

BSA New Zealand Northland District Health Board Coverage Report

For the period ending
31 December 2019



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Introduction

BreastScreen Aotearoa (BSA) is a national public health screening programme funded by the Government to offer free Mammography every two years to women aged 45–69 years of age. The aim of BSA is to reduce morbidity and mortality from breast cancer by the early detection and treatment of the disease.

BSA's target is to screen 70 percent of eligible women aged 50–69 every two years. BSA does not have a target for women aged 45–49 years because there is less evidence of the benefits of this age group's participation in a population health breast screening programme.

Improving uptake of the breast cancer screening programme by Māori and Pacific women is a key priority of the National Screening Unit (NSU) as part of its commitment to achieving equity and are considered priority populations for the programme. Coverage rates are monitored closely for these two groups who are known to be at increased risk of developing breast cancer and have significantly higher mortality rates from breast cancer. From June 2018 the NSU has added the number of Asian women screened by DHB and the eligible population to the quarterly reports (tables 4 and 5). Asian women are not at increased risk of developing breast cancer and are not considered to be part of the priority populations for BSA, however in some DHBs they do make up a significant part of the population and monitoring of their screening rates is important to understand screening behaviours.

While the majority (15) of District Health Boards (DHBs) are not directly contracted by the Ministry of Health to provide breast screening services, it is expected that all DHBs will have linkages to breast screening activities. The programme is delivered throughout the country by eight lead providers, their sub-contracted providers (where applicable), and mobile units that deliver services to rural and some urban communities. Working alongside the lead providers are 13 screening support service providers in defined geographical areas providing recruitment and retention, and support services for Māori, Pacific and other priority group women.

Women who screen regularly have a lower risk of dying from breast cancer than those who screen less regularly. Rescreening rates are calculated as the number of women rescreened within 20-27 months of their previous screen as a percentage of the number of women eligible for a rescreen. Where a woman has more than one screening episode recorded in a screening period, only the last episode is reported. This may result in variances when women's screens and rescreens are completed by different providers.

BSA monitor initial and subsequent screening rates. Initial rescreens are the proportion of women who have a screening mammogram within 20-27 months after their first screening appointment. There has been a decline in the proportion of women being rescreened within 27 months of their first mammogram and from June 2018 the initial rescreen rates were included in the quarterly DHB reports (page 7).

Numerator: Women screened in the 24 months period preceding the report end date and who are eligible for rescreening and returned for a rescreen within 20-27 months. (1 October 2017 to 31 December 2019)

Denominator: Women screened in the 24 months period preceding the report end date who are eligible for rescreening. (1 October 2015 to 30 September 2017).

The purpose of this quarterly report is to demonstrate by DHB if the programme coverage and rescreening targets are being met for the region.

Technical notes

The data for the period ending 31 December 2019 was extracted from the national BreastScreen Aotearoa database (the Database) on 14 January 2020.

Screened women are included in the coverage calculations based on their age at the time of their screen. This means that coverage for women aged 50–69 years includes women who may have turned 70 or 71 during the monitoring period.

For both women screened and in the denominator, women have been prioritised to a single ethnicity using the following priority order: Māori, Pacific, Other. This means that if a woman chooses more than one category, and one of these is Māori, she is counted as Māori. For screened women with no ethnicity recorded in the Database, her screen contributes to overall coverage but not to any particular ethnicity. This means that the total number of women screened may be greater than the sum of women screened by ethnicity.

The denominators used for calculating coverage for the periods ending 31 December 2017, 31 December 2018 and 31 December 2019 are derived from Statistics New Zealand's District Health Board (DHB) population projections 30 June 2018 update, based on the 2013 Census.

From December 2016, the National Screening Unit (NSU) begins reporting using the latest 2013 domicile codes and daily data loading process, compared to previous reports which used a monthly data loading process and were based on 2006 domicile codes. The denominator is the projected population for the mid-point of the monitoring period.

This means that for the two-year period ending:

- 31 December 2017, the denominator is the projected population for 31 December 2016
- 31 December 2018, the denominator is the projected population for 31 December 2017
- 31 December 2019, the denominator is the projected population for 31 December 2018

Delivery of BSA services through mobile units may also result in fluctuations of some ethnicities in some regions in the number of women screened in a quarter. This may have an impact on coverage from year to year depending on the mobile unit schedule.

Please note the maps showing coverage by ethnicity (figures 7-9) are not available for the December 2019 reports, and show data from June 2019.

Additional detail on the methodology can be obtained via a request made to screening@moh.govt.nz.

Northland coverage

Northland coverage by ethnicity in the two years ending 31 December 2019

Figure 1: BSA coverage (%) in the two years ending 31 December 2019 by ethnicity, women aged 50–69 years, Total Coverage

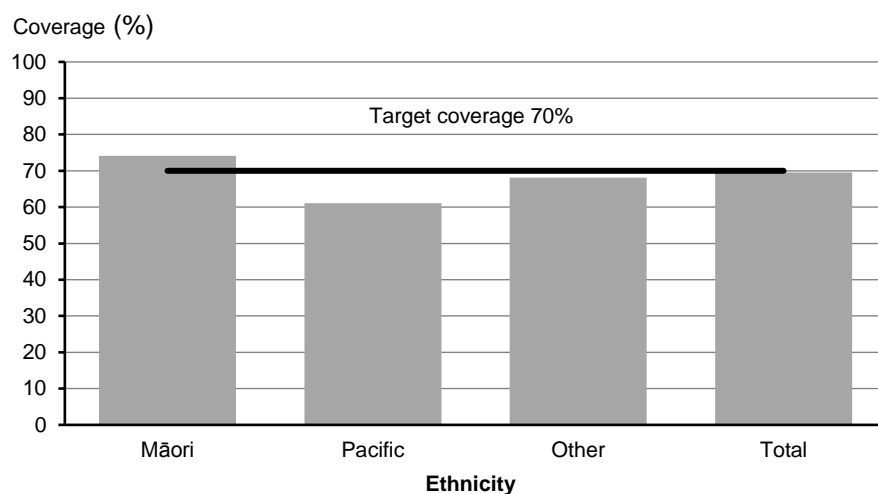


Table 1: BSA coverage (%) in the two years ending 31 December 2019 by ethnicity, women aged 50–69 years, Total Coverage

Ethnicity	Population	Women screened in last 2 years	2-year coverage	Additional screens to reach target*
Māori	6,075	4,503	74.10%	
Pacific	355	217	61.10%	31
Other	18,870	12,858	68.10%	351
Unspecified		8		
Total	25,300	17,586	69.50%	124

*For the total population the number of additional screens is the number required to move from the total population coverage to 70%. This may not be the same as the sum of additional screens required for each ethnic group to reach 70%.

Northland coverage trends by ethnicity

Figure 2: BSA coverage (%) of women aged 50–69 years in the two years ending 31 December 2017, 2018, 2019 by ethnicity and District Health Board

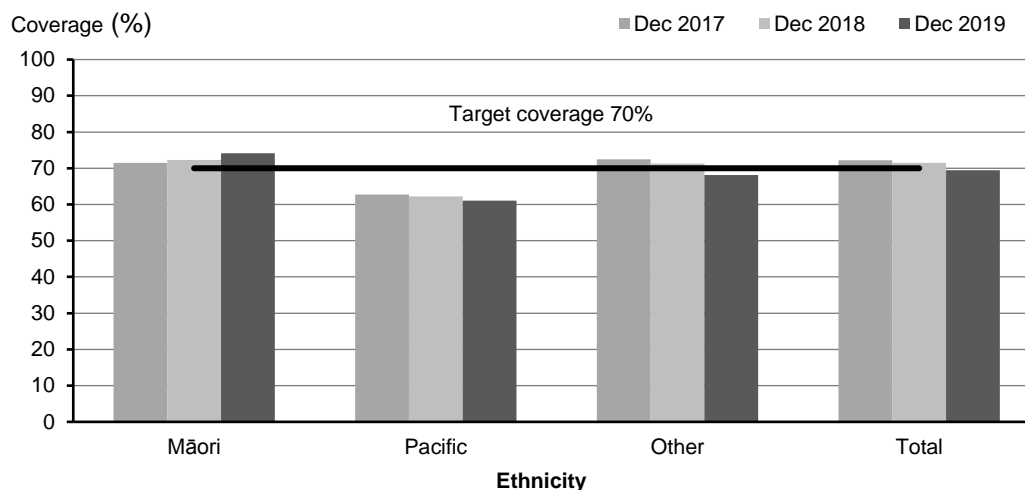


Table 2: BSA number of screens in women aged 50–69 years by ethnicity and quarter, Quarter 1 2018 –Quarter 4 2019

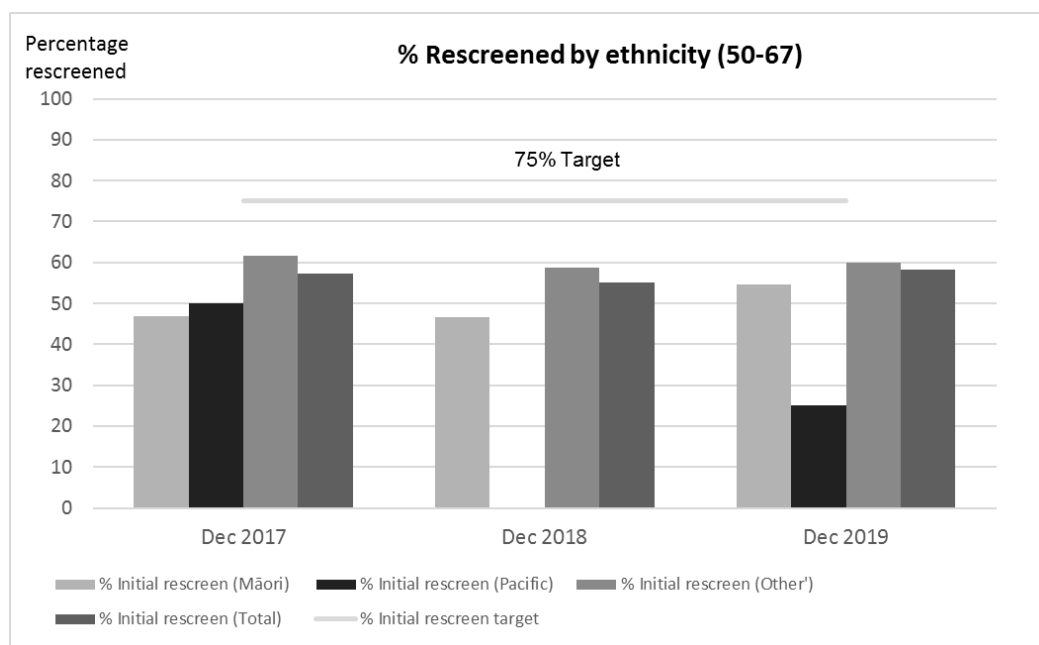
Ethnicity	Number of screens by quarter							
	Q1 (Jan - Mar) 2018	Q2 (Apr - Jun) 2018	Q3 (Jul - Sep) 2018	Q4 (Oct-Dec) 2018	Q1 (Jan - Mar) 2019	Q2 (Apr - Jun) 2019	Q3 (Jul - Sep) 2019	Q4 (Oct-Dec) 2019
Māori	472	643	551	739	571	549	752	416
Pacific	25	25	30	47	17	29	37	32
Other	1,532	1,904	1,721	1,752	1,289	1,853	1,574	1,576
Total	2,029	2,572	2,302	2,538	1,877	2,431	2,363	2,024

Number of Initial Rescreens by Ethnicity

Table 3: BSA number of eligible screens and initial rescreens for women aged 50–67 years by ethnicity for the rescreen period 1 October 2017 to 31 December 2019 (eligible period 1 October 2015 to 30 September 2017)

Ethnicity	Number of eligible screens	Number of initial rescreens	%	CI (95%)
Māori	139	76	54.7%	(46.0, 63.1)
Pacific	4	1	25.0%	(0.6, 80.6)
Other	348	209	60.1%	(54.7, 65.2)
Total	491	286	58.2%	(53.7, 62.7)

Figure 3: BSA number of initial eligible rescreens by ethnicity



DHB coverage comparisons

DHB coverage by ethnicity in the two years ending 31 December 2019

Figure 4: BSA coverage (%) of Māori women aged 50–69 years in the two years ending 31 December 2019 by District Health Board

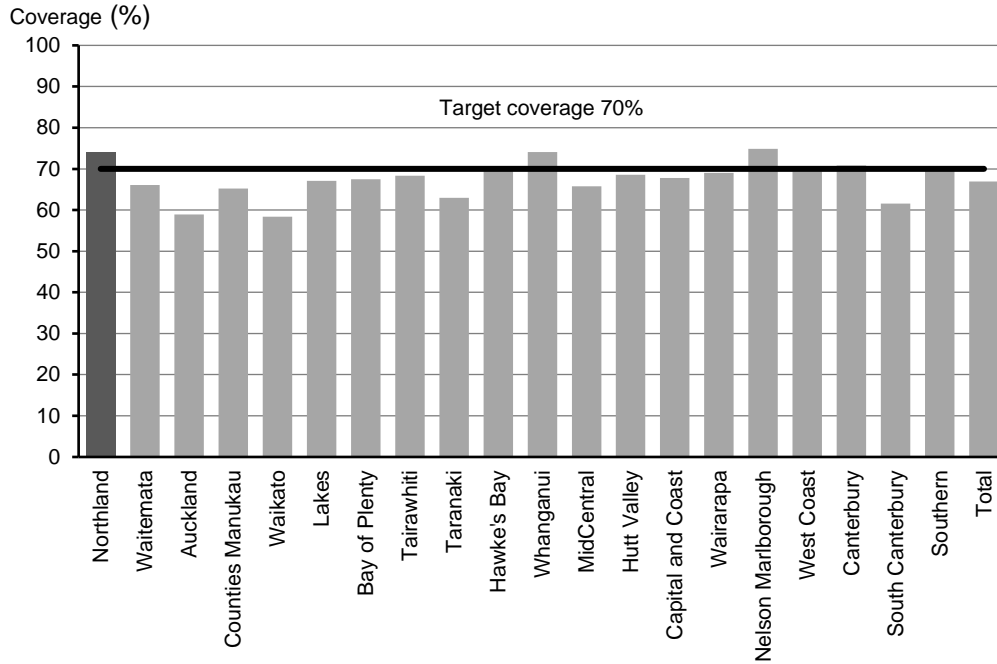


Figure 5: BSA coverage (%) of Pacific women aged 50–69 years in the two years ending 31 December 2019 by District Health Board

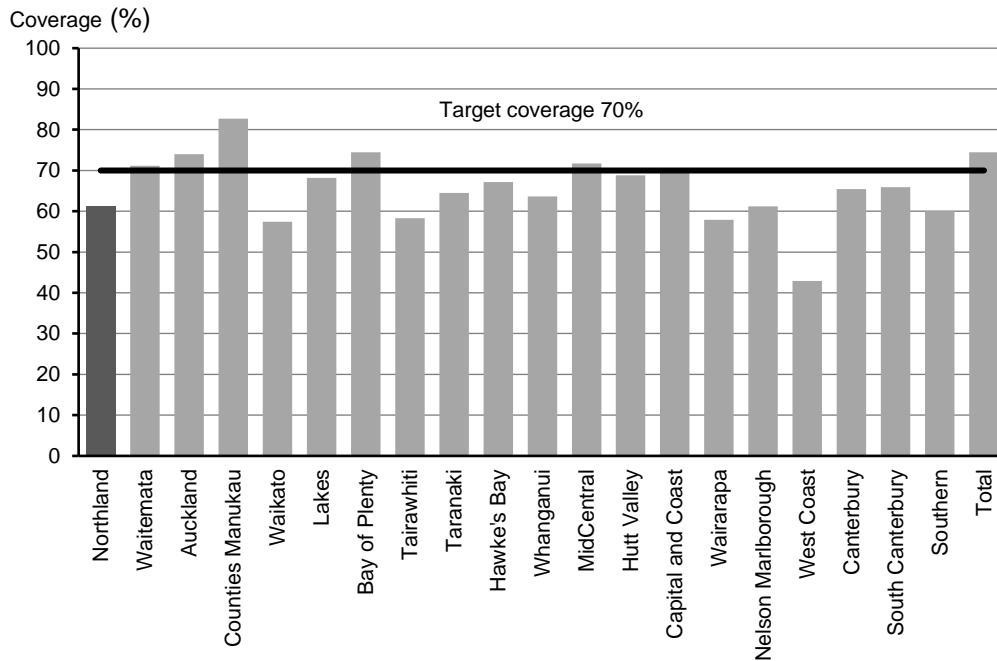


Figure 6: Overall BSA coverage (%) of women aged 50–69 years in the two years ending 31 December 2019 by District Health Board

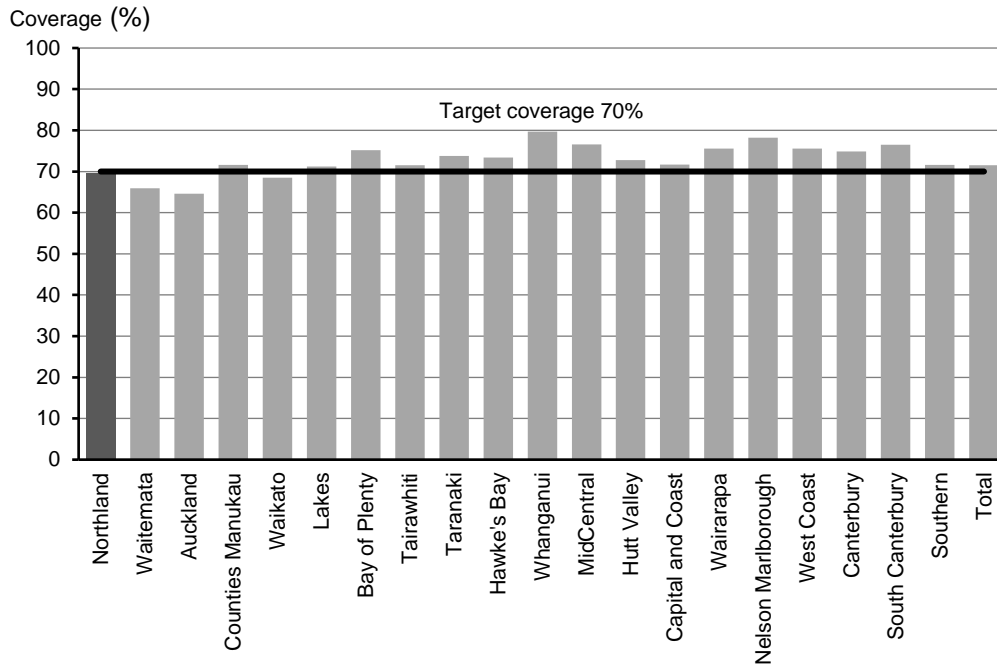


Figure 7: BSA coverage (%) of Māori women aged 50–69 years in the two years ending 30 June 2019 by District Health Board

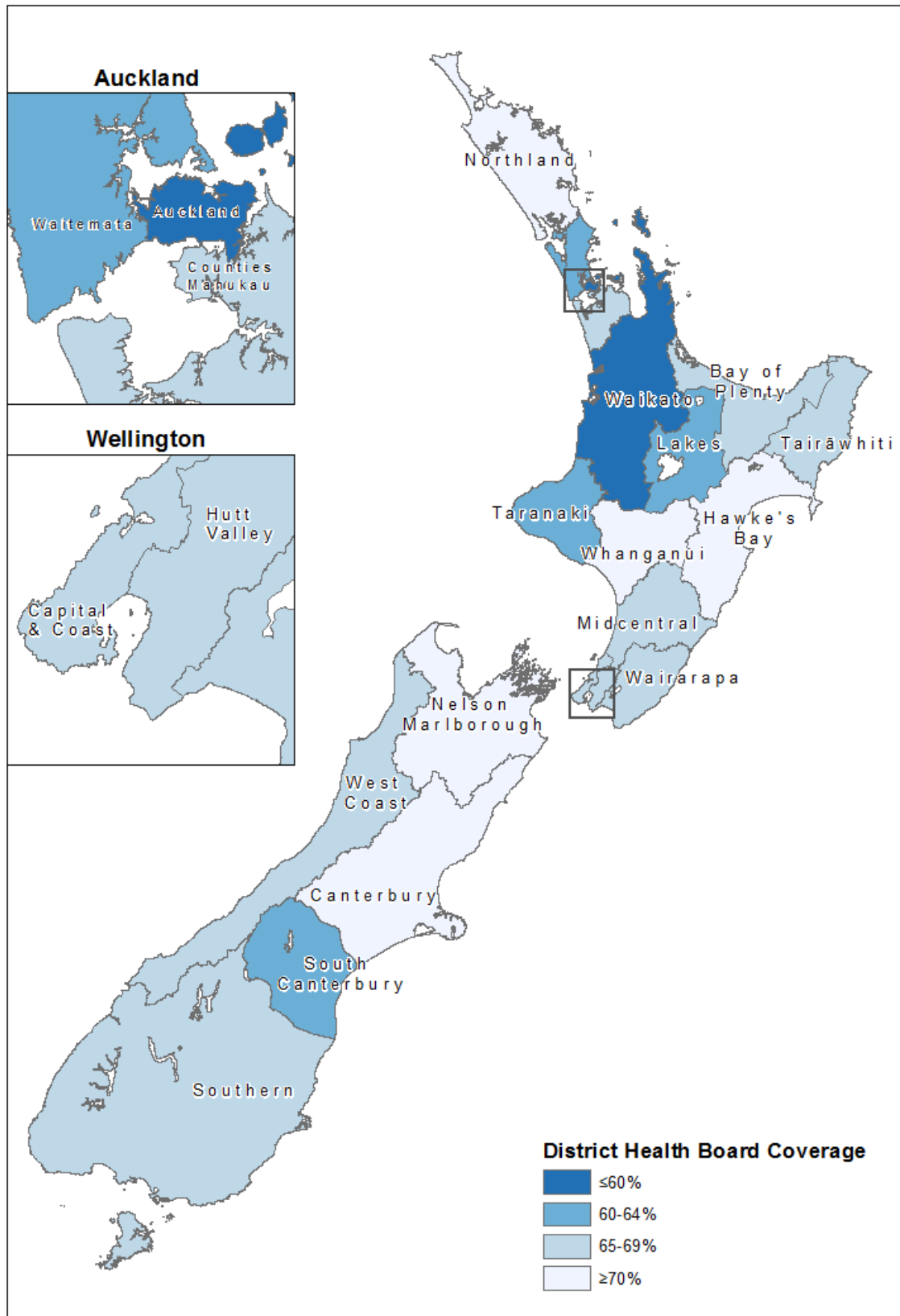


Figure 8: BSA coverage (%) of Pacific women aged 50–69 years in the two years ending 30 June 2019 by District Health Board

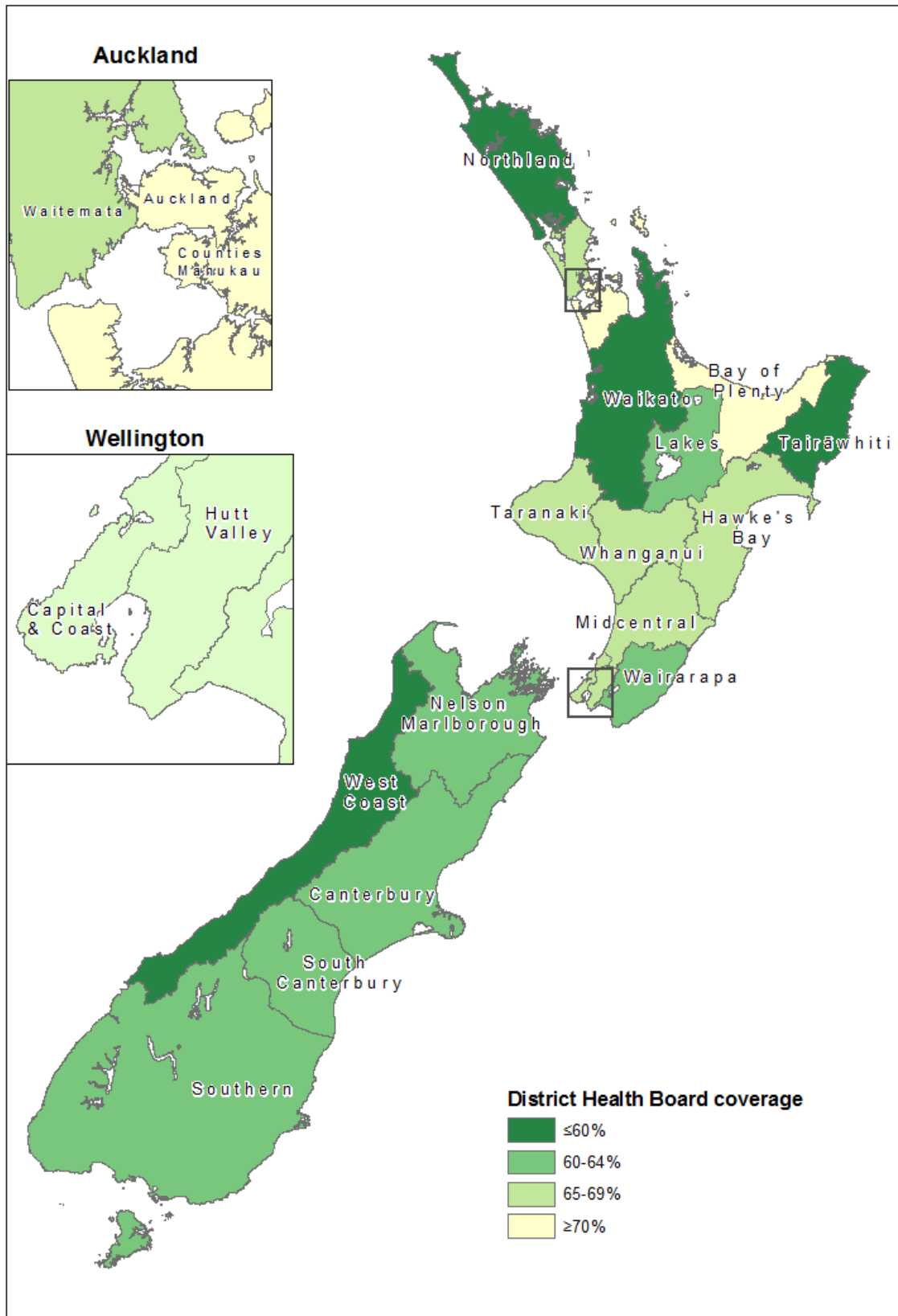


Figure 9: Overall BSA coverage (%) of women aged 50–69 years in the two years ending 30 June 2019 by District Health Board



Table 4: BSA number of screens and coverage (%) in women aged 50–69 years in the two years ending 31 December 2019 by District Health Board

DHB	Eligible Population					Screens						Coverage				
	Māori	Pacific	Asian	Other	Total	Māori	Pacific	Asian	Other	Unspec.	Total	Māori	Pacific	Asian	Other	Total
Northland	6,075	355	1,020	17,850	25,300	4,503	217	437	12,421	8	17,586	74.1%	61.1%	42.8%	69.6%	69.6%
Waitemata	4,980	3,770	14,960	49,265	72,975	3,291	2,685	9,993	32,088	21	48,078	66.1%	71.2%	66.8%	65.1%	65.9%
Auckland	3,860	5,070	16,870	29,410	55,210	2,273	3,750	10,980	18,628	23	35,654	58.9%	74.0%	65.1%	63.3%	64.6%
Counties Manukau	7,055	9,655	16,370	27,195	60,275	4,602	7,980	10,519	20,057	4	43,162	65.2%	82.7%	64.3%	73.8%	71.6%
Waikato	8,000	965	4,090	37,010	50,065	4,671	554	2,049	27,023	9	34,306	58.4%	57.4%	50.1%	73.0%	68.5%
Lakes	3,640	245	950	9,025	13,860	2,444	167	410	6,846	2	9,869	67.1%	68.2%	43.2%	75.9%	71.3%
Bay of Plenty	5,505	290	1,810	23,845	31,450	3,716	216	769	18,942	8	23,651	67.5%	74.5%	42.5%	79.4%	75.2%
Tairāwhiti	2,470	108	140	3,361	6,079	1,686	63	65	2,531	2	4,347	68.3%	58.3%	46.4%	75.3%	71.4%
Taranaki	1,880	110	580	12,815	15,385	1,185	71	251	9,839	11	11,357	63.0%	64.5%	43.3%	76.8%	73.8%
Hawke's Bay	3,755	430	910	17,435	22,530	2,630	289	429	13,183	11	16,542	70.0%	67.2%	47.1%	75.6%	73.5%
Whanganui	1,635	129	340	6,615	8,719	1,212	82	144	5,511	3	6,952	74.1%	63.6%	42.4%	83.3%	79.6%
MidCentral	2,890	385	1,520	17,745	22,540	1,902	276	780	14,307	7	17,272	65.8%	71.7%	51.3%	80.6%	76.5%
Hutt Valley	2,185	1,015	2,240	12,980	18,420	1,500	698	1,414	9,796	10	13,418	68.6%	68.8%	63.1%	75.5%	72.8%
Capital and Coast	2,910	2,015	5,180	26,210	36,315	1,973	1,404	2,925	19,689	38	26,029	67.8%	69.7%	56.5%	75.1%	71.7%
Wairarapa	710	76	180	5,540	6,506	490	44	96	4,279	8	4,917	69.0%	57.9%	53.3%	77.2%	75.6%
Nelson Marlborough	1,425	165	720	19,960	22,270	1,068	101	321	15,908	23	17,421	74.9%	61.2%	44.6%	79.7%	78.3%
West Coast	415	28	100	4,181	4,724	288	12	53	3,197	19	3,569	69.4%	42.9%	53.0%	76.5%	75.6%
Canterbury	3,835	960	5,910	58,375	69,080	2,716	628	2,871	45,479	43	51,737	70.8%	65.4%	48.6%	77.9%	74.9%
South Canterbury	435	41	260	7,835	8,571	268	27	80	6,180	1	6,556	61.6%	65.9%	30.8%	78.9%	76.4%
Southern	2,570	385	2,100	36,110	41,165	1,788	231	738	26,705	32	29,494	69.6%	60.0%	35.1%	74.0%	71.7%
Unspecified DHB	0	0	0	0	0	110	25	118	866	0	1,119	0.0%	0.0%	0.0%	0.0%	0.0%
National	66,230	26,197	76,250	422,762	591,439	44,316	19,520	45,442	313,475	283	423,036	66.9%	74.5%	59.6%	74.1%	71.5%

DHB coverage comparison trends by ethnicity

Table 5: BSA coverage (%) of women aged 50–69 years in the two years ending 31 December 2017, 2018, 2019 by ethnicity and District Health Board

DHB	Māori			Pacific			Asian			Other			Total		
	Dec 2017	Dec 2018	Dec 2019	Dec 2017	Dec 2018	Dec 2019	Dec 2017	Dec 2018	Dec 2019	Dec 2017	Dec 2018	Dec 2019	Dec 2017	Dec 2018	Dec 2019
Northland	71.5%	72.3%	74.1%	62.7%	62.2%	61.1%	47.5%	46.9%	42.8%	73.7%	72.7%	69.6%	72.2%	71.5%	69.5%
Waitemata	65.3%	64.1%	66.1%	66.8%	68.8%	71.2%	66.7%	66.5%	66.8%	65.1%	64.2%	65.1%	65.5%	64.9%	65.9%
Auckland	58.2%	59.2%	58.9%	69.1%	70.7%	74.0%	66.4%	65.0%	65.1%	61.1%	61.9%	63.3%	63.2%	63.5%	64.6%
Counties Manukau	66.1%	67.1%	65.2%	79.5%	83.9%	82.7%	64.8%	65.5%	64.3%	71.2%	73.5%	73.8%	70.3%	72.3%	71.6%
Waikato	59.7%	60.0%	58.4%	58.5%	60.5%	57.4%	49.8%	50.8%	50.1%	73.3%	73.7%	73.0%	69.3%	69.6%	68.5%
Lakes	65.4%	64.5%	67.1%	63.9%	63.8%	68.2%	46.3%	45.1%	43.2%	77.2%	75.2%	75.9%	72.3%	70.3%	71.2%
Bay of Plenty	60.6%	65.0%	67.5%	68.2%	69.1%	74.5%	42.9%	41.6%	42.5%	74.1%	77.2%	79.4%	70.2%	73.1%	75.2%
Tairāwhiti	69.0%	65.9%	68.3%	65.6%	52.9%	58.3%	55.2%	48.8%	46.4%	74.6%	70.7%	75.3%	71.9%	68.1%	71.5%
Taranaki	63.0%	63.7%	63.0%	61.2%	67.0%	64.5%	47.0%	46.9%	43.3%	77.8%	77.5%	76.8%	75.1%	74.8%	73.8%
Hawke's Bay	69.6%	70.4%	70.0%	66.9%	66.7%	67.2%	52.9%	47.9%	47.1%	75.6%	75.3%	75.6%	73.7%	73.4%	73.4%
Whanganui	71.4%	73.8%	74.1%	62.5%	63.9%	63.6%	45.2%	45.3%	42.4%	81.7%	82.7%	83.3%	78.4%	79.4%	79.7%
MidCentral	67.0%	67.0%	65.8%	69.4%	70.9%	71.7%	55.6%	53.1%	51.3%	80.1%	80.6%	80.6%	76.9%	77.0%	76.6%
Hutt Valley	70.1%	69.7%	68.6%	67.1%	67.0%	68.8%	68.1%	66.8%	63.1%	76.4%	77.5%	75.5%	74.3%	74.8%	72.8%
Capital and Coast	67.7%	66.8%	67.8%	68.1%	67.7%	69.7%	61.9%	60.0%	56.5%	76.0%	76.2%	75.1%	73.2%	73.0%	71.7%
Wairarapa	71.3%	69.0%	69.0%	72.3%	63.2%	57.9%	52.3%	60.0%	53.3%	79.6%	79.3%	77.2%	78.2%	77.8%	75.6%
Nelson Marlborough	75.4%	73.5%	74.9%	70.0%	65.2%	61.2%	45.8%	46.3%	44.6%	81.7%	81.5%	79.7%	80.3%	80.0%	78.2%
West Coast	67.5%	69.0%	69.4%	32.0%	50.0%	42.9%	54.1%	56.8%	53.0%	77.2%	77.9%	76.5%	76.1%	77.0%	75.6%
Canterbury	69.8%	70.1%	70.8%	64.4%	63.8%	65.4%	50.2%	49.6%	48.6%	79.2%	79.6%	77.9%	76.4%	76.5%	74.9%
South Canterbury	66.3%	65.6%	61.6%	53.8%	62.5%	65.9%	31.4%	32.6%	30.8%	78.1%	78.7%	78.9%	76.2%	76.7%	76.5%
Southern	67.3%	67.7%	69.6%	60.9%	61.4%	60.0%	39.7%	39.0%	35.1%	77.0%	78.3%	74.0%	74.9%	75.8%	71.6%
National	66.2%	66.6%	66.9%	71.6%	73.8%	74.5%	61.5%	60.8%	59.6%	74.5%	74.9%	74.1%	72.0%	72.3%	71.5%