7)		
50-69 years										
BSWN	1,638	194,000	0.8 (0.8-0.9)	✓✓✓	*	336	28,818	1.2 (1.0-1.3)	✓✓✓	*
BSCM	1,279	86,012	1.5 (1.4-1.6)	✓✓✓	*	154	33,883	0.5 (0.4-0.5)	✓✓✓	*
BSAL	650	87,577	0.7 (0.7-0.8)	✓✓✓	*	27	17,304	0.2 (0.1-0.2)	✓✓✓	*
BSM	1,053	131,294	0.8 (0.8-0.9)	✓✓✓	*	583	70,345	0.8 (0.8-0.9)	✓✓✓	*
BSCtoC	1,176	157,044	0.7 (0.7-0.8)	✓✓✓	*	183	27,161	0.7 (0.6-0.8)	✓✓✓	*
BSC	1,075	110,818	1.0 (0.9-1.0)	✓✓✓	*	50	34,017	0.1 (0.1-0.2)	✓✓✓	*
BSSL	1,837	263,668	0.7 (0.7-0.7)	✓✓✓	*	140	32,105	0.4 (0.4-0.5)	✓✓✓	*
BSHC	987	72,545	1.4 (1.3-1.4)	✓✓✓	*	236	36,984	0.6 (0.6-0.7)	✓✓✓	*
BSA Total	9,695	1,102,958	0.9 (0.9-0.9)	✓✓✓	*	1,709	280,617	0.6 (0.6-0.6)	✓✓✓	*

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

2.d. Assessment rate

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

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

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

	Initial			Subsequent		
	Referral to assessment	Women screened	% (95%CI)	Referral to assessment	Women screened	% (95%CI)
45-49 years						
BSWN	292	2,720	10.7 (9.5-12.0)	87	2,264	3.8 (3.1-4.7)
BSCM	220	1,739	12.7 (11.0-14.4)	48	1,039	4.6 (3.4-6.1)
BSAL	128	1,545	8.3 (6.9-9.9)	35	1,188	2.9 (2.1-4.1)
BSM	216	2,245	9.6 (8.4-11.0)	78	1,230	6.3 (5.0-7.9)
BSCtoC	94	1,607	5.8 (4.7-7.2)	29	1,622	1.8 (1.2-2.6)
BSC	143	1,538	9.3 (7.8-11.0)	56	1,168	4.8 (3.6-6.2)
BSSL	218	2,937	7.4 (6.5-8.5)	192	3,854	5.0 (4.3-5.7)
BSHC	97	833	11.6 (9.4-14.2)	30	959	3.1 (2.1-4.5)
BSA Total	1,408	15,164	9.3 (8.8-9.8)	555	13,324	4.2 (3.8-4.5)
50-69 years						
BSWN	198	1,822	10.9 (9.4-12.5)	360	12,627	2.9 (2.6-3.2)
BSCM	178	1,391	12.8 (11.0-14.8)	223	6,884	3.2 (2.8-3.7)
BSAL	109	1,009	10.8 (8.9-13.0)	185	7,183	2.6 (2.2-3.0)
BSM	150	1,373	10.9 (9.2-12.8)	316	10,755	2.9 (2.6-3.3)
BSCtoC	84	1,262	6.7 (5.3-8.2)	156	10,642	1.5 (1.2-1.7)
BSC	79	812	9.7 (7.7-12.1)	263	7,651	3.4 (3.0-3.9)
BSSL	65	781	8.3 (6.4-10.6)	474	18,548	2.6 (2.3-2.8)
BSHC	37	354	10.5 (7.4-14.4)	151	6,571	2.3 (1.9-2.7)
BSA Total	900	8,804	10.2 (9.6-10.9)	2128	80,861	2.6 (2.5-2.7)

Poisson 95% confidence intervals presented

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

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

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

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

	Initial					Subsequent				
	Referral to assessment	Women screened	% (95%CI)			Referral to assessment	Women screened	% (95%CI)		
45-49 years										
BSWN	1,065	10,021	10.6 (10.0-11.3)			322	8,105	4.0 (3.6-4.4)		
BSCM	686	6,236	11.0 (10.2-11.9)			152	3,702	4.1 (3.5-4.8)		
BSAL	476	5,224	9.1 (8.3-10.0)			168	3,696	4.5 (3.9-5.3)		
BSM	792	7,868	10.1 (9.4-10.8)			296	5,368	5.5 (4.9-6.2)		
BSCtoC	449	7,070	6.4 (5.8-7.0)			134	5,746	2.3 (2.0-2.8)		
BSC	616	6,019	10.2 (9.4-11.1)			252	4,813	5.2 (4.6-5.9)		
BSSL	806	10,864	7.4 (6.9-7.9)			581	13,148	4.4 (4.1-4.8)		
BSHC	542	4,070	13.3 (12.2-14.5)			108	3,401	3.2 (2.6-3.8)		
BSA Total	5,432	57,372	9.5 (9.2-9.7)			2,013	47,979	4.2 (4.0-4.4)		
50-69 years										
BSWN	765	7,257	10.5 (9.8-11.3)	✓	ns	1,395	43,505	3.2 (3.0-3.4)	✓✓✓	*
BSCM	530	4,648	11.4 (10.5-12.4)	×××	*	730	22,167	3.3 (3.1-3.5)	✓✓✓	*
BSAL	397	3,656	10.9 (9.8-12.0)	✓	ns	588	19,627	3.0 (2.8-3.2)	✓✓✓	*
BSM	538	5,211	10.3 (9.5-11.2)	✓	ns	1,500	41,490	3.6 (3.4-3.8)	✓✓✓	*
BSCtoC	346	4,818	7.2 (6.4-8.0)	✓✓✓	*	640	38,273	1.7 (1.5-1.8)	✓✓✓	*
BSC	392	3,530	11.1 (10.0-12.3)	×××	*	1,106	30,350	3.6 (3.4-3.9)	✓✓✓	*
BSSL	239	3,195	7.5 (6.6-8.5)	✓✓✓	*	1,786	65,711	2.7 (2.6-2.8)	✓✓✓	*
BSHC	241	1,681	14.3 (12.6-16.3)	×××	*	598	23,373	2.6 (2.4-2.8)	✓✓✓	*
BSA Total	3,448	33,996	10.1 (9.8-10.5)	✓	ns	8,343	284,496	2.9 (2.9-3.0)	✓✓✓	*

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

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

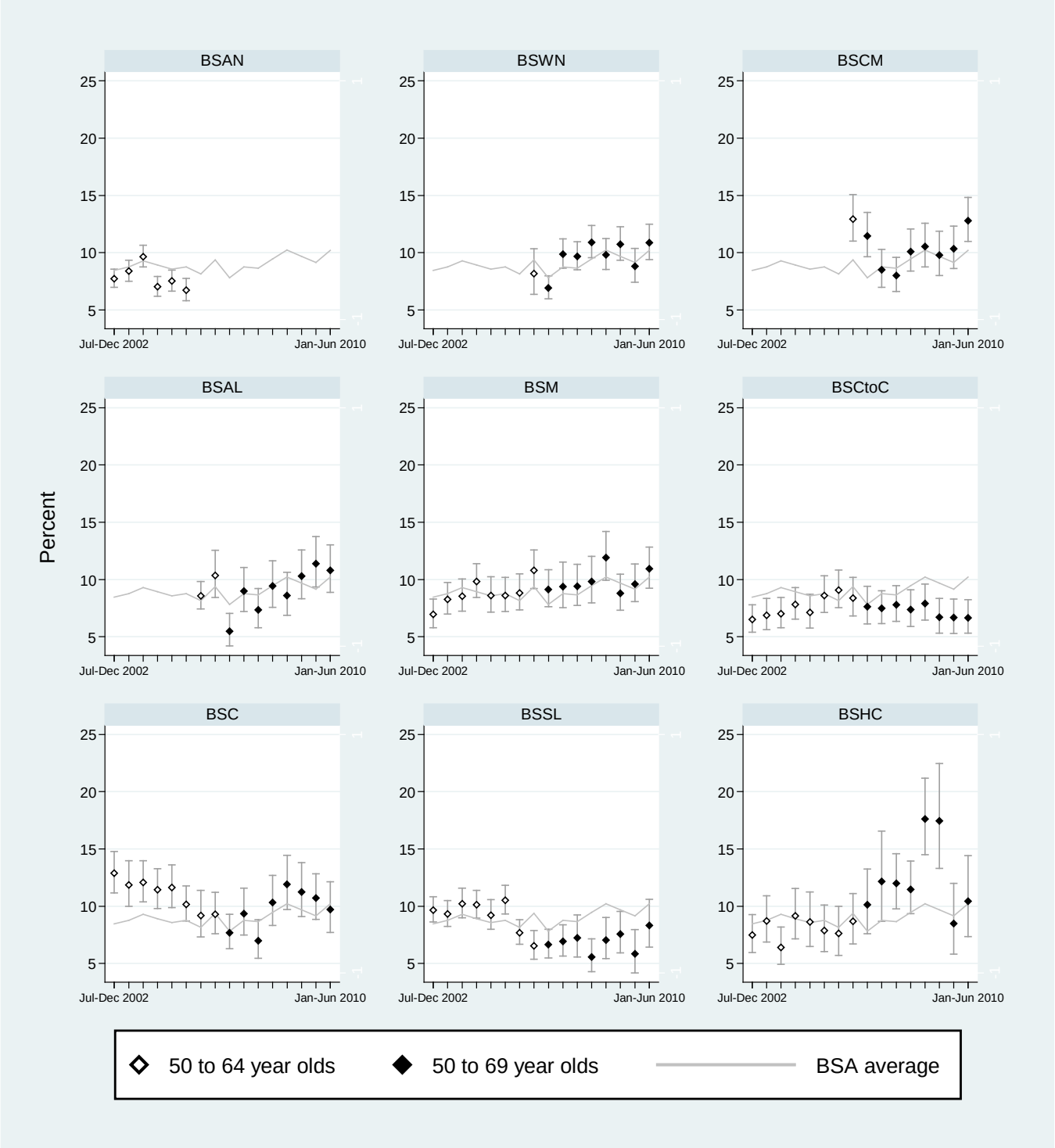


Figure 2d.1: Trends in referral to assessment for initial screens, 2 years

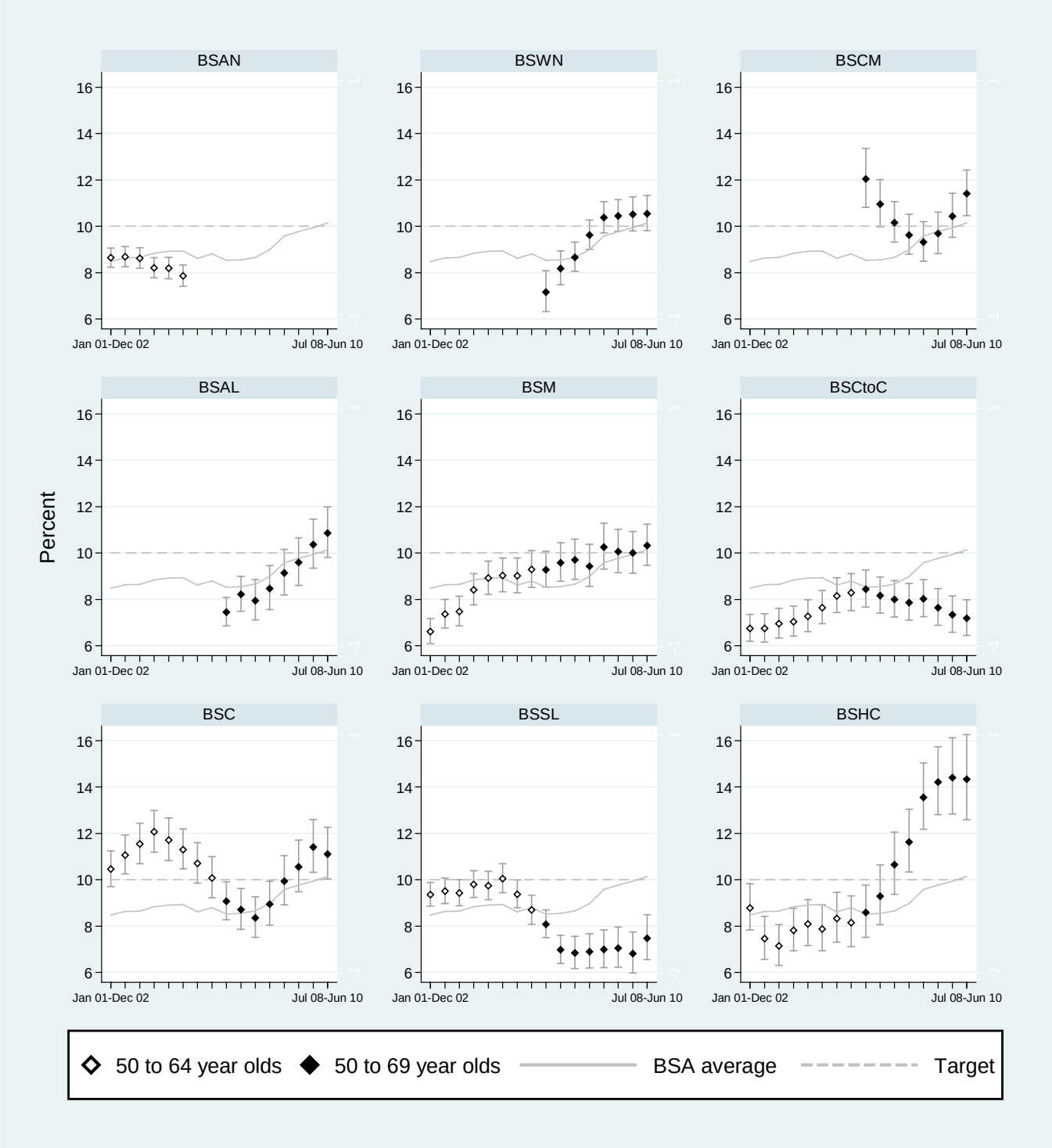


Figure 2d.2: Trends in referral to assessment for subsequent screens, 6 months

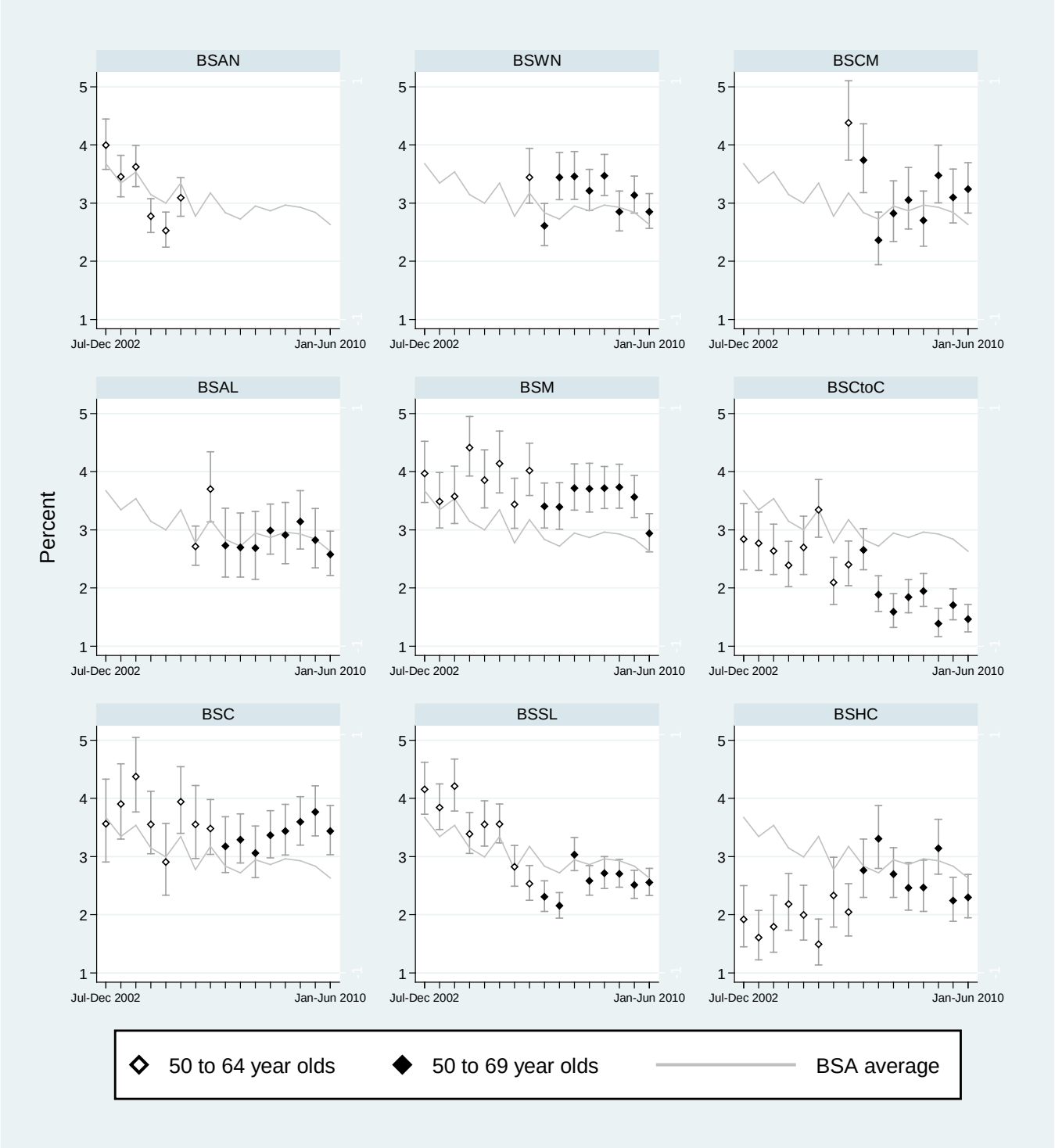
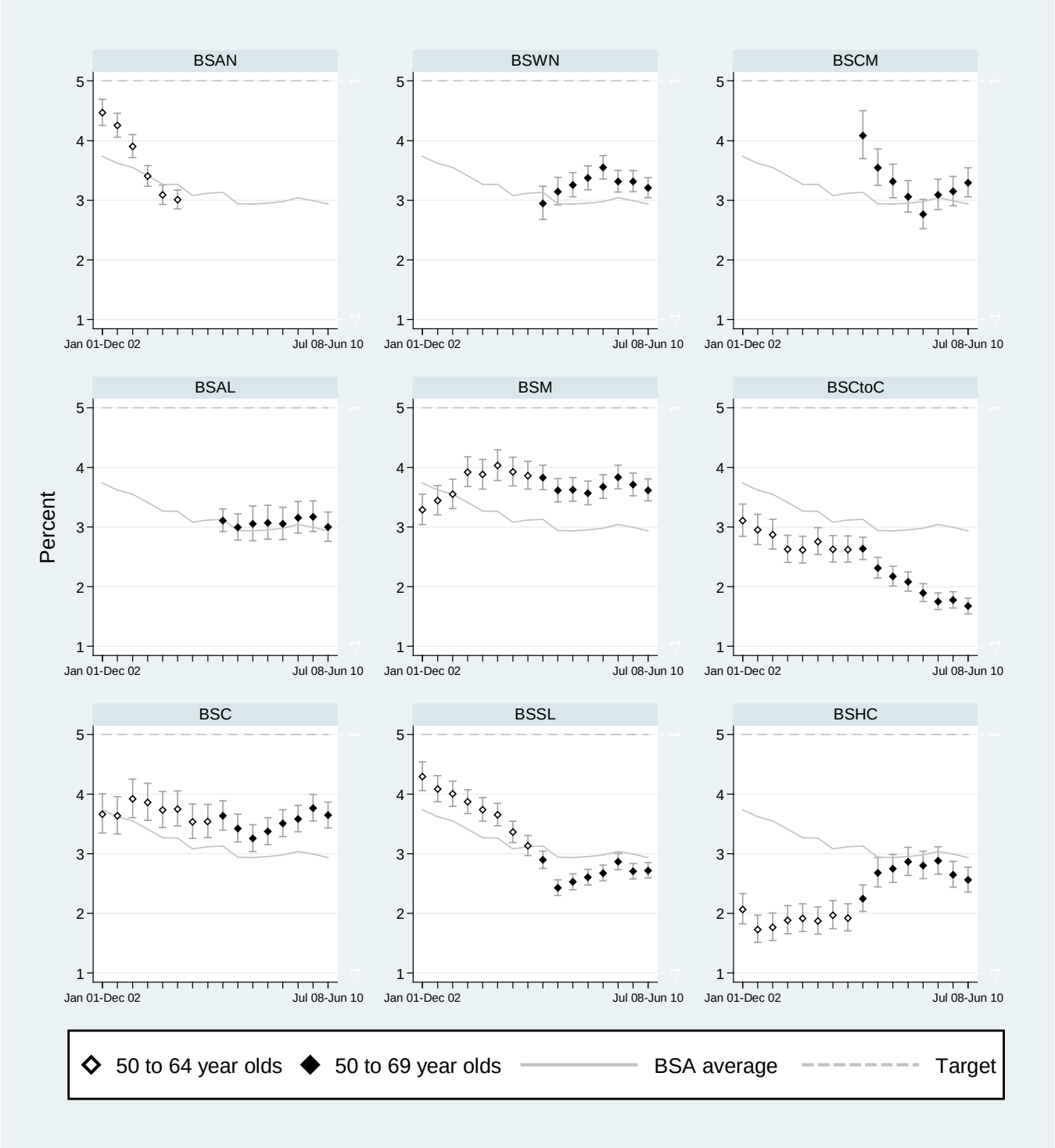


Figure 2d.2: Trends in referral to assessment for subsequent screens, 2 years



2.e. False positive rate

Description:

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

Target:

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

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

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

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

	Initial			Subsequent		
	Number of false positives	Women screened	% (95%CI)	Number of false positives	Women screened	% (95%CI)
45-49 years						
BSWN	269	2,720	9.9 (8.8-11.1)	74	2,264	3.3 (2.6-4.1)
BSCM	203	1,739	11.7 (10.2-13.3)	44	1,039	4.2 (3.1-5.6)
BSAL	114	1,545	7.4 (6.1-8.8)	33	1,188	2.8 (1.9-3.9)
BSM	194	2,245	8.6 (7.5-9.9)	72	1,230	5.9 (4.6-7.3)
BSCtoC	83	1,607	5.2 (4.1-6.4)	24	1,622	1.5 (1.0-2.2)
BSC	134	1,538	8.7 (7.4-10.2)	49	1,168	4.2 (3.1-5.5)
BSSL	202	2,937	6.9 (6.0-7.9)	179	3,854	4.6 (4.0-5.4)
BSHC	93	833	11.2 (9.1-13.5)	29	959	3.0 (2.0-4.3)
BSA Total	1,292	15,164	8.5 (8.1-9.0)	504	13,324	3.8 (3.5-4.1)
50-69 years						
BSWN	177	1,822	9.7 (8.4-11.2)	281	12,627	2.2 (2.0-2.5)
BSCM	152	1,391	10.9 (9.3-12.7)	180	6,884	2.6 (2.3-3.0)
BSAL	93	1,009	9.2 (7.5-11.2)	138	7,183	1.9 (1.6-2.3)
BSM	131	1,373	9.5 (8.0-11.2)	273	10,755	2.5 (2.2-2.9)
BSCtoC	71	1,262	5.6 (4.4-7.0)	98	10,642	0.9 (0.7-1.1)
BSC	63	812	7.8 (6.0-9.8)	210	7,651	2.7 (2.4-3.1)
BSSL	58	781	7.4 (5.7-9.5)	397	18,548	2.1 (1.9-2.4)
BSHC	33	354	9.3 (6.5-12.8)	117	6,571	1.8 (1.5-2.1)
BSA Total	778	8,804	8.8 (8.3-9.4)	1,694	80,861	2.1 (2.0-2.2)

Exact binomial 95% confidence intervals presented

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

Description:
Measures the proportion of women who are recalled to assessment, but after assessment are found not to have cancer (DCIS and invasive)
Target:
Initial (Prevalent) screen: expected value <9%, desired target <6%
Subsequent (Incident) screen: expected value <4%, desired target <3%

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

	Initial					Subsequent				
	Number of false positives	Women screened	% (95%CI)			Number of false positives	Women screened	% (95%CI)		
45-49 years										
BSWN	990	10,021	9.9 (9.3-10.5)			279	8,105	3.4 (3.1-3.9)		
BSCM	637	6,236	10.2 (9.5-11.0)			140	3,702	3.8 (3.2-4.4)		
BSAL	425	5,224	8.1 (7.4-8.9)			157	3,696	4.2 (3.6-4.9)		
BSM	736	7,868	9.4 (8.7-10.0)			274	5,368	5.1 (4.5-5.7)		
BSCtoC	397	7,070	5.6 (5.1-6.2)			116	5,746	2.0 (1.7-2.4)		
BSC	570	6,019	9.5 (8.7-10.2)			235	4,813	4.9 (4.3-5.5)		
BSSL	746	10,864	6.9 (6.4-7.4)			533	13,148	4.1 (3.7-4.4)		
BSHC	519	4,070	12.8 (11.7-13.8)			98	3,401	2.9 (2.3-3.5)		
BSA Total	5,020	57,372	8.7 (8.5-9.0)			1,832	47,979	3.8 (3.6-4.0)		
50-69 years										
BSWN	661	7,257	9.1 (8.5-9.8)	✓	ns	1,101	43,505	2.5 (2.4-2.7)	✓✓✓	*
BSCM	462	4,648	9.9 (9.1-10.8)	×××	*	572	22,167	2.6 (2.4-2.8)	✓✓✓	*
BSAL	340	3,656	9.3 (8.4-10.3)	✓	ns	443	19,627	2.3 (2.1-2.5)	✓✓✓	*
BSM	488	5,211	9.4 (8.6-10.2)	✓	ns	1,250	41,490	3.0 (2.9-3.2)	✓✓✓	*
BSCtoC	290	4,818	6.0 (5.4-6.7)	✓✓✓	*	440	38,273	1.1 (1.0-1.3)	✓✓✓	*
BSC	331	3,530	9.4 (8.4-10.4)	✓	ns	907	30,350	3.0 (2.8-3.2)	✓✓✓	*
BSSL	216	3,195	6.8 (5.9-7.7)	✓✓✓	*	1,462	65,711	2.2 (2.1-2.3)	✓✓✓	*
BSHC	222	1,681	13.2 (11.6-14.9)	×××	*	489	23,373	2.1 (1.9-2.3)	✓✓✓	*
BSA Total	3,010	33,996	8.9 (8.6-9.2)	✓	ns	6,664	284,496	2.3 (2.3-2.4)	✓✓✓	*

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

2.f. Positive predictive value

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

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

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)
45-49 years						
BSWN	16	292	5.5 (3.2-8.7)	12	87	13.8 (7.3-22.9)
BSCM	14	220	6.4 (3.5-10.4)	4	48	8.3 (2.3-20.0)
BSAL	11	128	8.6 (4.4-14.9)	2	35	5.7 (0.7-19.2)
BSM	13	216	6.0 (3.2-10.1)	5	78	6.4 (2.1-14.3)
BSCtoC	9	94	9.6 (4.5-17.4)	2	29	6.9 (0.8-22.8)
BSC	6	143	4.2 (1.6-8.9)	6	56	10.7 (4.0-21.9)
BSSL	14	218	6.4 (3.6-10.5)	10	192	5.2 (2.5-9.4)
BSHC	3	97	3.1 (0.6-8.8)	1	30	3.3 (0.1-17.2)
BSA Total	86	1,408	6.1 (4.9-7.5)	42	555	7.6 (5.5-10.1)
50-69 years						
BSWN	16	198	8.1 (4.7-12.8)	73	360	20.3 (16.2-24.8)
BSCM	13	178	7.3 (3.9-12.2)	38	223	17.0 (12.3-22.6)
BSAL	8	109	7.3 (3.2-14.0)	41	185	22.2 (16.4-28.8)
BSM	13	150	8.7 (4.7-14.4)	33	316	10.4 (7.3-14.4)
BSCtoC	9	84	16.3 (8.9-26.2)	54	156	34.6 (27.2-42.6)
BSC	11	79	13.9 (7.2-23.5)	52	263	19.8 (15.1-25.1)
BSSL	7	65	10.8 (4.4-20.9)	74	474	15.6 (12.5-19.2)
BSHC	0	37	0.0 (0.0-9.5)	29	151	19.2 (13.3-26.4)
BSA Total	77	900	8.6 (6.8-10.6)	394	2,128	18.5 (16.9-20.2)

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	62	1,065	5.8 (4.5-7.4)			38	322	11.8 (8.5-15.8)		
BSCM	33	686	4.8 (3.3-6.7)			12	152	7.9 (4.1-13.4)		
BSAL	42	476	8.8 (6.4-11.7)			10	168	6.0 (2.9-10.7)		
BSM	44	792	5.6 (4.1-7.4)			21	296	7.1 (4.4-10.6)		
BSCtoC	42	449	9.4 (6.8-12.4)			11	134	8.2 (4.2-14.2)		
BSC	39	616	6.3 (4.5-8.6)			15	252	6.0 (3.4-9.6)		
BSSL	55	806	6.8 (5.2-8.8)			40	581	6.9 (5.0-9.3)		
BSHC	14	542	2.6 (1.4-4.3)			9	108	8.3 (3.9-15.2)		
BSA Total	331	5,432	6.1 (5.5-6.8)			156	2,013	7.7 (6.6-9.0)		
50-69 years										
BSWN	80	765	10.5 (8.4-12.8)	✓	ns	269	1,395	19.3 (17.2-21.5)	✓✓✓	*
BSCM	48	530	9.1 (6.8-11.8)	✓	ns	145	730	19.9 (17.0-22.9)	✓✓✓	*
BSAL	39	397	9.8 (7.1-13.2)	✓	ns	135	588	23.0 (19.6-26.6)	✓✓✓	*
BSM	42	538	7.8 (5.7-10.4)	✓	ns	235	1,500	15.7 (13.9-17.6)	✓✓✓	*
BSCtoC	43	346	12.4 (9.1-16.4)	✓✓✓	*	187	640	29.2 (25.7-32.9)	✓✓✓	*
BSC	52	392	13.3 (10.1-17.0)	✓✓✓	*	189	1,106	17.1 (14.9-19.4)	✓✓✓	*
BSSL	22	239	9.2 (5.9-13.6)	✓	ns	309	1,786	17.3 (15.6-19.1)	✓✓✓	*
BSHC	11	241	4.6 (2.3-8.0)	×××	*	97	598	16.2 (13.4-19.4)	✓✓✓	*
BSA Total	337	3,448	9.8 (8.8-10.8)	✓	ns	1,566	8,343	18.8 (17.9-19.6)	✓✓✓	*

Exact binomial 95% confidence intervals presented

* Statistically different from target value, ns: not significant

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

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

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

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

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

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

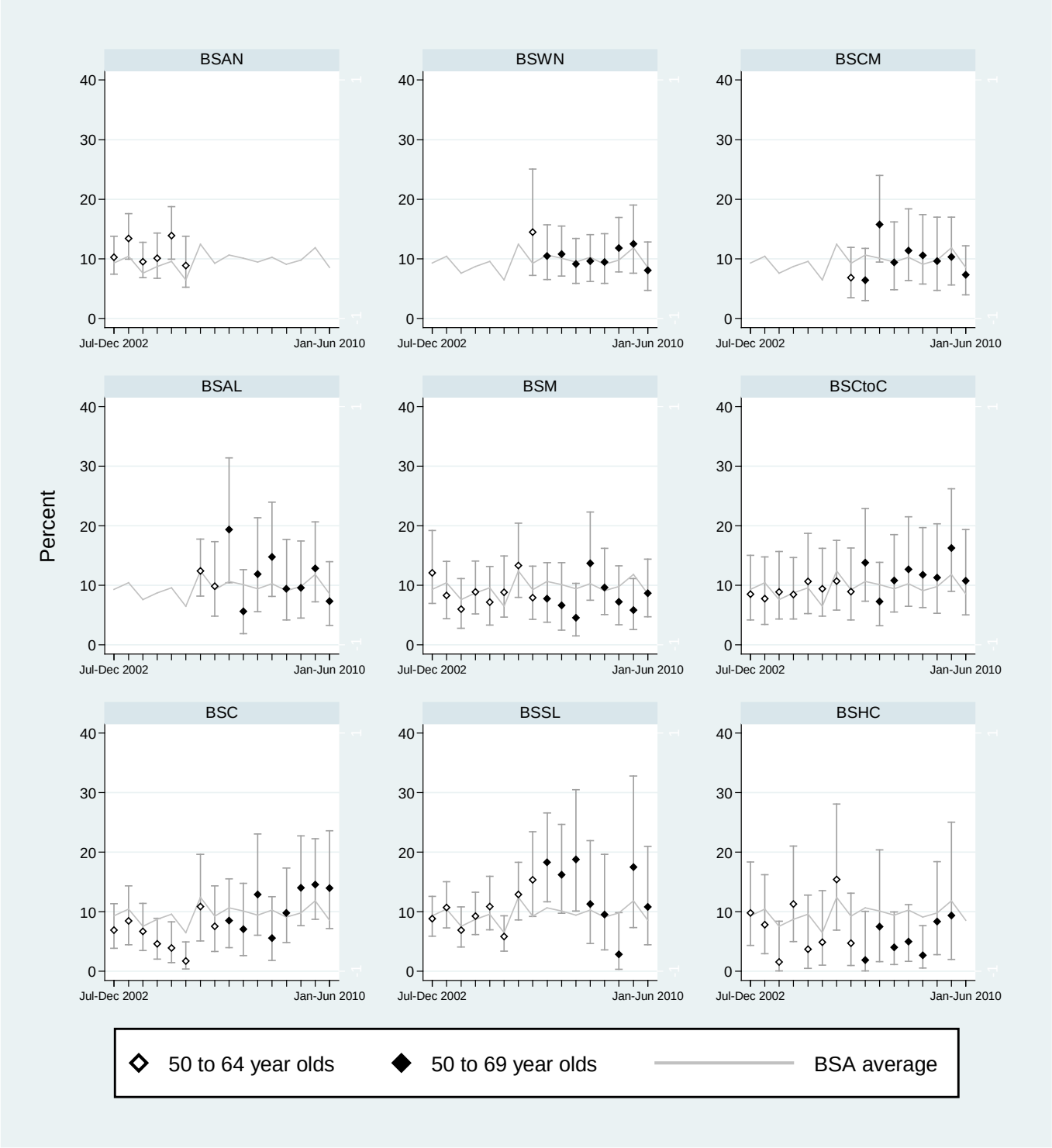


Figure 2f.1b: DCIS and invasive cancers as a percentage of referrals to assessment for initial screens, women 50-69 years, 2 years

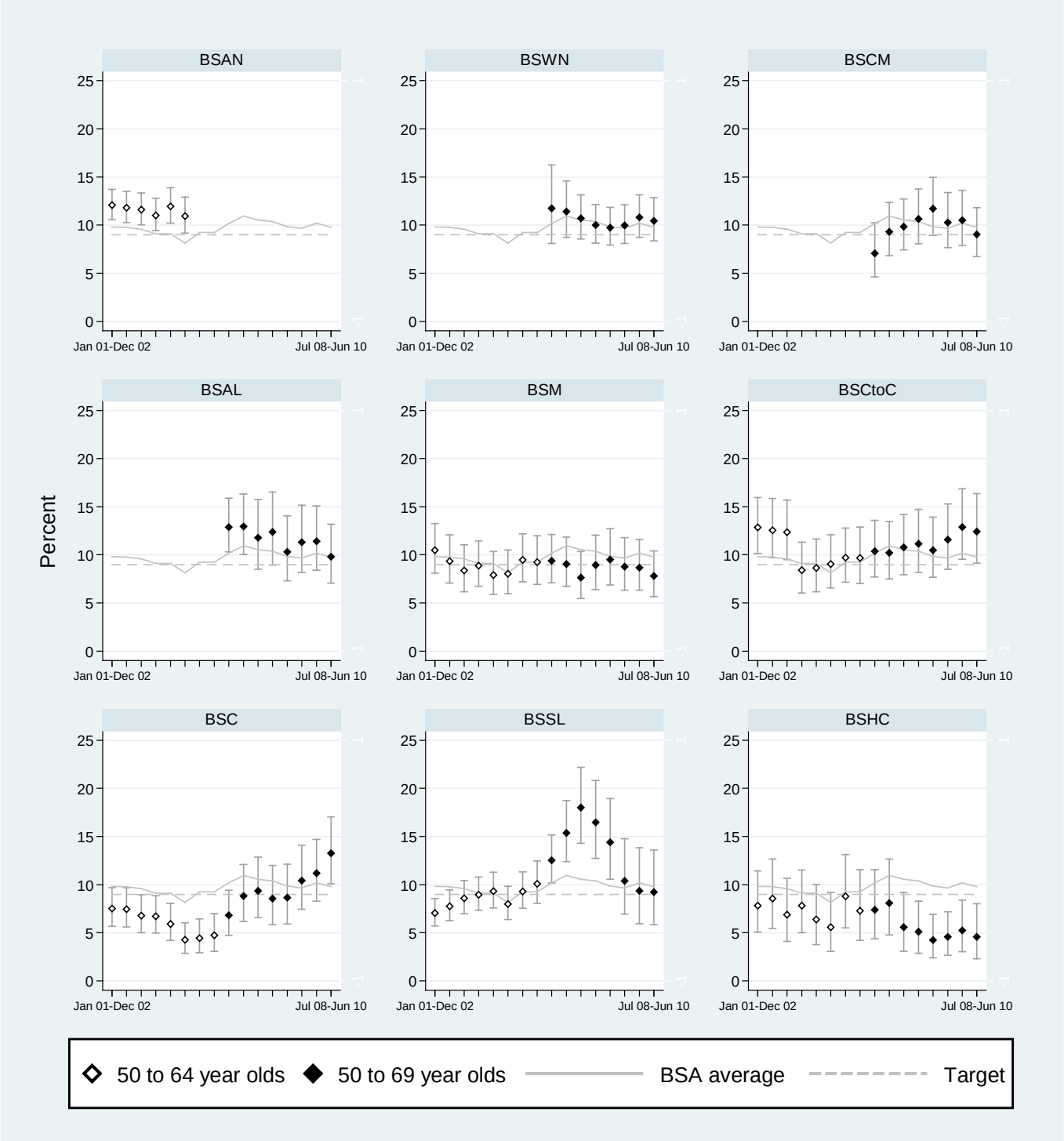


Figure 2f.2a: DCIS and invasive cancers as a percentage of referrals to assessment for subsequent screens, women 50-69 years, 6 months

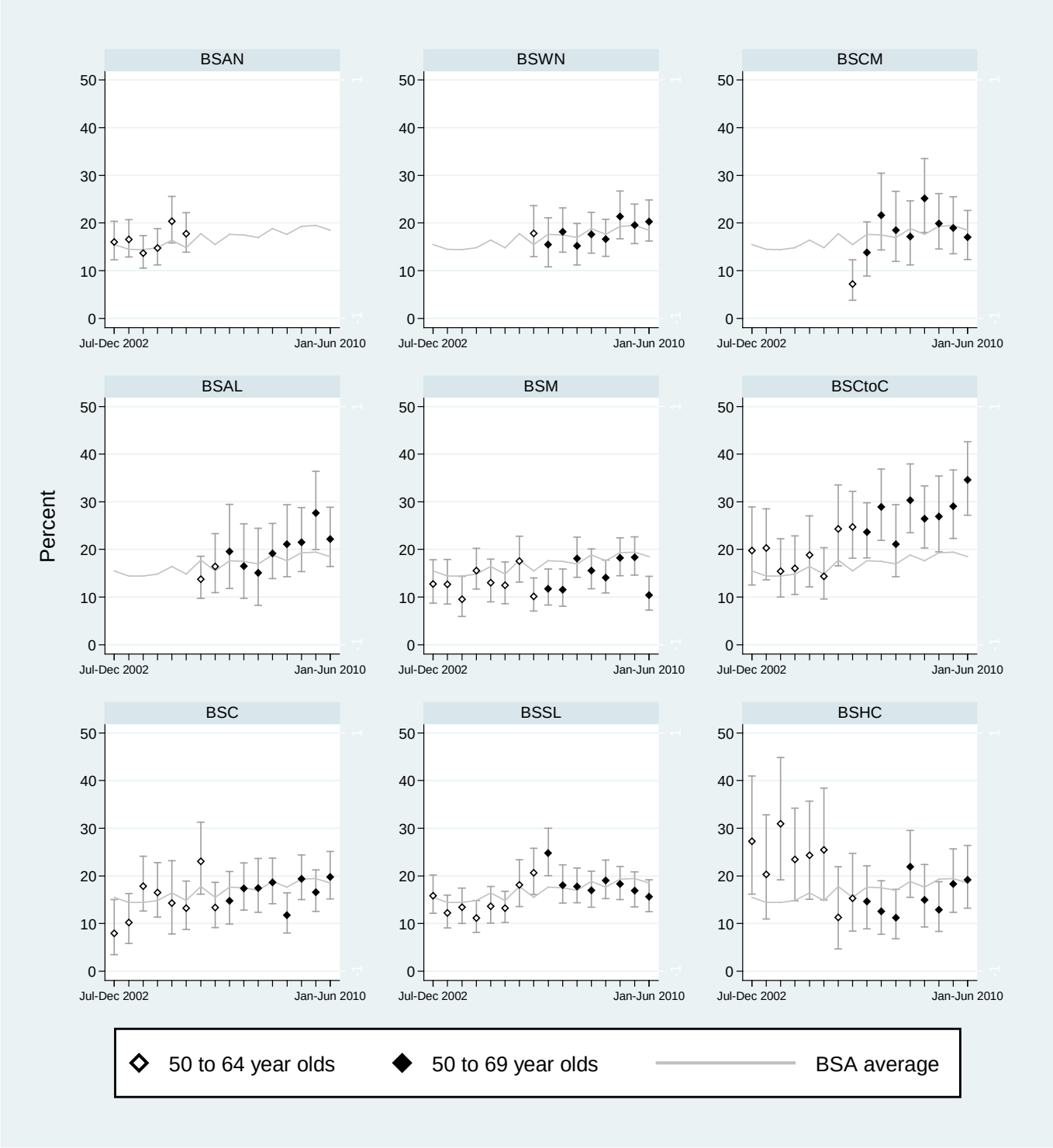
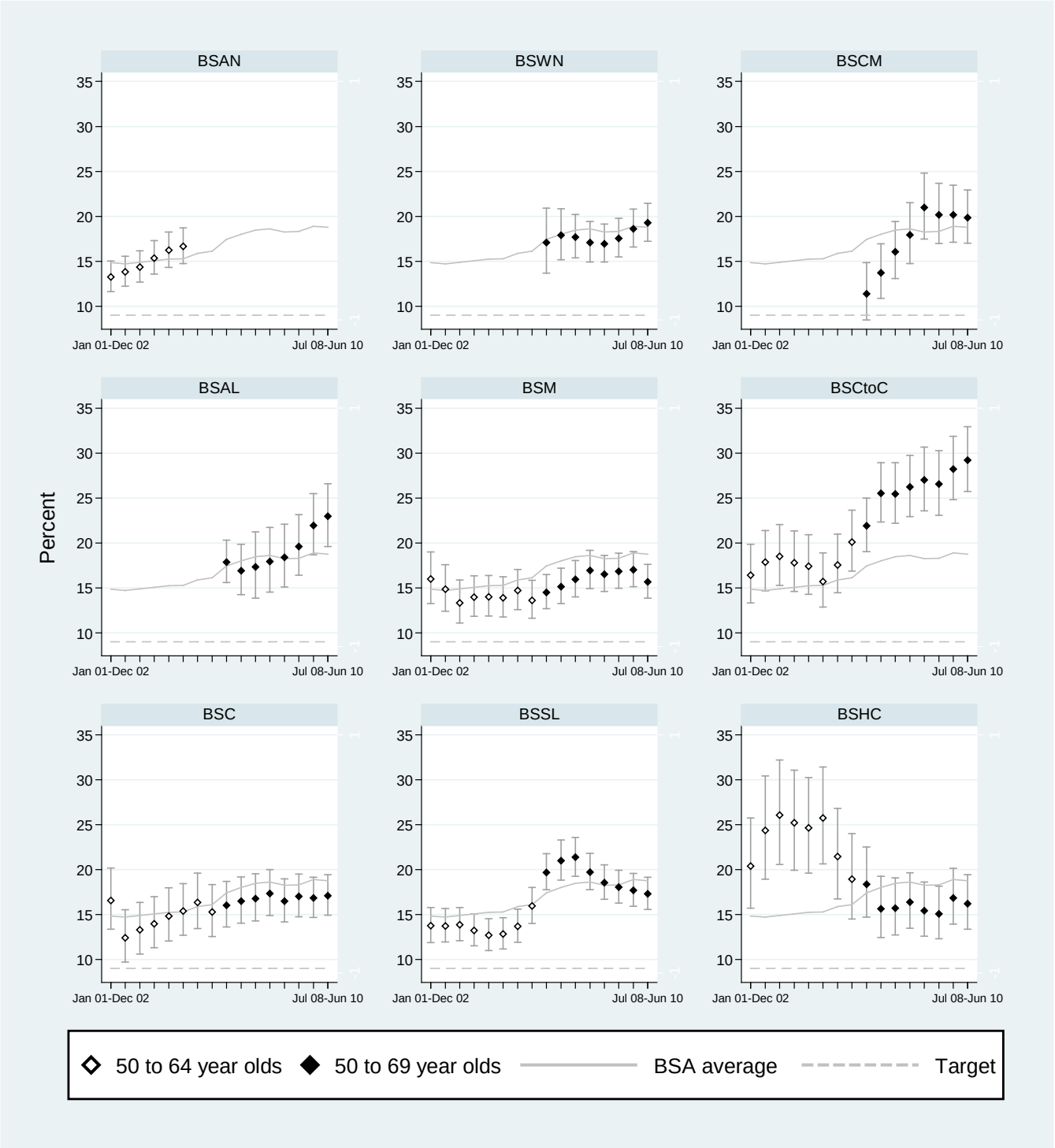


Figure 2f.2b: DCIS and invasive cancers as a percentage of referrals to assessment for subsequent screens, women 50-69 years, 2 years



2.g. Benign biopsy weight

Description:

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

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

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

	Total benign OBs	<30 gm	% (95% CIs)	30-49 gm	% (95% CIs)	50-69 gm	% (95% CIs)	≥70 gm	% (95% CIs)	Unknown	% (95% CIs)
45-49 years											
BSWN	44	40	90.9 (78.3-97.5)	3	6.8 (1.4-18.7)	1	2.3 (0.1-12.0)	0	0.0 (0.0-8.0)	0	0.0 (0.0-8.0)
BSCM	18	13	72.2 (46.5-90.3)	5	27.8 (9.7-53.5)	0	0.0 (0.0-18.5)	0	0.0 (0.0-18.5)	0	0.0 (0.0-18.5)
BSAL	21	18	85.7 (63.7-97.0)	3	14.3 (3.0-36.3)	0	0.0 (0.0-16.1)	0	0.0 (0.0-16.1)	0	0.0 (0.0-16.1)
BSM	24	18	75.0 (53.3-90.2)	2	8.3 (1.0-27.0)	2	8.3 (1.0-27.0)	0	0.0 (0.0-14.2)	2	8.3 (1.0-27.0)
BSCtoC	8	6	75.0 (34.9-96.8)	1	12.5 (0.3-52.7)	0	0.0 (0.0-36.9)	0	0.0 (0.0-36.9)	1	12.5 (0.3-52.7)
BSC	10	8	80.0 (44.4-97.5)	1	10.0 (0.3-44.5)	0	0.0 (0.0-30.8)	0	0.0 (0.0-30.8)	1	10.0 (0.3-44.5)
BSSL	18	13	72.2 (46.5-90.3)	4	22.2 (6.4-47.6)	1	5.6 (0.1-27.3)	0	0.0 (0.0-18.5)	0	0.0 (0.0-18.5)
BSHC	13	12	92.3 (64.0-99.8)	0	0.0 (0.0-24.7)	0	0.0 (0.0-24.7)	1	7.7 (0.2-36.0)	0	0.0 (0.0-24.7)
BSA Total	156	128	82.1 (75.1-87.7)	19	12.2 (7.5-18.4)	4	2.6 (0.7-6.4)	1	0.6 (0.0-3.5)	4	2.6 (0.7-6.4)
50-69 years											
BSWN	48	43	89.6 (77.3-96.5)	4	8.3 (2.3-20.0)	0	0.0 (0.0-7.4)	1	2.1 (0.1-11.1)	0	0.0 (0.0-7.4)
BSCM	35	25	71.4 (53.7-85.4)	9	25.7 (12.5-43.3)	0	0.0 (0.0-10.0)	1	2.9 (0.1-14.9)	0	0.0 (0.0-10.0)
BSAL	21	17	81.0 (58.1-94.6)	3	14.3 (3.0-36.3)	0	0.0 (0.0-16.1)	1	4.8 (0.1-23.8)	0	0.0 (0.0-16.1)
BSM	35	25	71.4 (53.7-85.4)	7	20.0 (8.4-36.9)	1	2.9 (0.1-14.9)	1	2.9 (0.1-14.9)	1	2.9 (0.1-14.9)
BSCtoC	14	10	71.4 (41.9-91.6)	3	21.4 (4.7-50.8)	0	0.0 (0.0-23.2)	0	0.0 (0.0-23.2)	1	7.1 (0.2-33.9)
BSC	16	13	81.3 (54.4-96.0)	2	12.5 (1.6-38.3)	1	6.3 (0.2-30.2)	0	0.0 (0.0-20.6)	0	0.0 (0.0-20.6)
BSSL	18	14	77.8 (52.4-93.6)	2	11.1 (1.4-34.7)	2	11.1 (1.4-34.7)	0	0.0 (0.0-18.5)	0	0.0 (0.0-18.5)
BSHC	12	7	58.3 (27.7-84.8)	2	16.7 (2.1-48.4)	2	16.7 (2.1-48.4)	1	8.3 (0.2-38.5)	0	0.0 (0.0-26.5)
BSA Total	199	154	77.4 (70.9-83.0)	32	16.1 (11.3-21.9)	6	3.0 (1.1-6.4)	5	2.5 (0.8-5.8)	2	1.0 (0.1-3.6)

Exact binomial 95% confidence intervals presented

2.h. Pre-operative diagnosis rate

Description:

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

Target:

> 90% desired target

> 70% expected target

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

	6 months					2 years				
	Preoperative diagnosis of cancer	Number of cancers	% (95%CI)			Preoperative diagnosis of cancer	Number of cancers	% (95%CI)		
45-49 years										
BSWN	24	28				85	100	85.0 (76.5-91.4)		
BSCM	14	18				40	45	88.9 (75.9-96.3)		
BSAL	11	13				48	52	92.3 (81.5-97.9)		
BSM	16	18				61	65	93.8 (85.0-98.3)		
BSCtoC	11	11				51	53	96.2 (87.0-99.5)		
BSC	11	12				49	54	90.7 (79.7-96.9)		
BSSL	21	24				91	95	95.8 (89.6-98.8)		
BSHC	2	4				20	23	87.0 (66.4-97.2)		
BSA Total	110	128	85.9 (78.7-91.4)			445	487	91.4 (88.5-93.7)		
50-69 years										
BSWN	79	89	88.8 (80.3-94.5)	✓✓✓	*	329	349	94.3 (91.3-96.5)	✓✓✓	*
BSCM	51	51	100.0 (93.0-100.0)	✓✓✓	*	191	193	99.0 (96.3-99.9)	✓✓✓	*
BSAL	44	49	89.8 (77.8-96.6)	✓✓✓	*	164	174	94.3 (89.7-97.2)	✓✓✓	*
BSM	44	46	95.7 (85.2-99.5)	✓✓✓	*	258	277	93.1 (89.5-95.8)	✓✓✓	*
BSCtoC	61	63	96.8 (89.0-99.6)	✓✓✓	*	221	230	96.1 (92.7-98.2)	✓✓✓	*
BSC	63	63	100.0 (94.3-100.0)	✓✓✓	*	233	241	96.7 (93.6-98.6)	✓✓✓	*
BSSL	76	81	93.8 (86.2-98.0)	✓✓✓	*	319	331	96.4 (93.8-98.1)	✓✓✓	*
BSHC	27	29	93.1 (77.2-99.2)	✓✓✓	*	104	108	96.3 (90.8-99.0)	✓✓✓	*
BSA Total	445	471	94.5 (92.0-96.4)	✓✓✓	*	1,819	1,903	95.6 (94.6-96.5)	✓✓✓	*

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

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

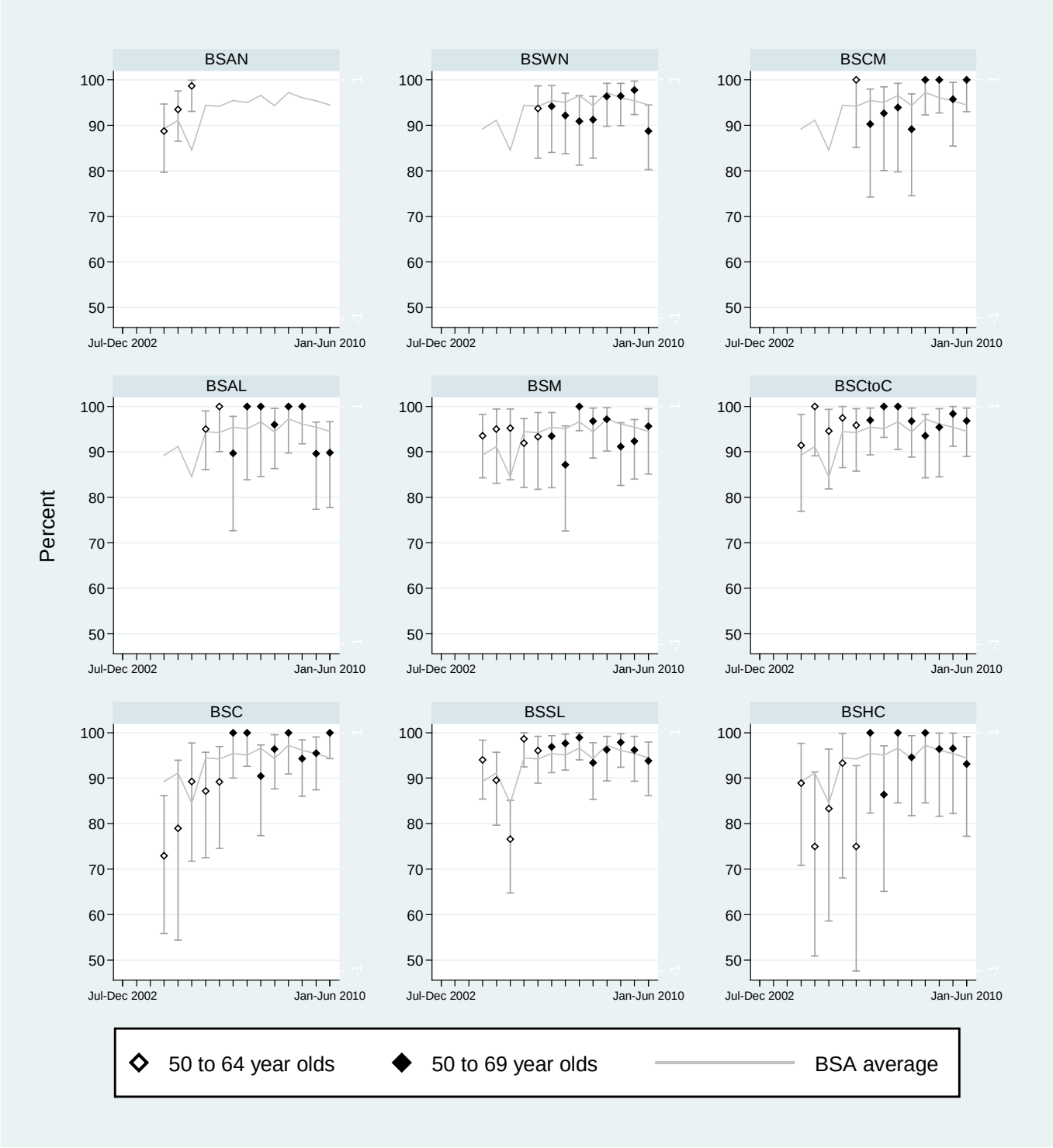
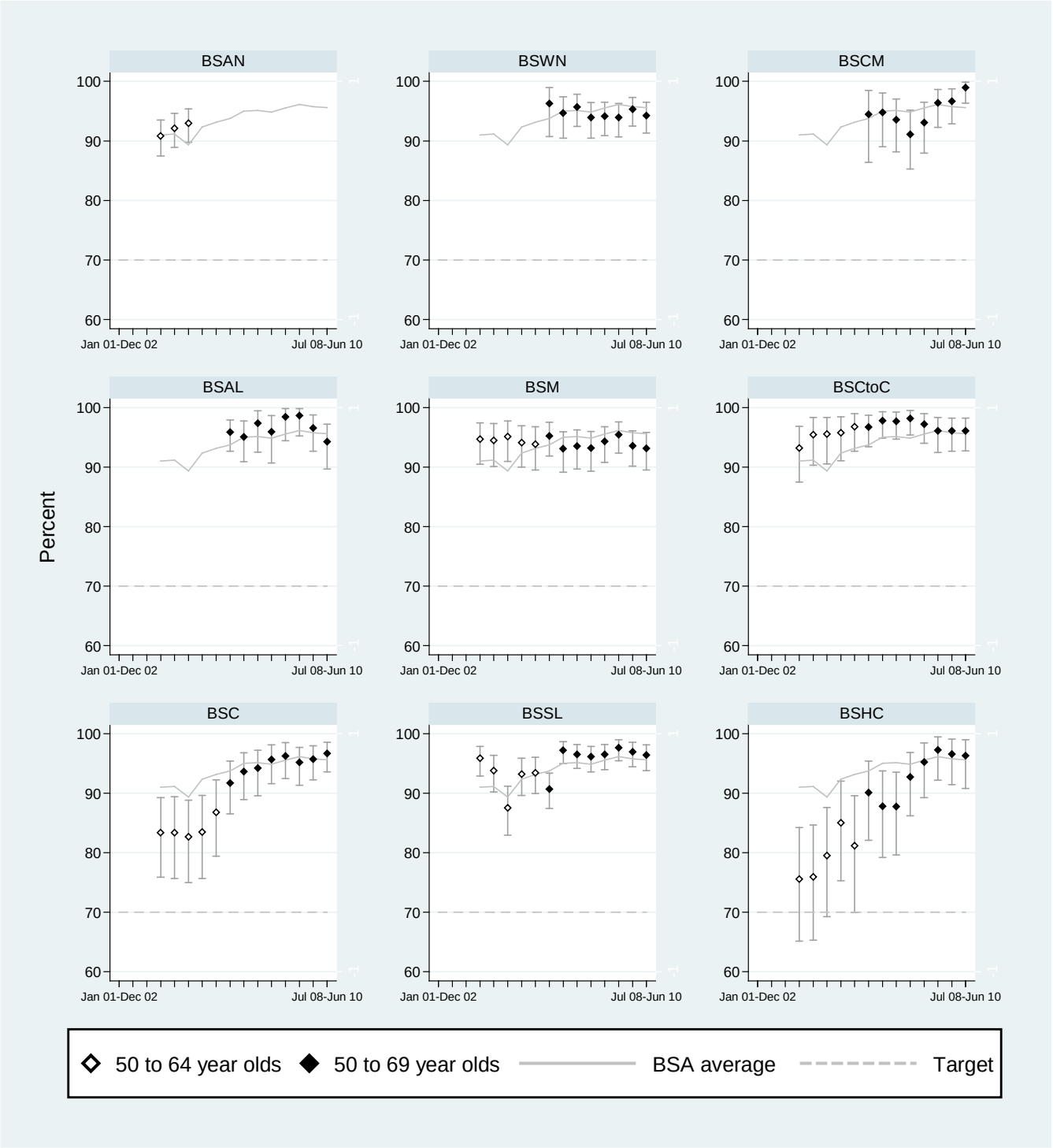


Figure 2h.b: Percentage of women with a preoperative diagnosis of cancer (DCIS and invasive), 2 years



2.l. Specificity

Description:

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

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

Target:

> 93 %

2.l.1. Specificity, 6 months

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

	Initial			Subsequent		
	Negative screens (RRS from Screen)	Negative screen plus False Positives	% (95% CI)	Negative screens (RRS from Screen)	Negative screen plus False Positives	% (95% CI)
45-49 years						
BSWN	2,428	2,697	90.0 (88.8-91.1)	2,177	2,251	96.7 (95.9-97.4)
BSCM	1,519	1,722	88.2 (86.6-89.7)	991	1,035	95.7 (94.3-96.9)
BSAL	1,417	1,531	92.6 (91.1-93.8)	1,153	1,186	97.2 (96.1-98.1)
BSM	2,029	2,223	91.3 (90.0-92.4)	1,152	1,224	94.1 (92.6-95.4)
BSCtoC	1,513	1,596	94.8 (93.6-95.8)	1,593	1,617	98.5 (97.8-99.0)
BSC	1,395	1,529	91.2 (89.7-92.6)	1,112	1,161	95.8 (94.5-96.9)
BSSL	2,719	2,921	93.1 (92.1-94.0)	3,662	3,841	95.3 (94.6-96.0)
BSHC	736	829	88.8 (86.4-90.8)	929	958	97.0 (95.7-98.0)
BSA Total	13,756	15,048	91.4 (91.0-91.9)	12,769	13,273	96.2 (95.9-96.5)
50-69 years						
BSWN	1,624	1,801	90.2 (88.7-91.5)	12,267	12,548	97.8 (97.5-98.0)
BSCM	1,213	1,365	88.9 (87.1-90.5)	6,661	6,841	97.4 (97.0-97.7)
BSAL	900	993	90.6 (88.6-92.4)	6,998	7,136	98.1 (97.7-98.4)
BSM	1,223	1,354	90.3 (88.6-91.8)	10,439	10,712	97.5 (97.1-97.7)
BSCtoC	1,178	1,249	94.3 (92.9-95.5)	10,486	10,584	99.1 (98.9-99.2)
BSC	733	796	92.1 (90.0-93.9)	7,388	7,598	97.2 (96.8-97.6)
BSSL	716	774	92.5 (90.4-94.3)	18,074	18,471	97.9 (97.6-98.1)
BSHC	317	350	90.6 (87.0-93.4)	6,420	6,537	98.2 (97.9-98.5)
BSA Total	7,904	8,682	91.0 (90.4-91.6)	78,733	80,427	97.9 (97.8-98.0)

RRS:

Exact binomial 95% confidence intervals presented

2.l.2. Specificity, 2 years

Description:

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

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

Target:

> 93 %

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

	Initial					Subsequent				
	Negative screens (RRS from Screen)	Negative screen plus False Positives	% (95% CI)			Negative screens (RRS from Screen)	Negative screen plus False Positives	% (95% CI)		
45-49 years										
BSWN	9,308	10,298	90.4 (89.8-90.9)			7,903	8,182	96.6 (96.2-97.0)		
BSCM	5,748	6,385	90.0 (89.3-90.7)			3,559	3,699	96.2 (95.5-96.8)		
BSAL	4,972	5,397	92.1 (91.4-92.8)			3,660	3,817	95.9 (95.2-96.5)		
BSM	7,141	7,877	90.7 (90.0-91.3)			5,155	5,429	95.0 (94.3-95.5)		
BSCtoC	6,764	7,161	94.5 (93.9-95.0)			5,660	5,776	98.0 (97.6-98.3)		
BSC	5,465	6,035	90.6 (89.8-91.3)			4,639	4,874	95.2 (94.5-95.8)		
BSSL	10,353	11,099	93.3 (92.8-93.7)			12,915	13,448	96.0 (95.7-96.4)		
BSHC	3,567	4,086	87.3 (86.2-88.3)			3,307	3,405	97.1 (96.5-97.7)		
BSA Total	53,318	58,338	91.4 (91.2-91.6)			46,798	48,630	96.2 (96.1-96.4)		
50-69 years										
BSWN	6,813	7,474	91.2 (90.5-91.8)	✓	*	43,912	45,013	97.6 (97.4-97.7)	✓	*
BSCM	4,303	4,765	90.3 (89.4-91.1)	✓	*	22,426	22,998	97.5 (97.3-97.7)	✓	*
BSAL	3,467	3,807	91.1 (90.1-92.0)	✓	*	20,214	20,657	97.9 (97.6-98.0)	✓✓	*
BSM	4,737	5,225	90.7 (89.8-91.4)	✓	*	41,510	42,760	97.1 (96.9-97.2)	✓	*
BSCtoC	4,597	4,887	94.1 (93.4-94.7)	✓	*	38,726	39,166	98.9 (98.8-99.0)	✓✓	*
BSC	3,194	3,525	90.6 (89.6-91.6)	✓	*	29,921	30,828	97.1 (96.9-97.2)	✓	*
BSSL	3,048	3,264	93.4 (92.5-94.2)	✓	ns	66,440	67,902	97.8 (97.7-98.0)	✓✓	*
BSHC	1,470	1,692	86.9 (85.2-88.5)	××	*	23,110	23,599	97.9 (97.7-98.1)	✓✓	*
BSA Total	31,629	34,639	91.3 (91.0-91.6)	✓	*	286,259	292,923	97.7 (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: $\leq$ 3.5 per 1000 women screened

Subsequent (Incident) screen: $\leq$ 1.6 per 1000 women screened

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

	Initial					Subsequent				
	Benign open biopsies	Number of screens	Rate per 1,000 (95%CI)			Benign open biopsies	Number of screens	Rate per 1,000 (95%CI)		
45-49 years										
BSWN	26	10,021	2.6 (1.7-3.8)			18	8,105			
BSCM	17	6,236	2.7 (1.6-4.4)			1	3,702			
BSAL	17	5,224	3.3 (1.9-5.2)			4	3,696			
BSM	15	7,868	1.9 (1.1-3.1)			8	5,368			
BSCtoC	6	7,070	0.8 (0.3-1.8)			1	5,746			
BSC	7	6,019	1.2 (0.5-2.4)			3	4,813			
BSSL	15	10,864	1.4 (0.8-2.3)			1	13,148			
BSHC	11	4,070	2.7 (1.3-4.8)			2	3,401			
BSA Total	114	57,372	2.0 (1.6-2.4)			38	47,979			
50-69 years										
BSWN	14	7,257	1.9 (1.1-3.2)	✓✓✓	*	34	43,505	0.8 (0.5-1.1)	✓✓✓	*
BSCM	14	4,648	3.0 (1.6-5.1)	✓	ns	21	22,167	0.9 (0.6-1.4)	✓✓✓	*
BSAL	11	3,656	3.0 (1.5-5.4)	✓	ns	10	19,627	0.5 (0.2-0.9)	✓✓✓	*
BSM	10	5,211	1.9 (0.9-3.5)	✓	ns	25	41,490	0.6 (0.4-0.9)	✓✓✓	*
BSCtoC	9	4,818	1.9 (0.9-3.5)	✓	ns	5	38,273	0.1 (0.0-0.3)	✓✓✓	*
BSC	5	3,530	1.4 (0.5-3.3)	✓✓✓	*	11	30,350	0.4 (0.2-0.6)	✓✓✓	*
BSSL	4	3,195	1.3 (0.3-3.2)	✓✓✓	*	13	65,711	0.2 (0.1-0.3)	✓✓✓	*
BSHC	2	1,681	1.2 (0.1-4.3)	✓	ns	10	23,373	0.4 (0.2-0.8)	✓✓✓	*
BSA Total	69	33,996	2.0 (1.6-2.6)	✓✓✓	*	129	284,496	0.5 (0.4-0.5)	✓✓✓	*

Poisson 95% confidence intervals presented

* Statistically different from target value, ns: not significant

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

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

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

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

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

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

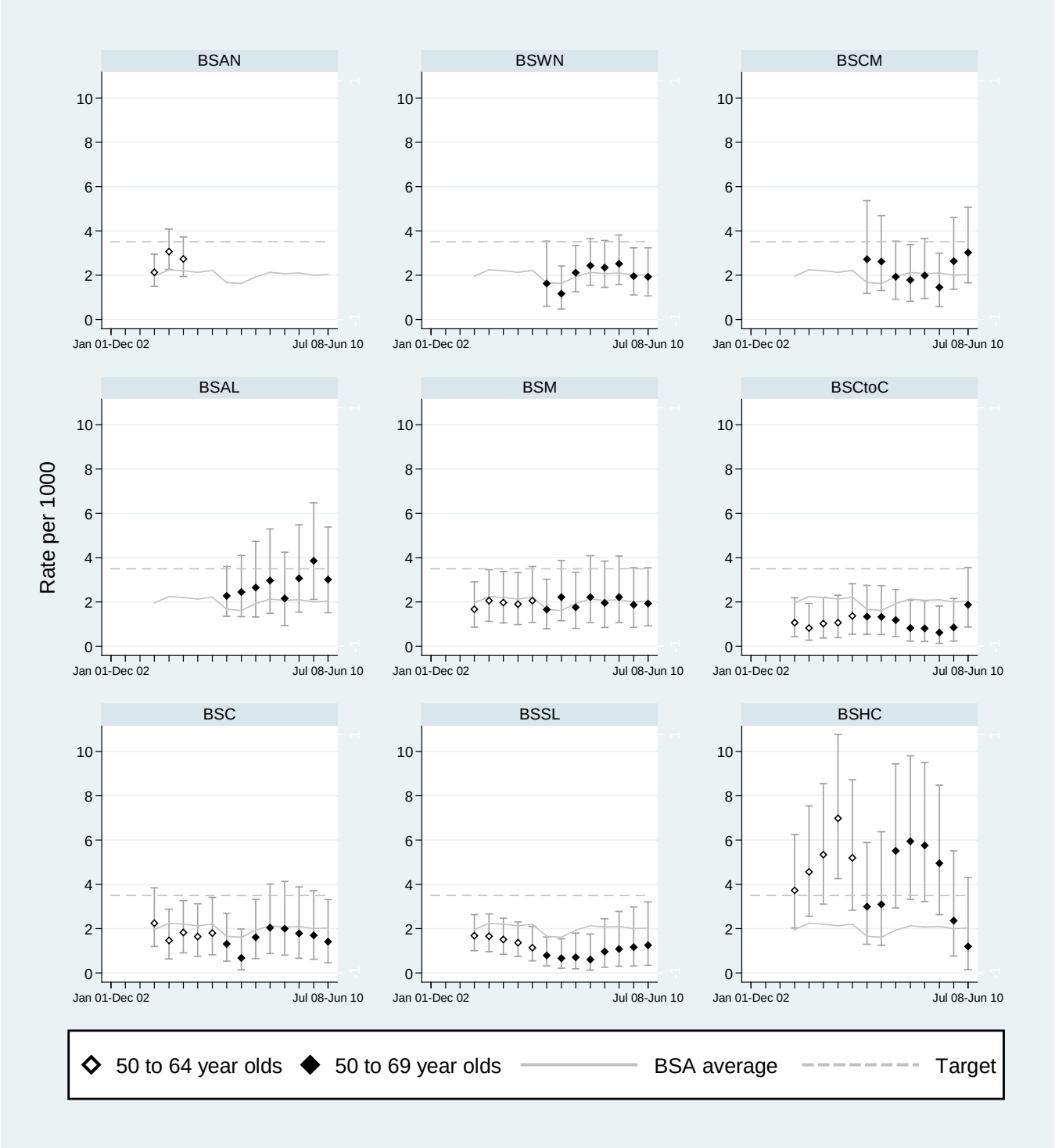
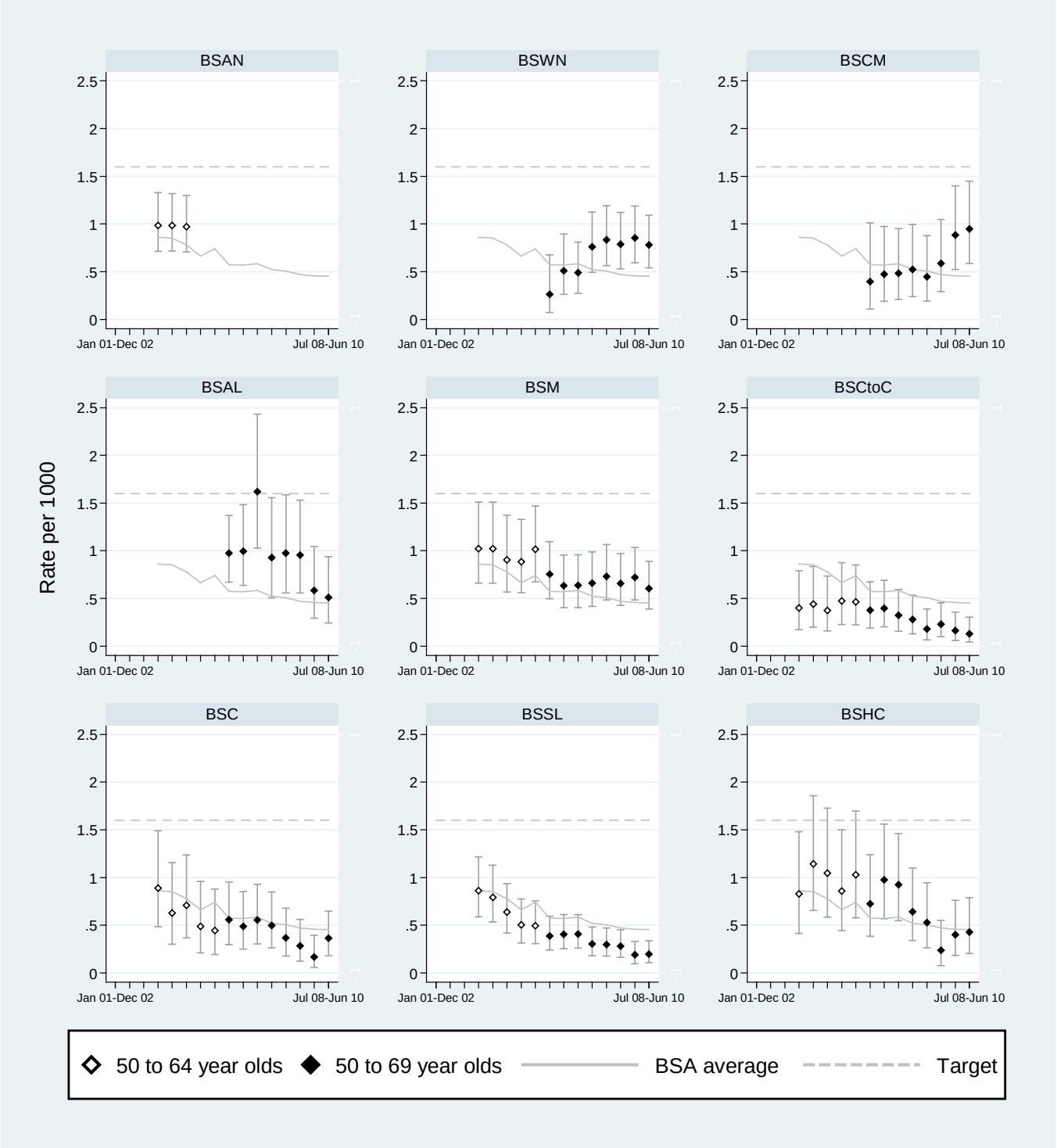


Figure 2m2: Benign open biopsy rate for subsequent screens, 2 years



3. EARLY DETECTION OF DCIS OR INVASIVE BREAST CANCER

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

Description:

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

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

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

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

	Initial			Subsequent		
	Number	Women screened	Rate per 1000 (95%CI)	Number	Women screened	Rate per 1000 (95%CI)
45-49 years						
BSWN	16	2,720	5.9 (3.4-9.6)	12	2,264	5.3 (2.7-9.3)
BSCM	14	1,739	8.1 (4.4-13.5)	4	1,039	3.8 (1.0-9.9)
BSAL	11	1,545	7.1 (3.6-12.7)	2	1,188	1.7 (0.2-6.1)
BSM	13	2,245	5.8 (3.1-9.9)	5	1,230	4.1 (1.3-9.5)
BSCtoC	9	1,607	5.6 (2.6-10.6)	2	1,622	1.2 (0.1-4.5)
BSC	6	1,538	3.9 (1.4-8.5)	6	1,168	5.1 (1.9-11.2)
BSSL	14	2,937	4.8 (2.6-8.0)	10	3,854	2.6 (1.2-4.8)
BSHC	3	833	3.6 (0.7-10.5)	1	959	1.0 (0.0-5.8)
BSA Total	86	15,164	5.7 (4.5-7.0)	42	13,324	3.2 (2.3-4.3)
50-69 years						
BSWN	16	1,822	8.8 (5.0-14.3)	73	12,627	5.8 (4.5-7.3)
BSCM	13	1,391	9.3 (5.0-16.0)	38	6,884	5.5 (3.9-7.6)
BSAL	8	1,009	7.9 (3.4-15.6)	41	7,183	5.7 (4.1-7.7)
BSM	13	1,373	9.5 (5.0-16.2)	33	10,755	3.1 (2.1-4.3)
BSCtoC	9	1,262	7.1 (3.3-13.5)	54	10,642	5.1 (3.8-6.6)
BSC	11	812	13.5 (6.8-24.2)	52	7,651	6.8 (5.1-8.9)
BSSL	7	781	9.0 (3.6-18.5)	74	18,548	4.0 (3.1-5.0)
BSHC	0	354	0.0 (0.0-10.4)	29	6,571	4.4 (3.0-6.3)
BSA Total	77	8,804	8.7 (6.9-10.9)	394	80,861	4.9 (4.4-5.4)

Poisson 95% confidence intervals presented

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

Description:

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

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

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

	Initial			Subsequent		
	Number	Women screened	Rate per 1,000 (95%CI)	Number	Women screened	Rate per 1,000 (95%CI)
45-49 years						
BSWN	62	10,021	6.2 (4.7-7.9)	38	8,105	4.7 (3.3-6.4)
BSCM	33	6,236	5.3 (3.6-7.4)	12	3,702	3.2 (1.7-5.7)
BSAL	42	5,224	8.0 (5.8-10.9)	10	3,696	2.7 (1.3-5.0)
BSM	44	7,868	5.6 (4.1-7.5)	21	5,368	3.9 (2.4-6.0)
BSCtoC	42	7,070	5.9 (4.3-8.0)	11	5,746	1.9 (1.0-3.4)
BSC	39	6,019	6.5 (4.6-8.9)	15	4,813	3.1 (1.7-5.1)
BSSL	55	10,864	5.1 (3.8-6.6)	40	13,148	3.0 (2.2-4.1)
BSHC	14	4,070	3.4 (1.9-5.8)	9	3,401	2.6 (1.2-5.0)
BSA Total	331	57,372	5.8 (5.2-6.4)	156	47,979	3.3 (2.8-3.8)
50-69 years						
BSWN	80	7,257	11.0 (8.7-13.7)	269	43,505	6.2 (5.5-7.0)
BSCM	48	4,648	10.3 (7.6-13.7)	145	22,167	6.5 (5.5-7.7)
BSAL	39	3,656	10.7 (7.6-14.6)	135	19,627	6.9 (5.8-8.1)
BSM	42	5,211	8.1 (5.8-10.9)	235	41,490	5.7 (5.0-6.4)
BSCtoC	43	4,818	8.9 (6.5-12.0)	187	38,273	4.9 (4.2-5.6)
BSC	52	3,530	14.7 (11.0-19.3)	189	30,350	6.2 (5.4-7.2)
BSSL	22	3,195	6.9 (4.3-10.4)	309	65,711	4.7 (4.2-5.3)
BSHC	11	1,681	6.5 (3.3-11.7)	97	23,373	4.2 (3.4-5.1)
BSA Total	337	33,996	9.9 (8.9-11.0)	1,566	284,496	5.5 (5.2-5.8)

Poisson 95% confidence intervals presented

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

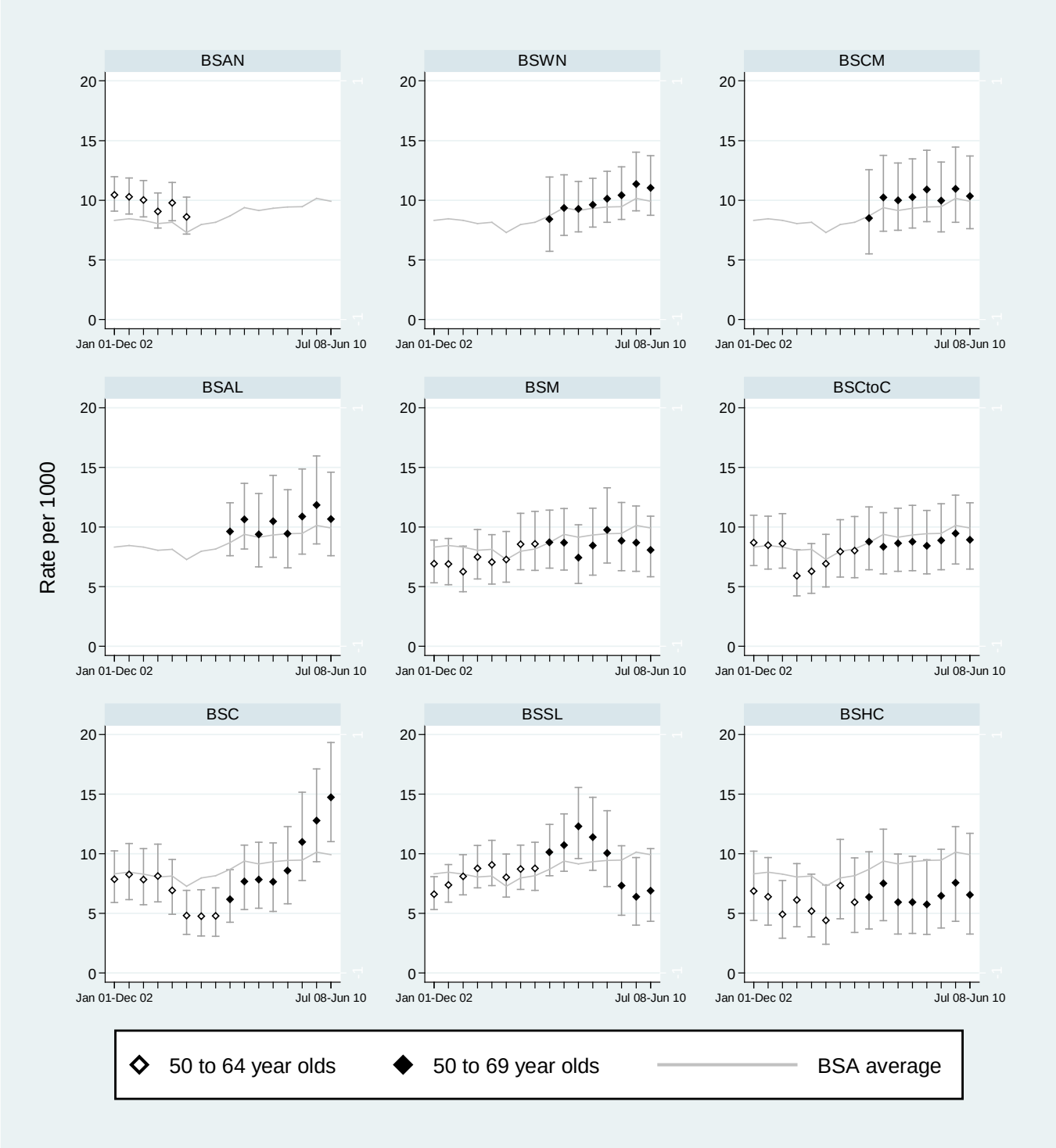
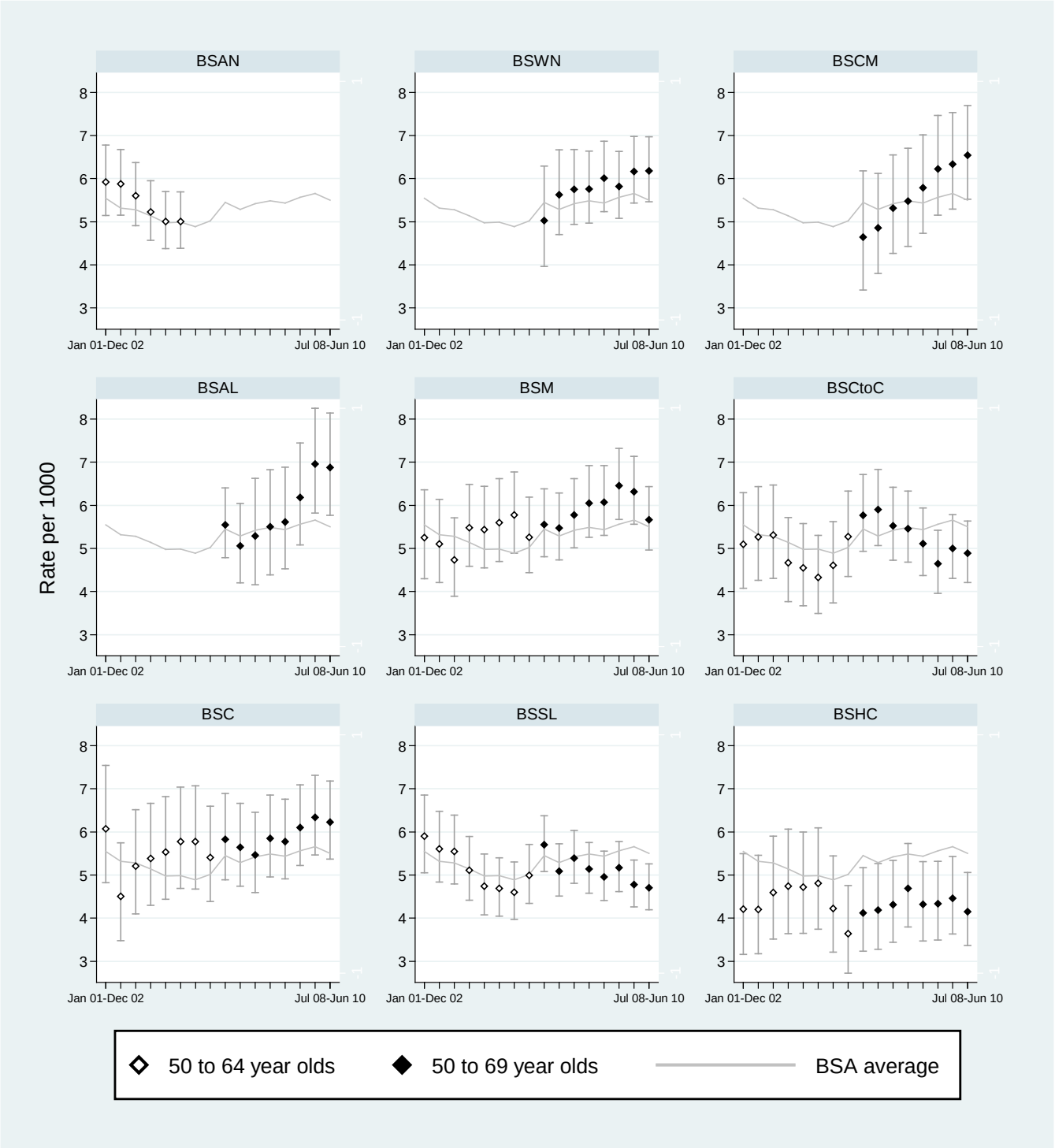


Figure 3a: Detection rate of DCIS and invasive breast cancer, subsequent screens, 2 years



3.a.2b. Invasive cancer detection, 6 months and 2 years

Description:

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

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

Target:

Initial (Prevalent) round: ≥ 6.1 per 1000 women screened

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

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

	Initial			Subsequent		
	Number	Women screened	Rate per 1,000 (95%CI)	Number	Women screened	Rate per 1,000 (95%CI)
45-49 years						
BSWN	12	2,720	4.4 (2.3-7.7)	8	2,264	3.5 (1.5-7.0)
BSCM*	7	1,739	4.0 (1.6-8.3)	1	1,039	1.0 (0.0-5.4)
BSAL*	7	1,545	4.5 (1.8-9.3)	1	1,188	0.8 (0.0-4.7)
BSM*	10	2,245	4.5 (2.1-8.2)	4	1,230	3.3 (0.9-8.3)
BSCtoC	8	1,607	5.0 (2.1-9.8)	1	1,622	0.6 (0.0-3.4)
BSC	5	1,538	3.3 (1.1-7.6)	4	1,168	3.4 (0.9-8.8)
BSSL	6	2,937	2.0 (0.7-4.4)	5	3,854	1.3 (0.4-3.0)
BSHC	3	833	3.6 (0.7-10.5)	0	959	0.0 (0.0-3.8)
BSA Total	58	15,164	3.8 (2.9-4.9)	24	13,324	1.8 (1.2-2.7)
50-69 years						
BSWN	11	1,822	6.0 (3.0-10.8)	54	12,627	4.3 (3.2-5.6)
BSCM	4	1,391	2.9 (0.8-7.4)	8	6,884	1.2 (0.5-2.3)
BSAL	5	1,009	5.0 (1.6-11.6)	24	7,183	3.3 (2.1-5.0)
BSM	11	1,373	8.0 (4.0-14.3)	19	10,755	1.8 (1.1-2.8)
BSCtoC	8	1,262	6.3 (2.7-12.5)	45	10,642	4.2 (3.1-5.7)
BSC	5	812	6.2 (2.0-14.4)	41	7,651	5.4 (3.8-7.3)
BSSL	4	781	5.1 (1.4-13.1)	53	18,548	2.9 (2.1-3.7)
BSHC	0	354	0.0 (0.0-10.4)	24	6,571	3.7 (2.3-5.4)
BSA Total	48	8,804	5.5 (4.0-7.2)	268	80,861	3.3 (2.9-3.7)

Poisson 95% confidence intervals presented

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

	Initial					Subsequent				
	Number	Women screened	Rate per 1,000 (95%CI)			Number	Women screened	Rate per 1,000 (95%CI)		
45-49 years										
BSWN	42	10,021	4.2 (3.0-5.7)			25	8,105	3.1 (2.0-4.6)		
BSCM	17	6,236	2.7 (1.6-4.4)			5	3,702	1.4 (0.4-3.2)		
BSAL	27	5,224	5.2 (3.4-7.5)			3	3,696	0.8 (0.2-2.4)		
BSM	29	7,868	3.7 (2.5-5.3)			13	5,368	2.4 (1.3-4.1)		
BSCtoC	32	7,070	4.5 (3.1-6.4)			8	5,746	1.4 (0.6-2.7)		
BSC	23	6,019	3.8 (2.4-5.7)			10	4,813	2.1 (1.0-3.8)		
BSSL	37	10,864	3.4 (2.4-4.7)			26	13,148	2.0 (1.3-2.9)		
BSHC	11	4,070	2.7 (1.3-4.8)			5	3,401	1.5 (0.5-3.4)		
BSA Total	218	57,372	3.8 (3.3-4.3)			95	47,979	2.0 (1.6-2.4)		
50-69 years										
BSWN	63	7,257	8.7 (6.7-11.1)	✓✓✓	*	197	43,505	4.5 (3.9-5.2)	✓✓✓	*
BSCM	29	4,648	6.2 (4.2-9.0)	✓	ns	94	22,167	4.2 (3.4-5.2)	✓	ns
BSAL	31	3,656	8.5 (5.8-12.0)	✓	ns	99	19,627	5.0 (4.1-6.1)	✓✓✓	*
BSM	33	5,211	6.3 (4.4-8.9)	✓	ns	172	41,490	4.1 (3.5-4.8)	✓✓✓	*
BSCtoC	32	4,818	6.6 (4.5-9.4)	✓	ns	160	38,273	4.2 (3.6-4.9)	✓✓✓	*
BSC	36	3,530	10.2 (7.1-14.1)	✓✓✓	*	145	30,350	4.8 (4.0-5.6)	✓✓✓	*
BSSL	15	3,195	4.7 (2.6-7.7)	✓	ns	243	65,711	3.7 (3.2-4.2)	✓	ns
BSHC	9	1,681	5.4 (2.4-10.2)	✓	ns	83	23,373	3.6 (2.8-4.4)	✓	ns
BSA Total	248	33,996	7.3 (6.4-8.3)	✓✓✓	*	1,193	284,496	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				
Initial round				
BSWN	10.9 (9.4-12.5)	90.2 (88.7-91.5)	8.1 (4.7-12.8)	8.8 (5.0-14.3)
BSCM	12.8 (11.0-14.8)	88.9 (87.1-90.5)	7.3 (3.9-12.2)	9.3 (5.0-16.0)
BSAL	10.8 (8.9-13.0)	90.6 (88.6-92.4)	7.3 (3.2-14.0)	7.9 (3.4-15.6)
BSM	10.9 (9.2-12.8)	90.3 (88.6-91.8)	8.7 (4.7-14.4)	9.5 (5.0-16.2)
BSCtoC	6.7 (5.3-8.2)	94.3 (92.9-95.5)	16.3 (8.9-26.2)	7.1 (3.3-13.5)
BSC	9.7 (7.7-12.1)	92.1 (90.0-93.9)	13.9 (7.2-23.5)	13.5 (6.8-24.2)
BSSL	8.3 (6.4-10.6)	92.5 (90.4-94.3)	10.8 (4.4-20.9)	9.0 (3.6-18.5)
BSHC	10.5 (7.4-14.4)	90.6 (87.0-93.4)	0.0 (0.0-9.5)	0.0 (0.0-10.4)
BSA Total	10.2 (9.6-10.9)	91.0 (90.4-91.6)	8.6 (6.8-10.6)	8.7 (6.9-10.9)
Subsequent round				
BSWN	2.9 (2.6-3.2)	97.8 (97.5-98.0)	20.3 (16.2-24.8)	5.8 (4.5-7.3)
BSCM	3.2 (2.8-3.7)	97.4 (97.0-97.7)	17.0 (12.3-22.6)	5.5 (3.9-7.6)
BSAL	2.6 (2.2-3.0)	98.1 (97.7-98.4)	22.2 (16.4-28.8)	5.7 (4.1-7.7)
BSM	2.9 (2.6-3.3)	97.5 (97.1-97.7)	10.4 (7.3-14.4)	3.1 (2.1-4.3)
BSCtoC	1.5 (1.2-1.7)	99.1 (98.9-99.2)	34.6 (27.2-42.6)	5.1 (3.8-6.6)
BSC	3.4 (3.0-3.9)	97.2 (96.8-97.6)	19.8 (15.1-25.1)	6.8 (5.1-8.9)
BSSL	2.6 (2.3-2.8)	97.9 (97.6-98.1)	15.6 (12.5-19.2)	4.0 (3.1-5.0)
BSHC	2.3 (1.9-2.7)	98.2 (97.9-98.5)	19.2 (13.3-26.4)	4.4 (3.0-6.3)
BSA Total	2.6 (2.5-2.7)	97.9 (97.8-98.0)	18.5 (16.9-20.2)	4.9 (4.4-5.4)
2 years				
Initial round				
BSWN	10.5 (9.8-11.3)	91.2 (90.5-91.8)	10.5 (8.4-12.8)	11.0 (8.7-13.7)
BSCM	11.4 (10.5-12.4)	90.3 (89.4-91.1)	9.1 (6.8-11.8)	10.3 (7.6-13.7)
BSAL	10.9 (9.8-12.0)	91.1 (90.1-92.0)	9.8 (7.1-13.2)	10.7 (7.6-14.6)
BSM	10.3 (9.5-11.2)	90.7 (89.8-91.4)	7.8 (5.7-10.4)	8.1 (5.8-10.9)
BSCtoC	7.2 (6.4-8.0)	94.1 (93.4-94.7)	12.4 (9.1-16.4)	8.9 (6.5-12.0)
BSC	11.1 (10.0-12.3)	90.6 (89.6-91.6)	13.3 (10.1-17.0)	14.7 (11.0-19.3)
BSSL	7.5 (6.6-8.5)	93.4 (92.5-94.2)	9.2 (5.9-13.6)	6.9 (4.3-10.4)
BSHC	14.3 (12.6-16.3)	86.9 (85.2-88.5)	4.6 (2.3-8.0)	6.5 (3.3-11.7)
BSA Total	10.1 (9.8-10.5)	91.3 (91.0-91.6)	9.8 (8.8-10.8)	9.9 (8.9-11.0)
Subsequent round				
BSWN	3.2 (3.0-3.4)	97.6 (97.4-97.7)	19.3 (17.2-21.5)	6.2 (5.5-7.0)
BSCM	3.3 (3.1-3.5)	97.5 (97.3-97.7)	19.9 (17.0-22.9)	6.5 (5.5-7.7)
BSAL	3.0 (2.8-3.2)	97.9 (97.6-98.0)	23.0 (19.6-26.6)	6.9 (5.8-8.1)
BSM	3.6 (3.4-3.8)	97.1 (96.9-97.2)	15.7 (13.9-17.6)	5.7 (5.0-6.4)
BSCtoC	1.7 (1.5-1.8)	98.9 (98.8-99.0)	29.2 (25.7-32.9)	4.9 (4.2-5.6)
BSC	3.6 (3.4-3.9)	97.1 (96.9-97.2)	17.1 (14.9-19.4)	6.2 (5.4-7.2)
BSSL	2.7 (2.6-2.8)	97.8 (97.7-98.0)	17.3 (15.6-19.1)	4.7 (4.2-5.3)
BSHC	2.6 (2.4-2.8)	97.9 (97.7-98.1)	16.2 (13.4-19.4)	4.2 (3.4-5.1)
BSA Total	2.9 (2.9-3.0)	97.7 (97.7-97.8)	18.8 (17.9-19.6)	5.5 (5.2-5.8)

3.b. Detection of invasive cancers ≤ 10 mm

Description:

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

Target:

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

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

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

	Initial					Subsequent				
	Invasive cancers ≤10 mm	Total invasive cancers	% (95%CI)			Invasive cancers ≤10 mm	Total invasive cancers	% (95%CI)		
45-49 years										
BSWN	11	42	26.2 (13.9-42.0)			11	25	44.0 (24.4-65.1)		
BSCM	5	17	29.4 (10.3-56.0)			2	5	40.0 (5.3-85.3)		
BSAL	7	27	25.9 (11.1-46.3)			1	3	33.3 (0.8-90.6)		
BSM	10	29	34.5 (17.9-54.3)			3	13	23.1 (5.0-53.8)		
BSCtoC	7	32	21.9 (9.3-40.0)			0	8	0.0 (0.0-36.9)		
BSC	5	23	21.7 (7.5-43.7)			3	10	30.0 (6.7-65.2)		
BSSL	8	37	21.6 (9.8-38.2)			8	26	30.8 (14.3-51.8)		
BSHC	4	11	36.4 (10.9-69.2)			0	5	0.0 (0.0-52.2)		
BSA Total	57	218	26.1 (20.4-32.5)			28	95	29.5 (20.6-39.7)		
50-69 years										
BSWN	19	63	30.2 (19.2-43.0)	✓	ns	80	197	40.6 (33.7-47.8)	✓✓✓	*
BSCM	6	29	20.7 (8.0-39.7)	✓	ns	35	94	37.2 (27.5-47.8)	✓	ns
BSAL	12	31	38.7 (21.8-57.8)	✓	ns	37	99	37.4 (27.9-47.7)	✓	ns
BSM	8	33	24.2 (11.1-42.3)	✓	ns	77	172	44.8 (37.2-52.5)	✓✓✓	*
BSCtoC	10	32	31.3 (16.1-50.0)	✓	ns	51	160	31.9 (24.7-39.7)	✓	ns
BSC	8	36	22.2 (10.1-39.2)	✓	ns	53	145	36.6 (28.7-44.9)	✓	ns
BSSL	3	15	20.0 (4.3-48.1)	✓	ns	108	243	44.4 (38.1-50.9)	✓✓✓	*
BSHC	0	9	0.0 (0.0-33.6)	✓	ns	21	83	25.3 (16.4-36.0)	✓	ns
BSA Total	66	248	26.6 (21.2-32.6)	✓	ns	462	1193	38.7 (36.0-41.6)	✓✓✓	*

Exact Binomial 95% confidence intervals presented

* Statistically different from target value, ns: not significant

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

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

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

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

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

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

	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)		
45-49 years										
BSWN	11	10,021	11.0 (5.5-19.6)			11	8,105	13.6 (6.8-24.3)		
BSCM	5	6,236	8.0 (2.6-18.7)			2	3,702	5.4 (0.7-19.5)		
BSAL	7	5,224	13.4 (5.4-27.6)			1	3,696	2.7 (0.1-15.1)		
BSM	10	7,868	12.7 (6.1-23.4)			3	5,368	5.6 (1.2-16.3)		
BSCtoC	7	7,070	9.9 (4.0-20.4)			0	5,746	0.0 (0.0-6.4)		
BSC	5	6,019	8.3 (2.7-19.4)			3	4,813	6.2 (1.3-18.2)		
BSSL	8	10,864	7.4 (3.2-14.5)			8	13,148	6.1 (2.6-12.0)		
BSHC	4	4,070	9.8 (2.7-25.2)			0	3,401	0.0 (0.0-10.8)		
BSA Total	57	57,372	9.9 (7.5-12.9)			28	47,979	5.8 (3.9-8.4)		
50-69 years										
BSWN	19	7,257	26.2 (15.8-40.9)	✓✓✓	*	80	43,505	18.4 (14.6-22.9)	✓✓✓	*
BSCM	6	4,648	12.9 (4.7-28.1)	✓	ns	35	22,167	15.8 (11.0-22.0)	✓✓✓	*
BSAL	12	3,656	32.8 (17.0-57.3)	✓✓✓	*	37	19,627	18.9 (13.3-26.0)	✓✓✓	*
BSM	8	5,211	15.4 (6.6-30.2)	✓	ns	77	41,490	18.6 (14.6-23.2)	✓✓✓	*
BSCtoC	10	4,818	20.8 (10.0-38.2)	✓	ns	51	38,273	13.3 (9.9-17.5)	✓	ns
BSC	8	3,530	22.7 (9.8-44.7)	✓	ns	53	30,350	17.5 (13.1-22.8)	✓✓✓	*
BSSL	3	3,195	9.4 (1.9-27.4)	✓	ns	108	65,711	16.4 (13.5-19.8)	✓✓✓	*
BSHC	0	1,681	0.0 (0.0-21.9)	✓	ns	21	23,373	9.0 (5.6-13.7)	✓	ns
BSA Total	66	33,996	19.4 (15.0-24.7)	✓	ns	462	284,496	16.2 (14.8-17.8)	✓✓✓	*

Poisson 95% confidence intervals presented

* Statistically different from target value, ns: not significant

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

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

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

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

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

3.c. Detection of invasive cancers <15 mm

Description:
Proportion and rate of invasive breast cancer of diameter <15 mm
Target:
Initial (Prevalent) round: >50%, which gives a rate of >30.5 per 10,000 screens
Subsequent (Incident) round: >50%, which gives a rate of >17.3 per 10,000 screens

3.c.1. Proportion of invasive cancers <15 mm, women aged 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	42	42.9 (27.7-59.0)			16	25	64.0 (42.5-82.0)		
BSCM	7	17	41.2 (18.4-67.1)			3	5	60.0 (14.7-94.7)		
BSAL	10	27	37.0 (19.4-57.6)			1	3	33.3 (0.8-90.6)		
BSM	15	29	51.7 (32.5-70.6)			3	13	23.1 (5.0-53.8)		
BSCtoC	11	32	34.4 (18.6-53.2)			4	8	50.0 (15.7-84.3)		
BSC	9	23	39.1 (19.7-61.5)			3	10	30.0 (6.7-65.2)		
BSSL	15	37	40.5 (24.8-57.9)			9	26	34.6 (17.2-55.7)		
BSHC	7	11	63.6 (30.8-89.1)			1	5	20.0 (0.5-71.6)		
BSA Total	92	218	42.2 (35.6-49.1)			40	95	42.1 (32.0-52.7)		
50-69 years										
BSWN	32	63	50.8 (37.9-63.6)	✓	ns	122	197	61.9 (54.8-68.7)	✓✓✓	*
BSCM	11	29	37.9 (20.7-57.7)	✓	ns	54	94	57.4 (46.8-67.6)	✓	ns
BSAL	15	31	48.4 (30.2-66.9)	✓	ns	49	99	49.5 (39.3-59.7)	✓	ns
BSM	15	33	45.5 (28.1-63.6)	✓	ns	98	172	57.0 (49.2-64.5)	✓	ns
BSCtoC	14	32	43.8 (26.4-62.3)	✓	ns	74	160	46.3 (38.3-54.3)	✓	ns
BSC	21	36	58.3 (40.8-74.5)	✓	ns	80	145	55.2 (46.7-63.4)	✓	ns
BSSL	4	15	26.7 (7.8-55.1)	✓	ns	155	243	63.8 (57.4-69.8)	✓✓✓	*
BSHC	1	9	11.1 (0.3-48.2)	×××	*	39	83	47.0 (35.9-58.3)	✓	ns
BSA Total	113	248	45.6 (39.3-52.0)	✓	ns	671	1193	56.2 (53.4-59.1)	✓✓✓	*

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

Table 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)		
45-49 years										
BSWN	18	10,021	18.0 (10.6-28.4)			16	8,105	19.7 (11.3-32.1)		
BSCM	7	6,236	11.2 (4.5-23.1)			3	3,702	8.1 (1.7-23.7)		
BSAL	10	5,224	19.1 (9.2-35.2)			1	3,696	2.7 (0.1-15.1)		
BSM	15	7,868	19.1 (10.7-31.4)			3	5,368	5.6 (1.2-16.3)		
BSCtoC	11	7,070	15.6 (7.8-27.8)			4	5,746	7.0 (1.9-17.8)		
BSC	9	6,019	15.0 (6.8-28.4)			3	4,813	6.2 (1.3-18.2)		
BSSL	15	10,864	13.8 (7.7-22.8)			9	13,148	6.8 (3.1-13.0)		
BSHC	7	4,070	17.2 (6.9-35.4)			1	3,401	2.9 (0.1-16.4)		
BSA Total	92	57,372	16.0 (12.9-19.7)			40	47,979	8.3 (6.0-11.4)		
50-69 years										
BSWN	32	7,257	44.1 (30.2-62.2)	✓	ns	122	43,505	28.0 (23.3-33.5)	✓✓✓	*
BSCM	11	4,648	23.7 (11.8-42.3)	✓	ns	54	22,167	24.4 (18.3-31.8)	✓✓✓	*
BSAL	15	3,656	41.0 (23.0-67.7)	✓	ns	49	19,627	25.0 (18.5-33.0)	✓✓✓	*
BSM	15	5,211	28.8 (16.1-47.5)	✓	ns	98	41,490	23.6 (19.2-28.8)	✓✓✓	*
BSCtoC	14	4,818	29.1 (15.9-48.8)	✓	ns	74	38,273	19.3 (15.2-24.3)	✓	ns
BSC	21	3,530	59.5 (36.8-90.9)	✓✓✓	*	80	30,350	26.4 (20.9-32.8)	✓✓✓	*
BSSL	4	3,195	12.5 (3.4-32.1)	✓	ns	155	65,711	23.6 (20.0-27.6)	✓✓✓	*
BSHC	1	1,681	5.9 (0.2-33.1)	✓	ns	39	23,373	16.7 (11.9-22.8)	✓	ns
BSA Total	113	33,996	33.2 (27.4-40.0)	✓	ns	671	284,496	23.6 (21.8-25.4)	✓✓✓	*

Poisson 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

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

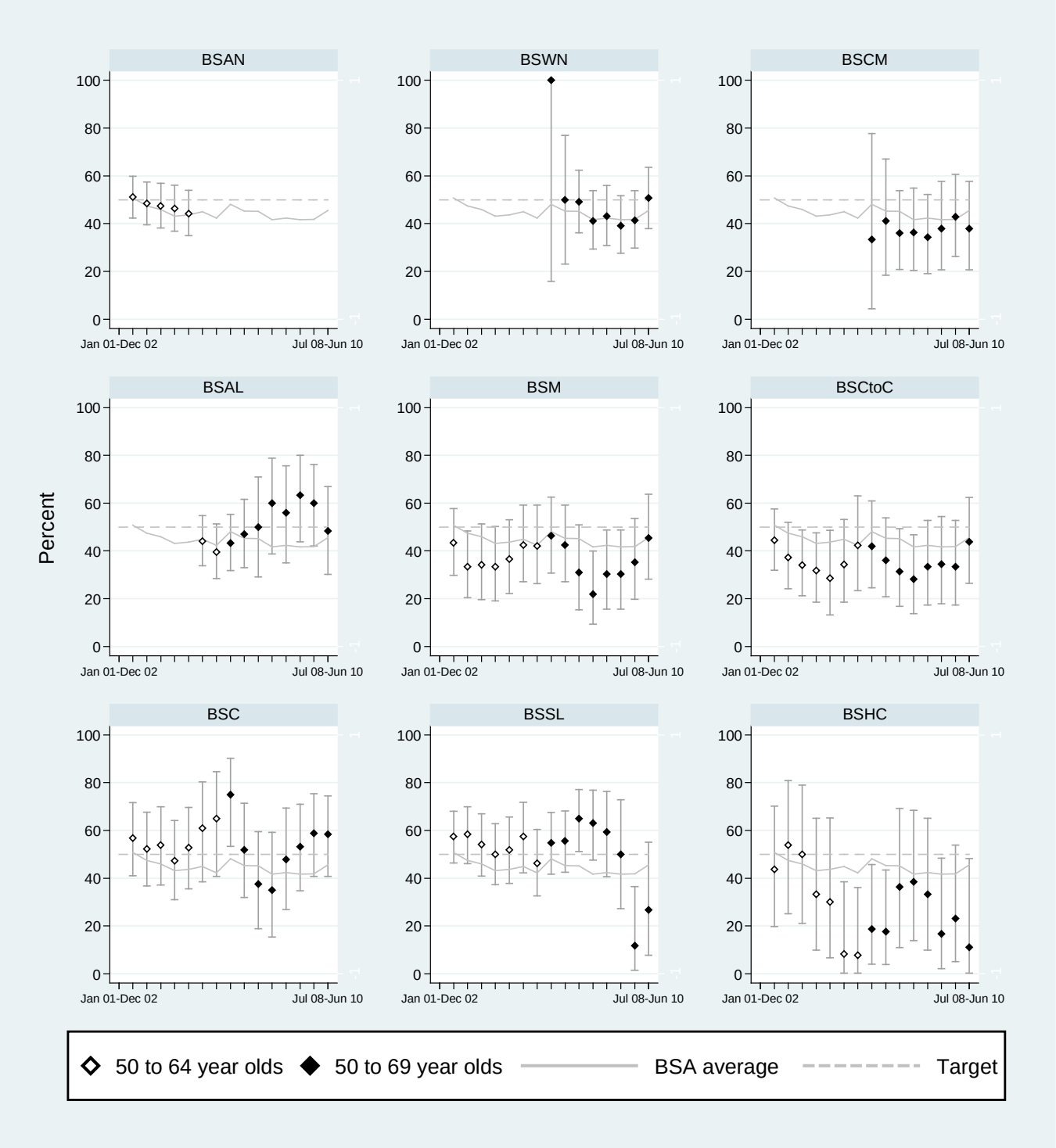


Figure 3c.1: Proportion invasive cancers <15mm, subsequent screens, 2 years

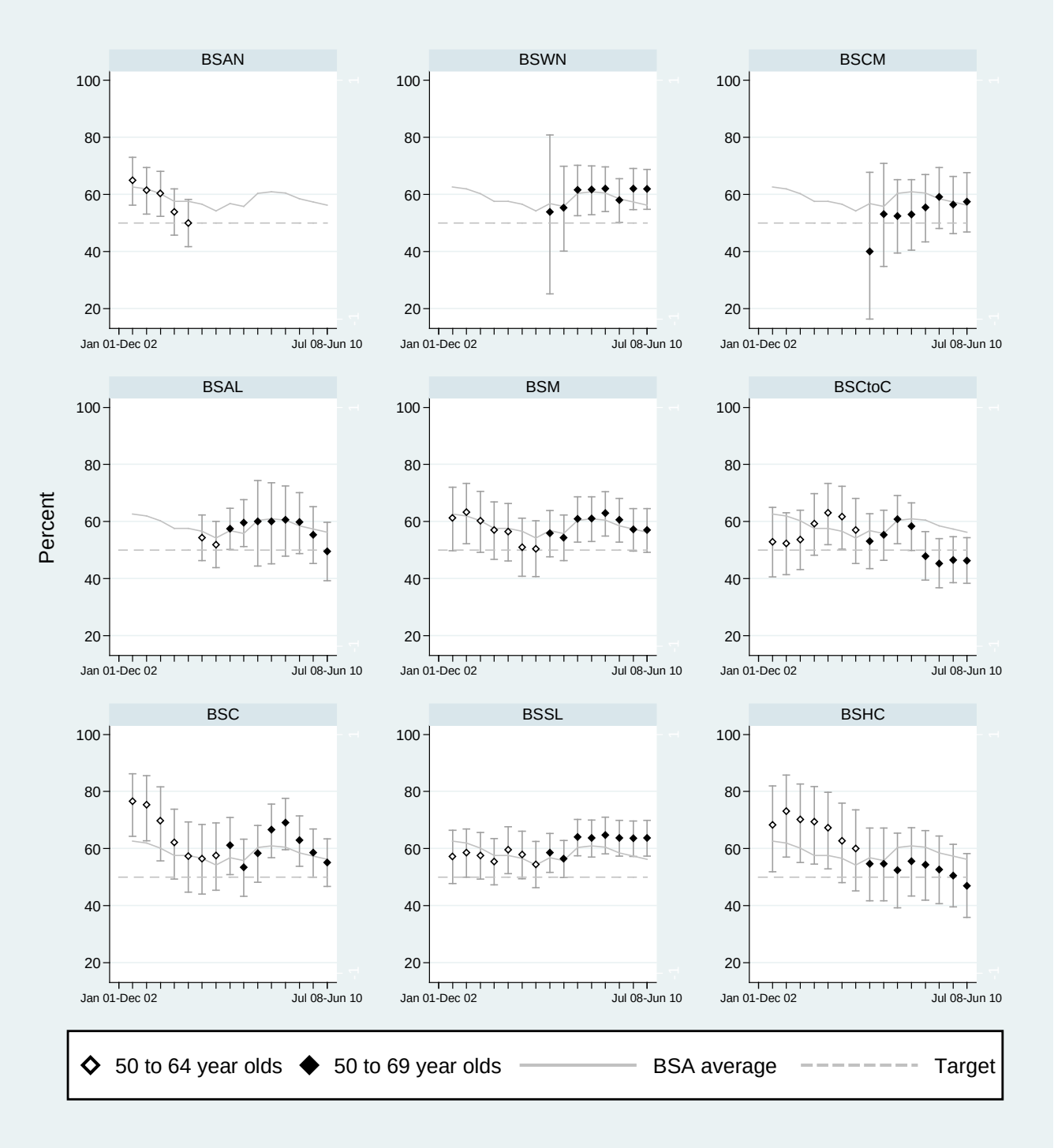
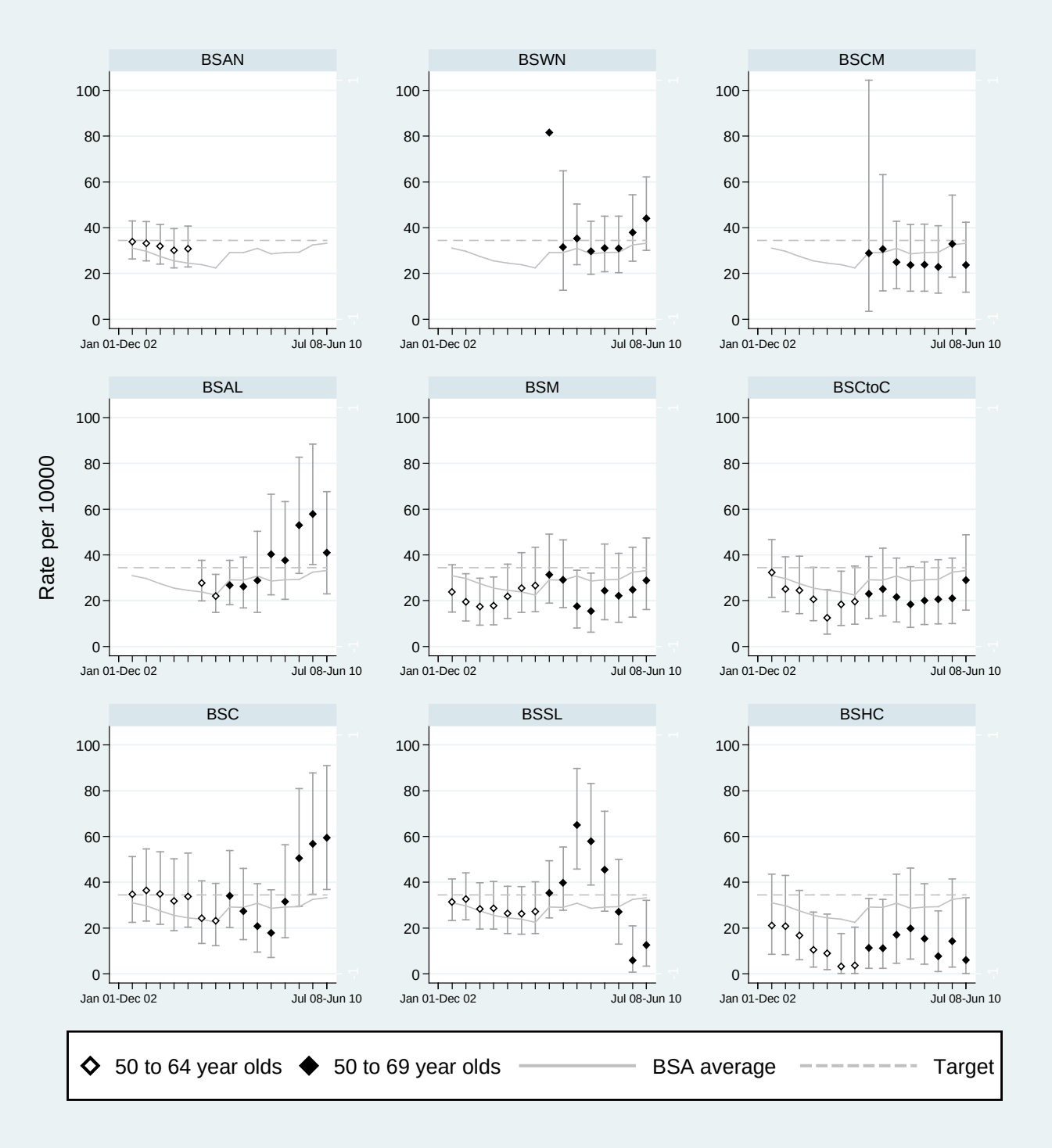
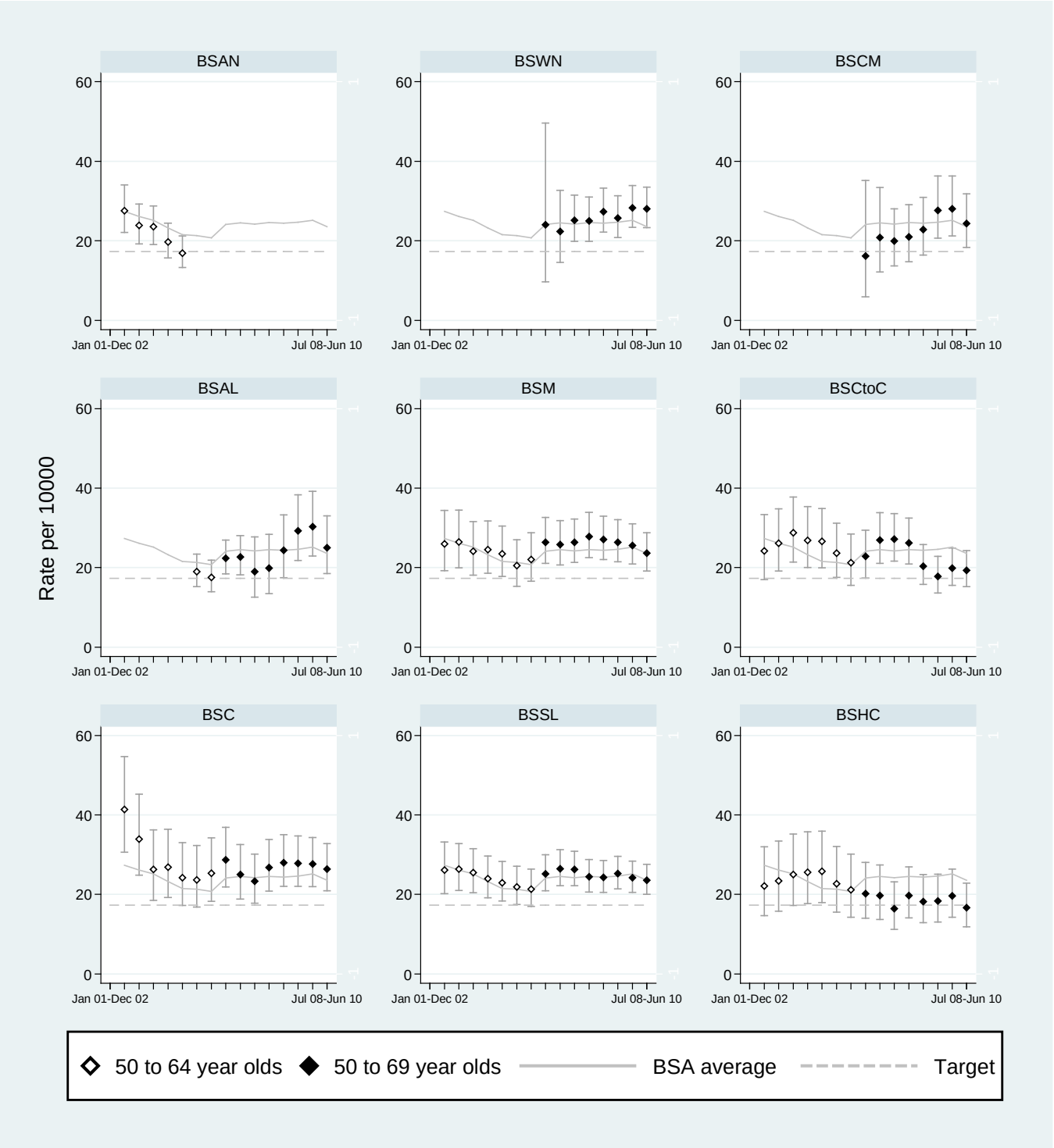


Figure 3c.2: Invasive cancers <15mm per 10,000 women screened, initial screens, 2 years



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)		
45-49 years										
BSWN	31	42	73.8 (58.0-86.1)			19	25	76.0 (54.9-90.6)		
BSCM	13	17	76.5 (50.1-93.2)			2	5	40.0 (5.3-85.3)		
BSAL	22	27	81.5 (61.9-93.7)			3	3	100.0 (29.2-100.0)		
BSM	25	29	86.2 (68.3-96.1)			10	13	76.9 (46.2-95.0)		
BSCtoC	21	32	65.6 (46.8-81.4)			4	8	50.0 (15.7-84.3)		
BSC	17	23	73.9 (51.6-89.8)			5	10	50.0 (18.7-81.3)		
BSSL	22	37	59.5 (42.1-75.2)			18	26	69.2 (48.2-85.7)		
BSHC	7	11	63.6 (30.8-89.1)			4	5	80.0 (28.4-99.5)		
BSA Total	158	218	72.5 (66.0-78.3)			65	95	68.4 (58.1-77.6)		
50-69 years										
BSWN	47	63	74.6 (62.1-84.7)	✓	ns	163	197	82.7 (76.7-87.7)	✓✓✓	*
BSCM	18	29	62.1 (42.3-79.3)	✓	ns	77	94	81.9 (72.6-89.1)	✓	ns
BSAL	28	31	90.3 (74.2-98.0)	✓✓✓	*	80	99	80.8 (71.7-88.0)	✓	ns
BSM	24	33	72.7 (54.5-86.7)	✓	ns	152	172	88.4 (82.6-92.8)	✓✓✓	*
BSCtoC	23	32	71.9 (53.3-86.3)	✓	ns	118	160	73.8 (66.2-80.4)	✓	ns
BSC	29	36	80.6 (64.0-91.8)	✓	ns	112	145	77.2 (69.5-83.8)	✓	ns
BSSL	9	15	60.0 (32.3-83.7)	✓	ns	192	243	79.0 (73.3-84.0)	✓	ns
BSHC	6	9	66.7 (29.9-92.5)	✓	ns	59	83	71.1 (60.1-80.5)	✓	ns
BSA Total	184	248	74.2 (68.3-79.5)	✓	ns	953	1193	79.9 (77.5-82.1)	✓✓	*

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
✓✓ 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.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.

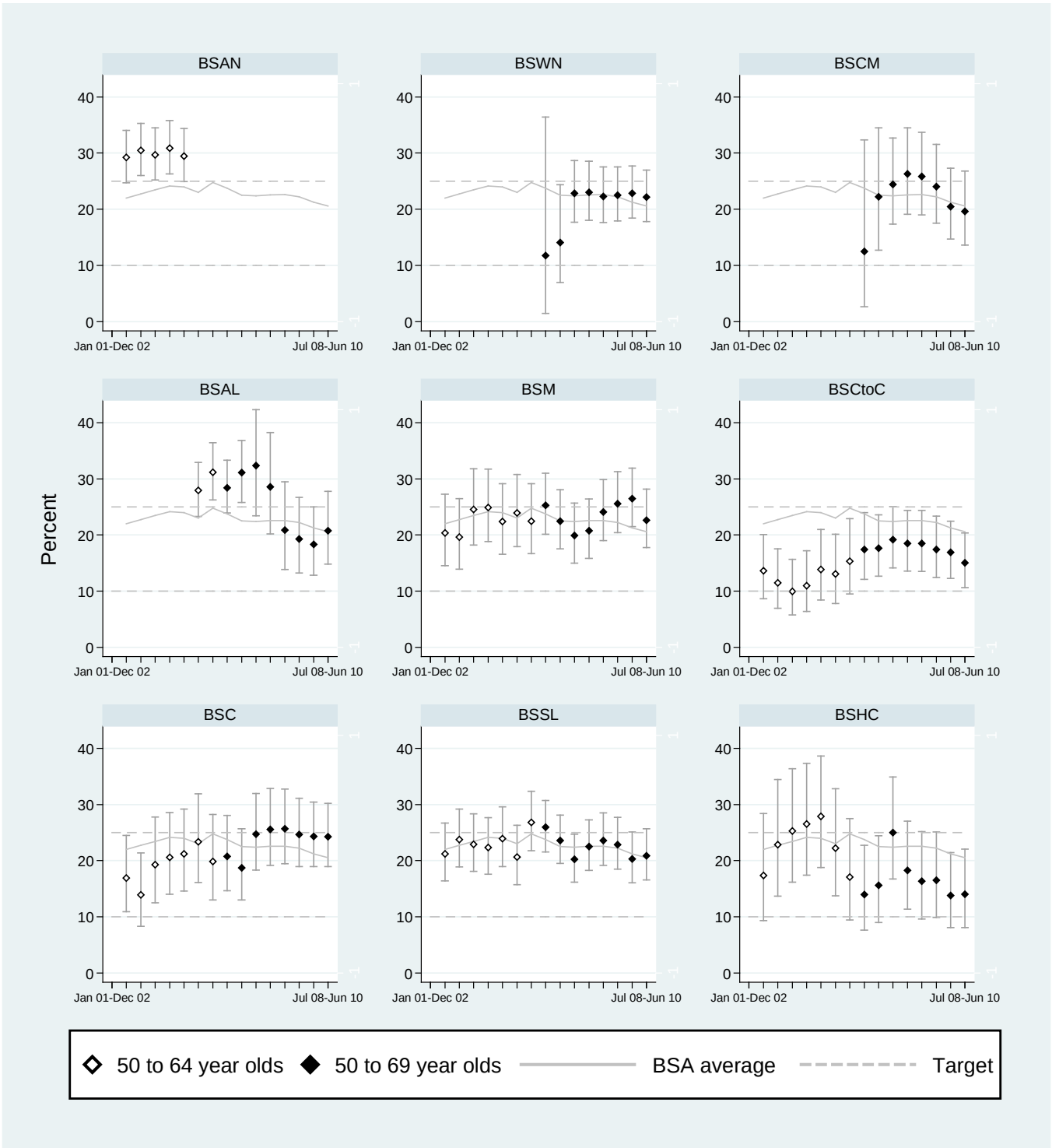
3.e. DCIS, women aged 45-69 years

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

	DCIS	Total cancers	% (95%CI)
45-49 years			
BSWN	24	91	26.4 (17.7-36.7)
BSCM	10	32	31.3 (16.1-50.0)
BSAL	18	48	37.5 (24.0-52.6)
BSM	22	64	34.4 (22.9-47.3)
BSCtoC	12	52	23.1 (12.5-36.8)
BSC	20	53	37.7 (24.8-52.1)
BSSL	28	91	30.8 (21.5-41.3)
BSHC	7	23	30.4 (13.2-52.9)
BSA Total	141	454	31.1 (26.8-35.5)
50-69 years			
BSWN	74	334	22.2 (17.8-27.0)
BSCM	30	153	19.6 (13.6-26.8)
BSAL	34	164	20.7 (14.8-27.7)
BSM	60	265	22.6 (17.7-28.2)
BSCtoC	34	226	15.0 (10.6-20.4)
BSC	58	239	24.3 (19.0-30.2)
BSSL	68	326	20.9 (16.6-25.7)
BSHC	15	107	14.0 (8.1-22.1)
BSA Total	373	1,814	20.6 (18.7-22.5)

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)		
45-49 years										
BSWN	4,926	4,984	98.8 (98.5-99.1)			17,498	18,126	96.5 (96.3-96.8)		
BSCM	2,713	2,778	97.7 (97.0-98.2)			9,553	9,938	96.1 (95.7-96.5)		
BSAL	2,258	2,733	82.6 (81.1-84.0)			7,747	8,920	86.8 (86.1-87.5)		
BSM	3,384	3,475	97.4 (96.8-97.9)			11,956	13,236	90.3 (89.8-90.8)		
BSCtoC	3,207	3,229	99.3 (99.0-99.6)			12,635	12,816	98.6 (98.4-98.8)		
BSC	2,684	2,706	99.2 (98.8-99.5)			10,597	10,832	97.8 (97.5-98.1)		
BSSL	6,702	6,791	98.7 (98.4-98.9)			23,518	24,012	97.9 (97.8-98.1)		
BSHC	1,634	1,792	91.2 (89.8-92.5)			6,652	7,471	89.0 (88.3-89.7)		
BSA Total	27,508	28,488	96.6 (96.3-96.8)			100,156	105,351	95.1 (94.9-95.2)		
50-69 years										
BSWN	14,365	14,449	99.4 (99.3-99.5)	✓✓✓	*	49,562	50,762	97.6 (97.5-97.8)	✓✓	*
BSCM	8,090	8,275	97.8 (97.4-98.1)	✓✓	*	25,937	26,815	96.7 (96.5-96.9)	✓✓	*
BSAL	6,989	8,192	85.3 (84.5-86.1)	××	*	20,870	23,283	89.6 (89.2-90.0)	✓	ns
BSM	11,941	12,128	98.5 (98.2-98.7)	✓✓	*	42,554	46,701	91.1 (90.9-91.4)	✓	*
BSCtoC	11,818	11,904	99.3 (99.1-99.4)	✓✓✓	*	42,467	43,091	98.6 (98.4-98.7)	✓✓	*
BSC	8,412	8,463	99.4 (99.2-99.6)	✓✓✓	*	33,340	33,880	98.4 (98.3-98.5)	✓✓	*
BSSL	19,155	19,329	99.1 (99.0-99.2)	✓✓✓	*	67,993	68,906	98.7 (98.6-98.8)	✓✓	*
BSHC	6,618	6,925	95.6 (95.1-96.0)	✓✓	*	23,480	25,054	93.7 (93.4-94.0)	✓	*
BSA Total	87,388	89,665	97.5 (97.4-97.6)	✓✓	*	306,203	318,492	96.1 (96.1-96.2)	✓✓	*

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 does not take into consideration NZ National Statutory Holidays. Future data will have working day calculations adjusted for NZ National Statutory Holidays.

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

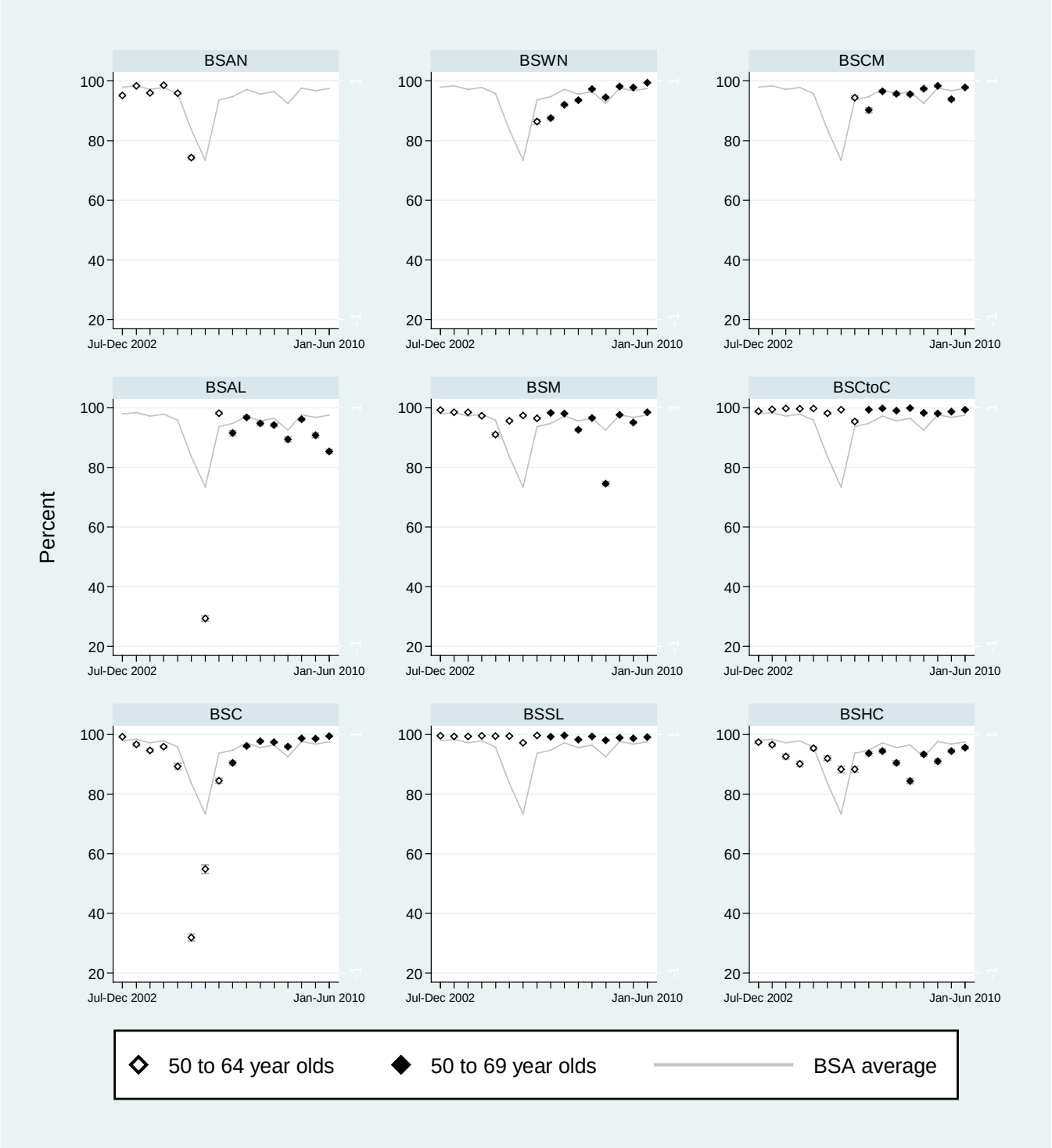
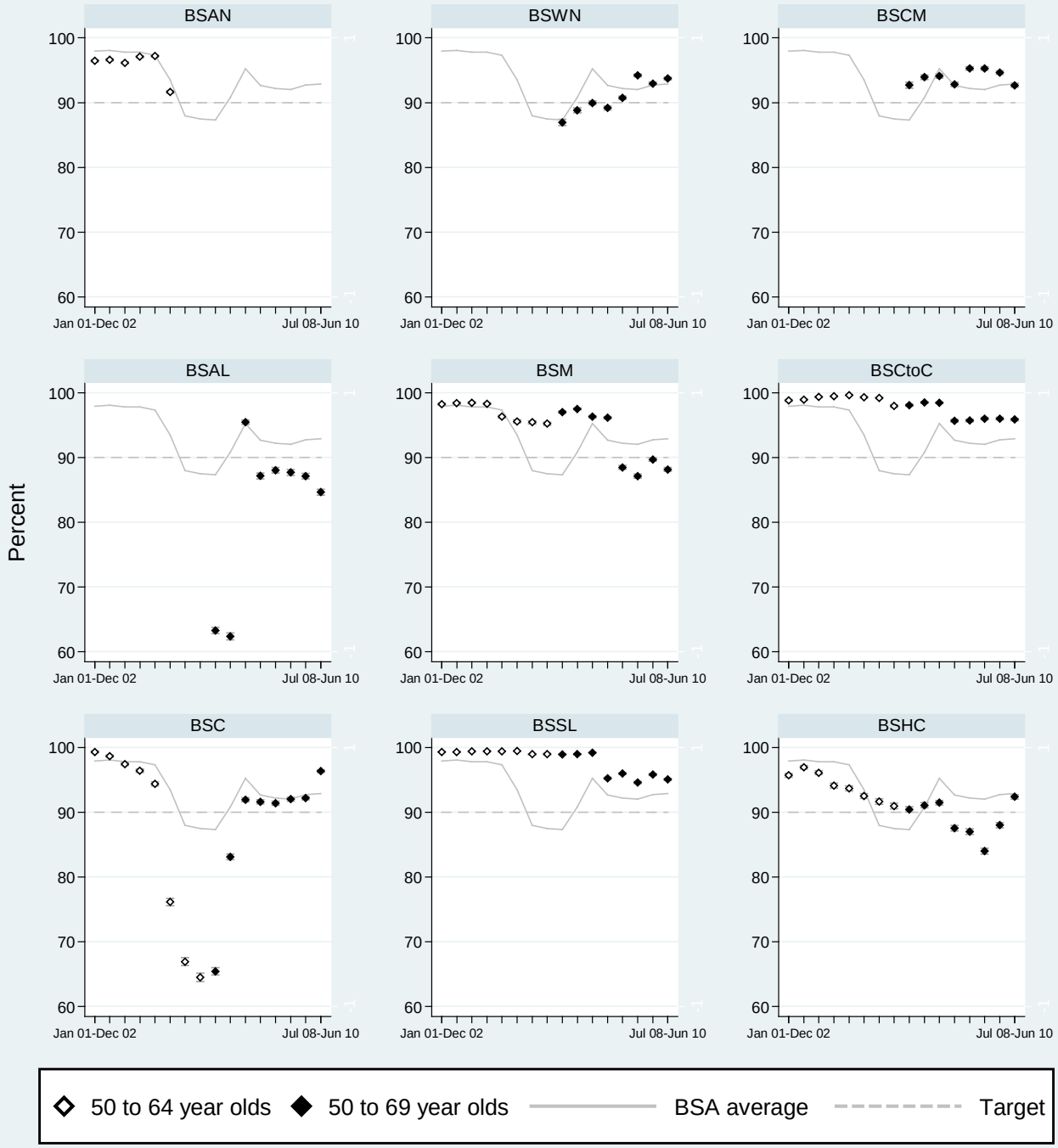


Figure 5a: Percentage of women notified of screening results within 10 working days, 2 years



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)		
45-49 years										
BSWN	362	379	95.5 (92.9-97.4)			1,175	1,387	84.7 (82.7-86.6)		
BSCM	266	268	99.3 (97.3-99.9)			744	838	88.8 (86.4-90.8)		
BSAL	76	163	46.6 (38.8-54.6)			397	644	61.6 (57.8-65.4)		
BSM	275	294	93.5 (90.1-96.1)			938	1,088	86.2 (84.0-88.2)		
BSCtoC	105	123	85.4 (77.9-91.1)			528	583	90.6 (87.9-92.8)		
BSC	196	199	98.5 (95.7-99.7)			822	868	94.7 (93.0-96.1)		
BSSL	395	410	96.3 (94.0-97.9)			1,312	1,387	94.6 (93.3-95.7)		
BSHC	89	127	70.1 (61.3-77.9)			293	650	45.1 (41.2-49.0)		
BSA Total	1,764	1,963	89.9 (88.4-91.2)			6,209	7,445	83.4 (82.5-84.2)		
50-69 years										
BSWN	542	558	97.1 (95.4-98.4)	✓✓	*	1,852	2,160	85.7 (84.2-87.2)	✓	*
BSCM	387	401	96.5 (94.2-98.1)	✓✓	*	1,083	1,260	86.0 (83.9-87.8)	✓	*
BSAL	147	294	50.0 (44.1-55.9)	×××	*	621	985	63.0 (59.9-66.1)	×××	*
BSM	440	466	94.4 (91.9-96.3)	✓	*	1,729	2,038	84.8 (83.2-86.4)	××	*
BSCtoC	208	240	86.7 (81.7-90.7)	✓	ns	903	986	91.6 (89.7-93.2)	✓	ns
BSC	332	342	97.1 (94.7-98.6)	✓✓	*	1,419	1,498	94.7 (93.5-95.8)	✓✓	*
BSSL	517	539	95.9 (93.9-97.4)	✓✓	*	1,897	2,025	93.7 (92.5-94.7)	✓	*
BSHC	116	188	61.7 (54.3-68.7)	×××	*	403	839	48.0 (44.6-51.5)	×××	*
BSA Total	2,689	3,028	88.8 (87.6-89.9)	✓	*	9,907	11,791	84.0 (83.3-84.7)	××	*

Exact Binomial 95% confidence intervals presented

* Statistically different from target value, ns: not significant

✓ On target, difference of <5% better or worse than target value based on point estimate or 95% Confidence Interval not significantly different from 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 does not take into consideration NZ National Statutory Holidays. Future data will have working day calculations adjusted for NZ National Statutory Holidays.

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

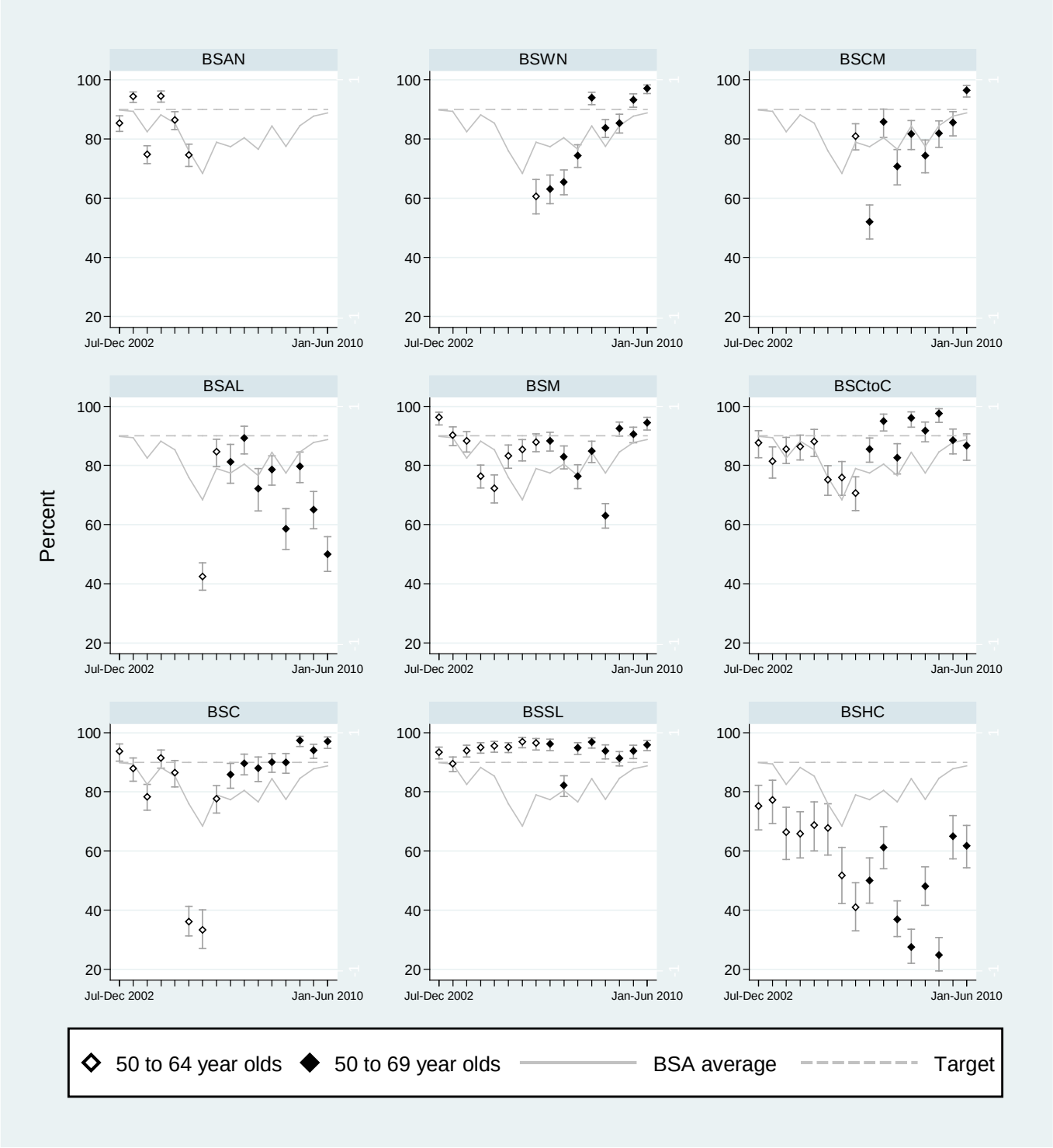
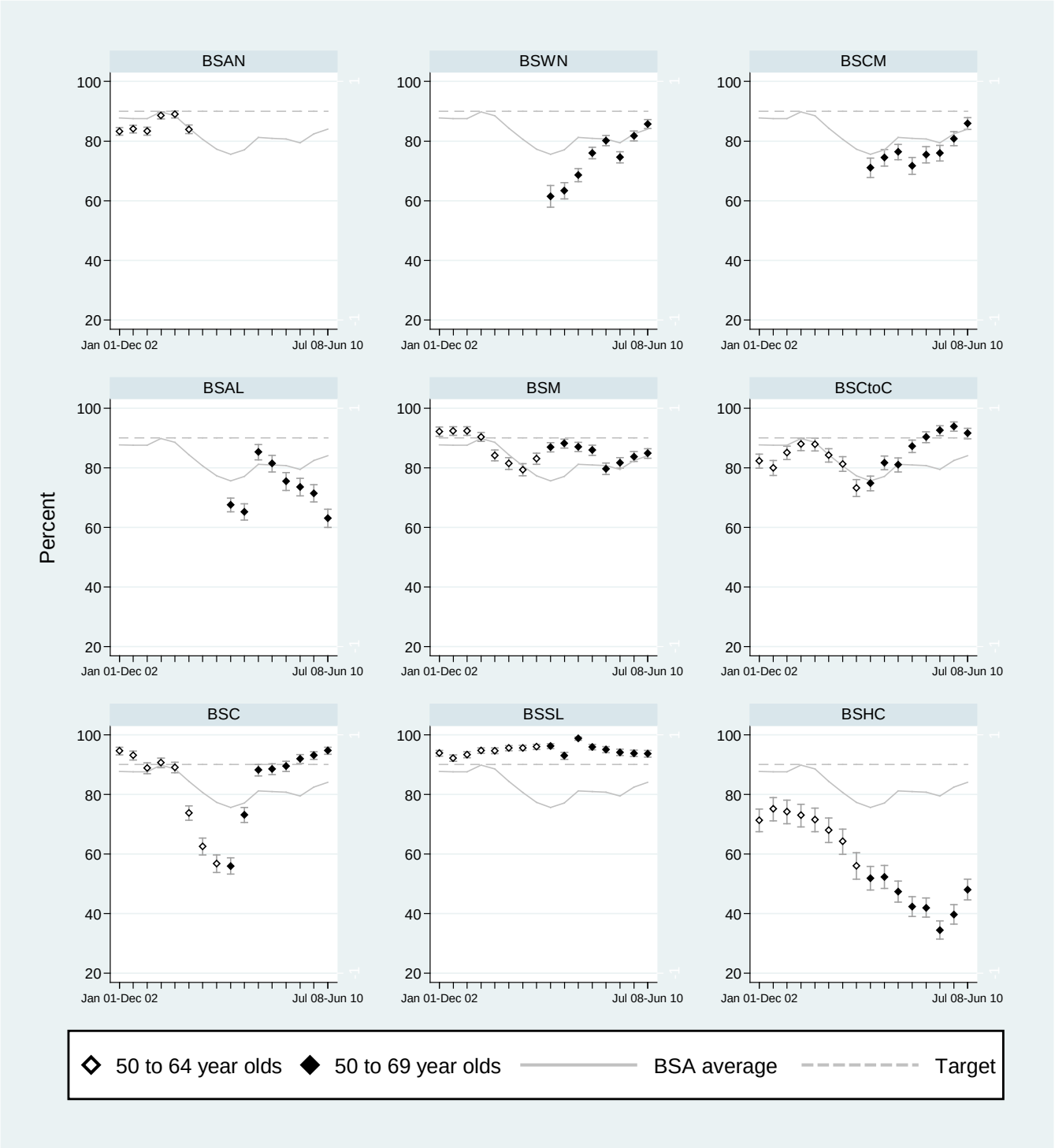


Figure 5b: Percentage of women offered first assessment appointment within 15 working days, 2 years



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)		
45-49 years										
BSWN	111	112	99.1 (95.1-100.0)			418	426	98.1 (96.3-99.2)		
BSCM	98	105	93.3 (86.7-97.3)			290	329	88.1 (84.2-91.4)		
BSAL	59	71	83.1 (72.3-91.0)			207	251	82.5 (77.2-87.0)		
BSM	76	82	92.7 (84.8-97.3)			249	302	82.5 (77.7-86.6)		
BSCtoC	32	32	100.0 (89.1-100.0)			163	166	98.2 (94.8-99.6)		
BSC	40	43	93.0 (80.9-98.5)			153	165	92.7 (87.6-96.2)		
BSSL	96	114	84.2 (76.2-90.4)			313	357	87.7 (83.8-90.9)		
BSHC	18	19	94.7 (74.0-99.9)			101	108	93.5 (87.1-97.4)		
BSA Total	530	578	91.7 (89.1-93.8)			1,894	2,104	90.0 (88.7-91.3)		
50-69 years										
BSWN	173	175	98.9 (95.9-99.9)	✓✓	*	694	705	98.4 (97.2-99.2)	✓✓	*
BSCM	150	156	96.2 (91.8-98.6)	✓✓	*	429	508	84.4 (81.0-87.5)	××	*
BSAL	104	125	83.2 (75.5-89.3)	××	*	371	437	84.9 (81.2-88.1)	××	*
BSM	115	127	90.6 (84.1-95.0)	✓	ns	540	642	84.1 (81.1-86.9)	××	*
BSCtoC	102	103	99.0 (94.7-100.0)	✓✓✓	*	391	396	98.7 (97.1-99.6)	✓✓	*
BSC	105	111	94.6 (88.6-98.0)	✓	ns	410	430	95.3 (92.9-97.1)	✓✓	*
BSSL	161	183	88.0 (82.4-92.3)	✓	ns	546	626	87.2 (84.3-89.7)	✓	*
BSHC	45	48	93.8 (82.8-98.7)	✓	ns	180	197	91.4 (86.5-94.9)	✓	ns
BSA Total	955	1028	92.9 (91.2-94.4)	✓	*	3,561	3,941	90.4 (89.4-91.3)	✓	ns

Exact Binomial 95% confidence intervals presented

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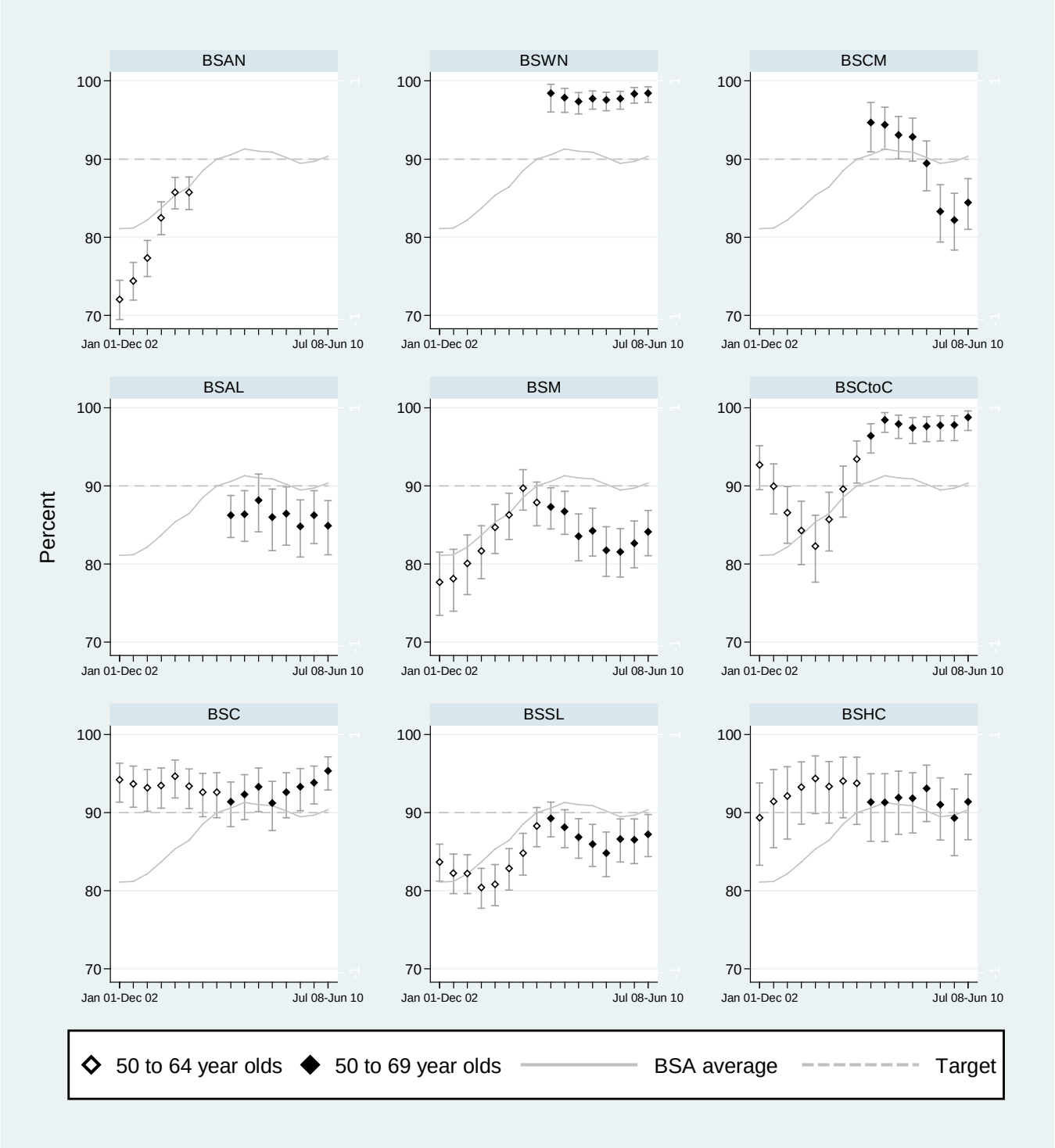
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Please note that data in the table above does not take into consideration NZ National Statutory Holidays. Future data will have working day calculations adjusted 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)		
45-49 years									
BSWN	6	7			40	59	67.8 (54.4-79.4)		
BSCM	4	9			16	23	69.6 (47.1-86.8)		
BSAL	6	6			23	24	95.8 (78.9-99.9)		
BSM	2	7			17	28	60.7 (40.6-78.5)		
BSCtoC	1	1			5	10	50.0 (18.7-81.3)		
BSC	2	3			10	15	66.7 (38.4-88.2)		
BSSL	7	8			20	22	90.9 (70.8-98.9)		
BSHC	4	5			14	16	87.5 (61.7-98.4)		
BSA Total	32	46	69.6 (54.2-82.3)		145	197	73.6 (66.9-79.6)		
50-69 years									
BSWN	14	24			40	66	60.6 (47.8-72.4)	×××	*
BSCM	3	10			28	37	75.7 (58.8-88.2)	×××	*
BSAL	9	9			24	28	85.7 (67.3-96.0)	✓	ns
BSM	6	8			29	52	55.8 (41.3-69.5)	×××	*
BSCtoC	3	5			7	21	33.3 (14.6-57.0)	×××	*
BSC	3	9			12	24	50.0 (29.1-70.9)	×××	*
BSSL	10	12			25	30	83.3 (65.3-94.4)	✓	ns
BSHC	4	5			12	16	75.0 (47.6-92.7)	✓	ns
BSA Total	52	82	63.4 (52.0-73.8)	××× *	177	274	64.6 (58.6-70.3)	×××	*

Note: 6 monthly proportions for Lead Providers not shown due to small numbers.
Exact Binomial 95% confidence intervals presented
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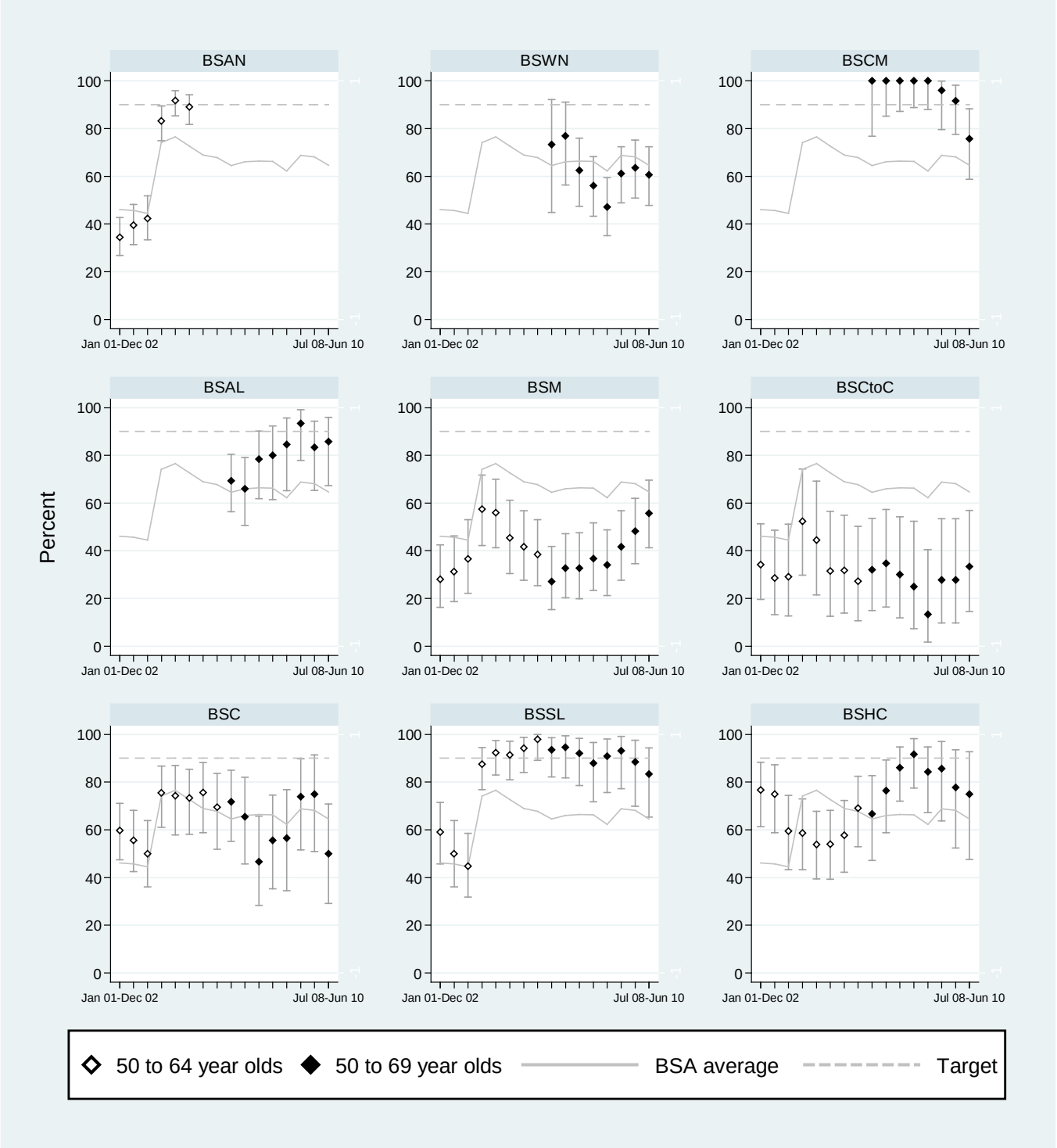
✓✓✓ Difference of ≥ 10% magnitude better than target value and statistically significant
xx Difference of ≥ 5-9% magnitude worse than target value and statistically significant
xxx Difference of ≥ 10% magnitude worse than target value and statistically significant

Please note that data in the table above does not take into consideration NZ National Statutory Holidays. Future data will have working day calculations adjusted 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)		
45-49 years										
BSWN	115	124	92.7 (86.7-96.6)			389	465	83.7 (80.0-86.9)		
BSCM	95	105	90.5 (83.2-95.3)			290	329	88.1 (84.2-91.4)		
BSAL	56	75	74.7 (63.3-84.0)			216	269	80.3 (75.0-84.9)		
BSM	72	83	86.7 (77.5-93.2)			235	308	76.3 (71.1-80.9)		
BSCtoC	31	32	96.9 (83.8-99.9)			146	170	85.9 (79.7-90.7)		
BSC	43	44	97.7 (88.0-99.9)			159	169	94.1 (89.4-97.1)		
BSSL	105	115	91.3 (84.6-95.8)			331	360	91.9 (88.6-94.5)		
BSHC	19	21	90.5 (69.6-98.8)			108	121	89.3 (82.3-94.2)		
BSA Total	536	599	89.5 (86.7-91.8)			1,874	2,191	85.5 (84.0-87.0)		
BSWN	156	186	83.9 (77.8-88.8)	××	*	637	747	85.3 (82.5-87.7)	××	*
BSCM	143	162	88.3 (82.3-92.8)	✓	ns	467	520	89.8 (86.9-92.3)	✓	ns
BSAL	106	131	80.9 (73.1-87.3)	×××	*	393	456	86.2 (82.7-89.2)	✓	*
BSM	114	130	87.7 (80.8-92.8)	✓	ns	520	652	79.8 (76.5-82.8)	×××	*
BSCtoC	93	106	87.7 (79.9-93.3)	✓	ns	356	403	88.3 (84.8-91.3)	✓	ns
BSC	97	112	86.6 (78.9-92.3)	✓	ns	389	435	89.4 (86.1-92.2)	✓	ns
BSSL	171	184	92.9 (88.2-96.2)	✓	ns	577	638	90.4 (87.9-92.6)	✓	ns
BSHC	48	50	96.0 (86.3-99.5)	✓	ns	193	206	93.7 (89.5-96.6)	✓	ns
BSA Total	928	1061	87.5 (85.3-89.4)	✓	*	3,532	4,057	87.1 (86.0-88.1)	✓	*

Exact Binomial 95% confidence intervals presented

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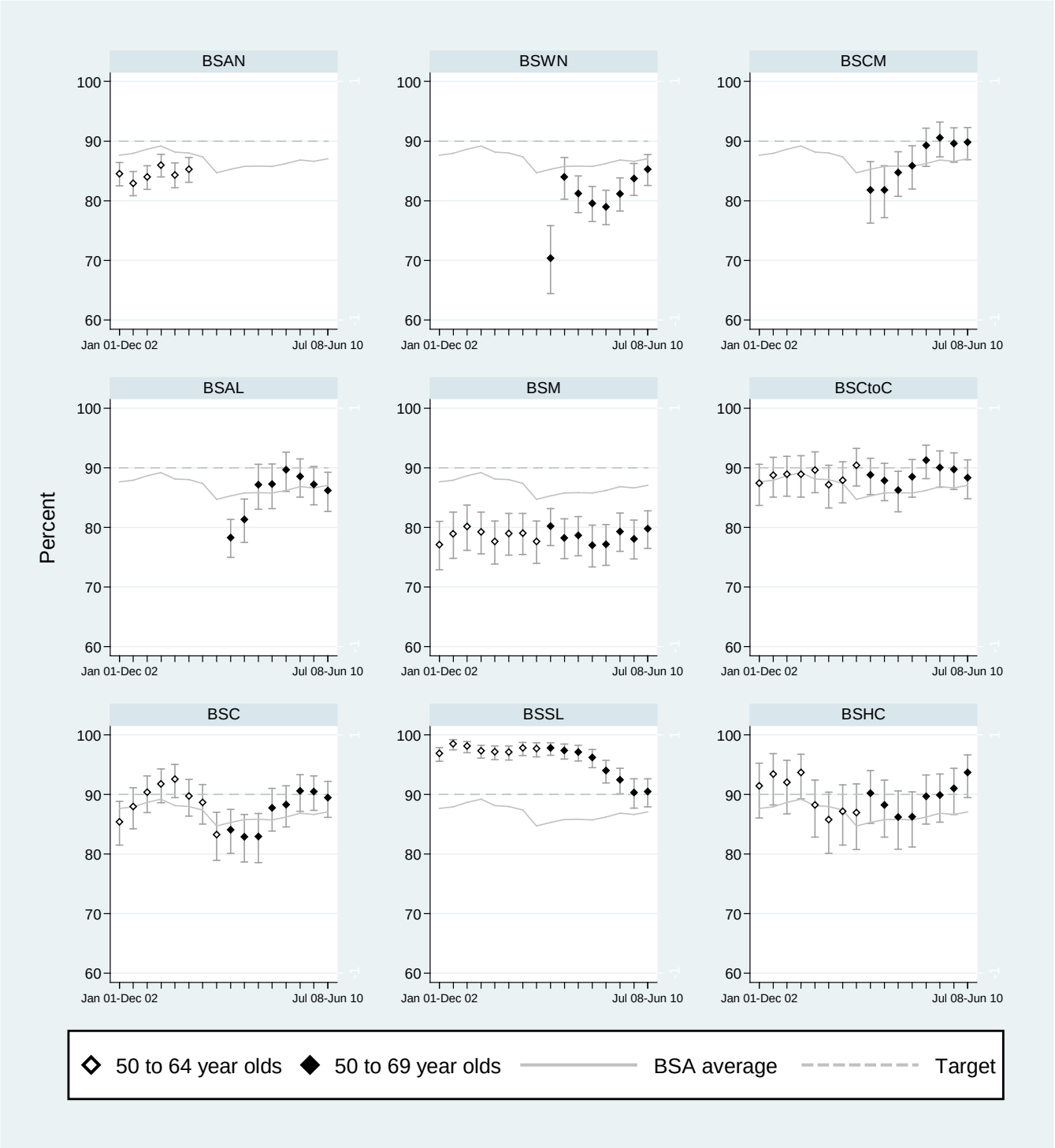
Figure 5d: Percentage of women receiving final diagnostic biopsy results within 5 working days, 2 years



APPENDIX A: POPULATION DENOMINATORS BY AGE-GROUP

			Annual Census projection estimates						Smoothed 6 monthly population estimates					
Year	Lead Provider	Reporting period	45-49	50-54	55-59	60-64	65-69	50-69*	45-49	50-54	55-59	60-64	65-69	50-69*
2010	BSWN	Jan-Jun, 2010	27185	23560	20155	18030	13840	75585	27358	24053	20350	18390	14133	76925
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	Jan-Jun, 2010	17090	14040	11660	9450	6880	42030	17290	14250	11870	9660	6940	42720
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	Jan-Jun, 2010	16900	14215	12230	10610	8005	45060	17060	14495	12355	10828	8168	45845
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

			Annual Census projection estimates						Smoothed 6 monthly population estimates					
Year	Lead Provider	Reporting period	45-49	50-54	55-59	60-64	65-69	50-69*	45-49	50-54	55-59	60-64	65-69	50-69*
2010	BSM	Jan-Jun, 2010	24930	22690	19720	17545	14285	74240	25010	22973	19983	17888	14488	75330
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	Jan-Jun, 2010	20795	18765	16520	14605	11865	61755	20750	18988	16653	14905	11955	62500
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
2010	BSC	Jan-Jun, 2010	18560	15205	13110	11755	8810	48880	18778	15380	13128	12060	8890	49458
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

*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.

			Annual Census projection estimates						Smoothed 6 monthly population estimates					
Year	Lead Provider	Reporting period	45-49	50-54	55-59	60-64	65-69	50-69*	45-49	50-54	55-59	60-64	65-69	50-69*
2010	BSSL	Jan-Jun, 2010	27600	25185	22370	20145	15380	83080	27740	25548	22468	20705	15573	84293
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
2010	BSHC	Jan-Jun, 2010	11285	10125	8690	7950	6275	33040	11300	10268	8690	8153	6288	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	Jan-Jun, 2010	164345	14378	12445	11009	85340	463670	16528	14595	12549	11258	86433	470468
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	Jan-Jun, 2010	3460	1265	22460	7080	2745	65760	3490	1293	22575	7285	2825	66815
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	Jan-Jun, 2010	1160	1730	14200	2670	3660	35700	1160	1740	14390	2725	3715	36280
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	Jan-Jun, 2010	2450	2790	11660	4960	6100	34000	2500	2850	11710	5065	6250	34530
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	2365	2110	2365	10780	4330	5280	31050
2006	BSCM	Jan-Jun, 2006				6120	7290	40530				6120	7290	40530
2005	BSCM	Jul-Dec, 2005				1890	2690	26310				1890	2690	26310
2005	BSAN	Jan-Jun, 2005				9820	8500	95890				9933	8590	96640
2004	BSAN	Jul-Dec, 2004				9820	8500	95890				9820	8500	95890
2004	BSAN	Jan-Jun, 2004				9370	8140	92890				9595	8320	94390
2003	BSAN	Jul-Dec, 2003				9370	8140	92890				9370	8140	92890
2003	BSAN	Jan-Jun, 2003				9210	7010	92915				9115	7398	91188
2002	BSAN	Jul-Dec, 2002				8860	6655	89485				8860	6655	89485

*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	Jan-Jun, 2010	5380	360	19190	11670	790	61780	5455	385	19170	11935	810	62585
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	Jan-Jun, 2010	4135	325	16335	8665	620	52470	4165	333	16253	8863	613	53025
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	Jan-Jun, 2010	2010	1040	15510	3860	2430	42590	2008	1075	15695	3970	2453	43035
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	Jan-Jun, 2010	1620	340	25640	3295	585	79200	1658	358	25725	3408	595	80290
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	Jan-Jun, 2010	745	70	10470	1350	180	31510	758	68	10475	1368	195	31835
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	Jan-Jun, 2010	20960	7920	135465	43550	17110	403010	21193	8100	135993	44618	17455	408395
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.

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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.

ns
Not significant (statistically) from the target value as determined by 95% confidence limits

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.

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