

# **BSA New Zealand MidCentral District Health Board Coverage Report**

For the period ending  
31 March 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. 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 added the number of Asian women screened by DHB and the eligible population to the quarterly reports (tables 4 and 5). While Asian women are not at increased risk of developing breast cancer, it is important to monitor the rate of screening in this group 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 month period preceding the report end date and who are eligible for rescreening and returned for a rescreen within 20-27 months. (1 January 2017 to 31 March 2019)

Denominator: Women screened in the 24 month period preceding the report end date who are eligible for rescreening. (1 January 2015 to 31 December 2016).

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 March 2019 was extracted from the national BreastScreen Aotearoa database (the Database) on 23 April 2019.

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 March 2017, 31 March 2018 and 31 March 2019 are derived from Statistics New Zealand's District Health Board (DHB) population projections 30 June 2017 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 March 2017, the denominator is the projected population for 31 March 2016
- 31 March 2018, the denominator is the projected population for 31 March 2017
- 31 March 2019, the denominator is the projected population for 31 March 2018

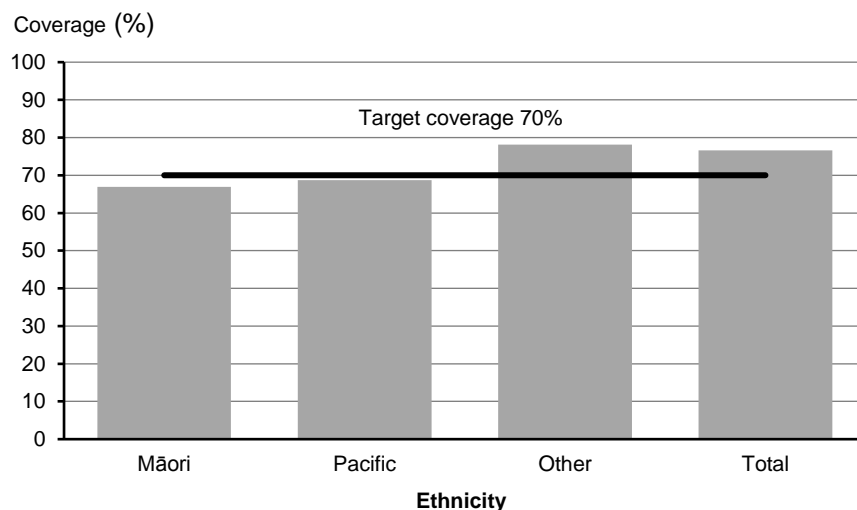
Delivery of BSA services through mobile units may also result in fluctuations in the number of women screened in a quarter which may impact on coverage from year to year depending on the mobile unit schedule.

Additional detail on the methodology can be obtained via a request made to [screening@moh.govt.nz](mailto:screening@moh.govt.nz).

# MidCentral coverage

## MidCentral coverage by ethnicity in the two years ending 31 March 2019

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



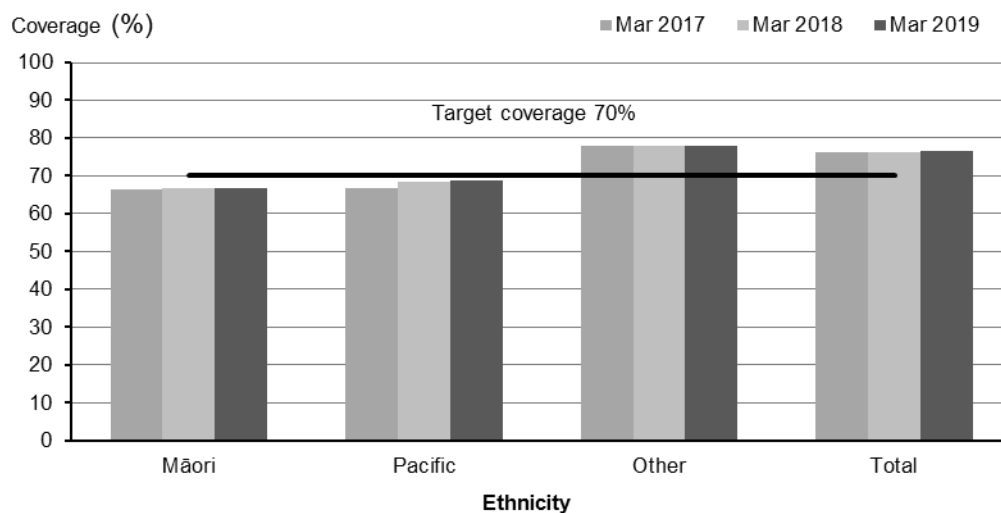
**Table 1: BSA coverage (%) in the two years ending 31 March 2019 by ethnicity, women aged 50–69 years, Total Coverage**

Ethnicity	Population	Women screened in last 2 years	2-year coverage	Additional screens to reach target*
Māori	2,815	1,884	66.90%	86
Pacific	383	263	68.70%	5
Other	19,140	14,957	78.10%	
Unspecified		9		
<b>Total</b>	<b>22,338</b>	<b>17,113</b>	<b>76.60%</b>	

\*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%.

## MidCentral coverage trends by ethnicity

**Figure 2: BSA coverage (%) of women aged 50–69 years in the two years ending 31 March 2017, 31 March 2018 and 31 March 2019 by ethnicity, Total Coverage**



**Table 2: BSA number of screens in women aged 50–69 years by ethnicity and quarter, Quarter 1 2018 - Quarter 1 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
Māori	196	444	281	149	211
Pacific	33	40	57	31	24
Other	1,707	2,625	2,478	1,568	1,803
<b>Total</b>	<b>1,936</b>	<b>3,109</b>	<b>2,816</b>	<b>1,748</b>	<b>2,038</b>

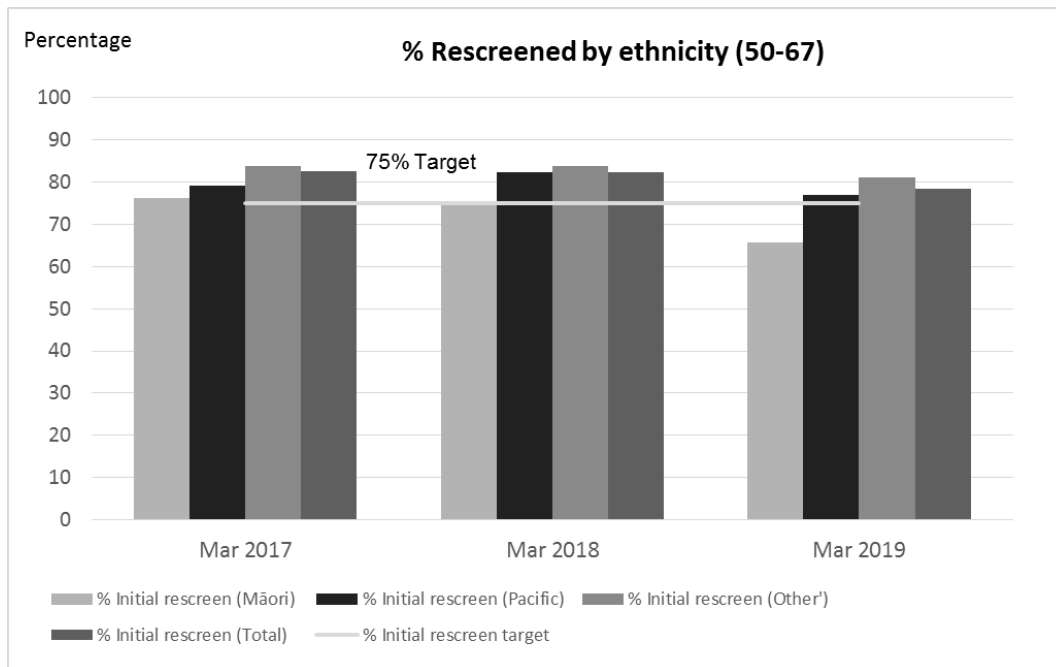


## Number of Initial Rescreens by Ethnicity

**Table 3: BSA number of eligible screens and initial rescreens for women aged 50–67 years by ethnicity for the rescreen period 1 January 2017 to 31 March 2019 (eligible period 1 January 2015 to 31 December 2016)**

Ethnicity	Number of eligible screens	Number of initial rescreens	%	CI (95%)
Māori	105	69	65.7%	(55.8, 74.7)
Pacific	13	10	76.9%	(46.2, 95.0)
Other	510	413	81.0%	(77.3, 84.3)
<b>Total</b>	<b>628</b>	<b>492</b>	<b>78.3%</b>	<b>(74.9, 81.5)</b>

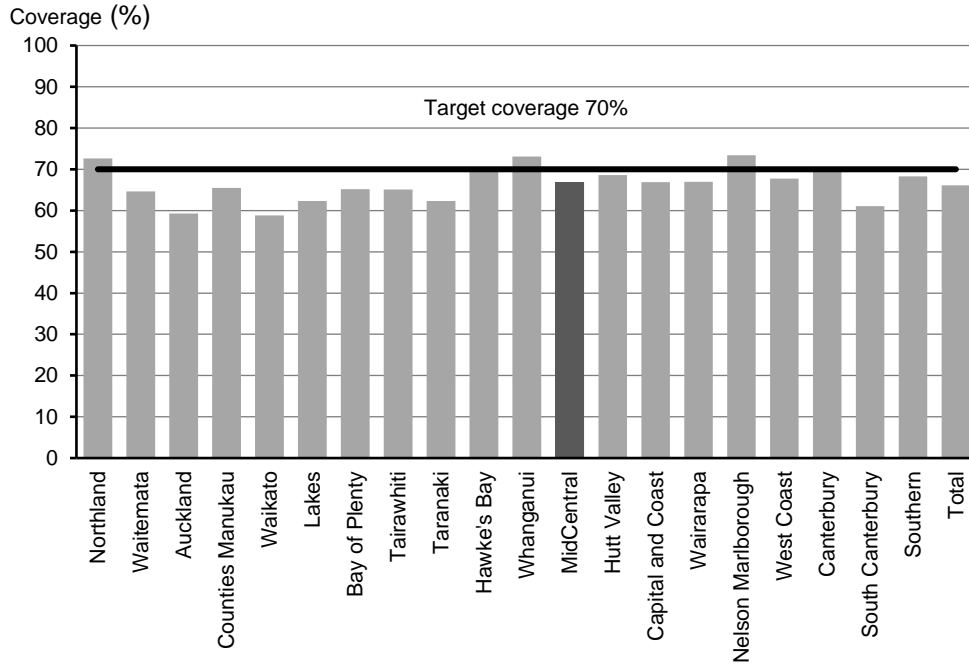
**Figure 3: BSA number of initial eligible rescreens by ethnicity**



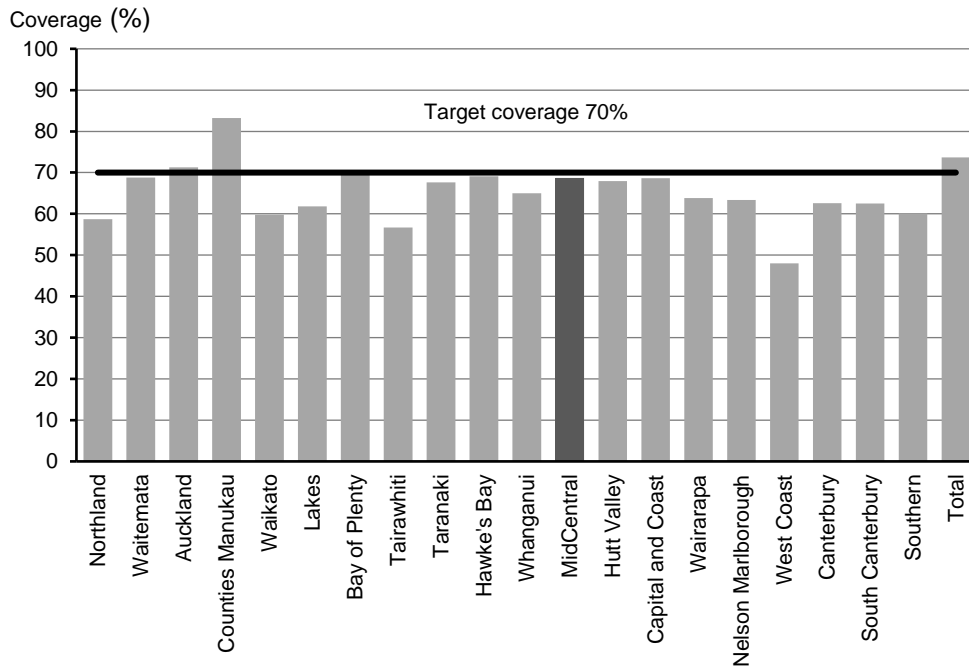
# DHB coverage comparisons

## DHB coverage by ethnicity in the two years ending 31 March 2019

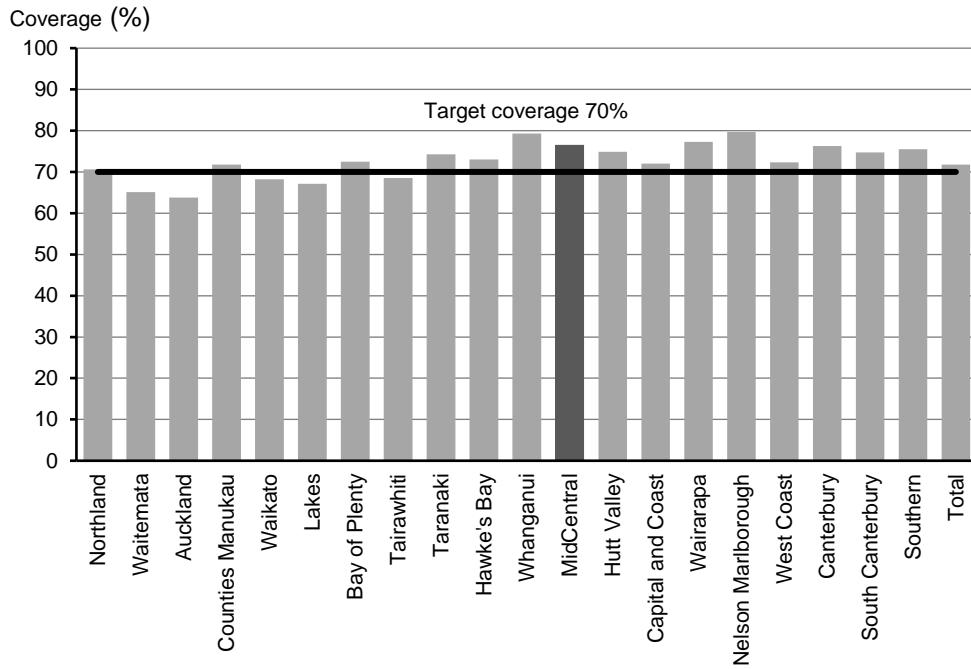
**Figure 4: BSA coverage (%) of Māori women aged 50–69 years in the two years ending 31 March 2019 by District Health Board**



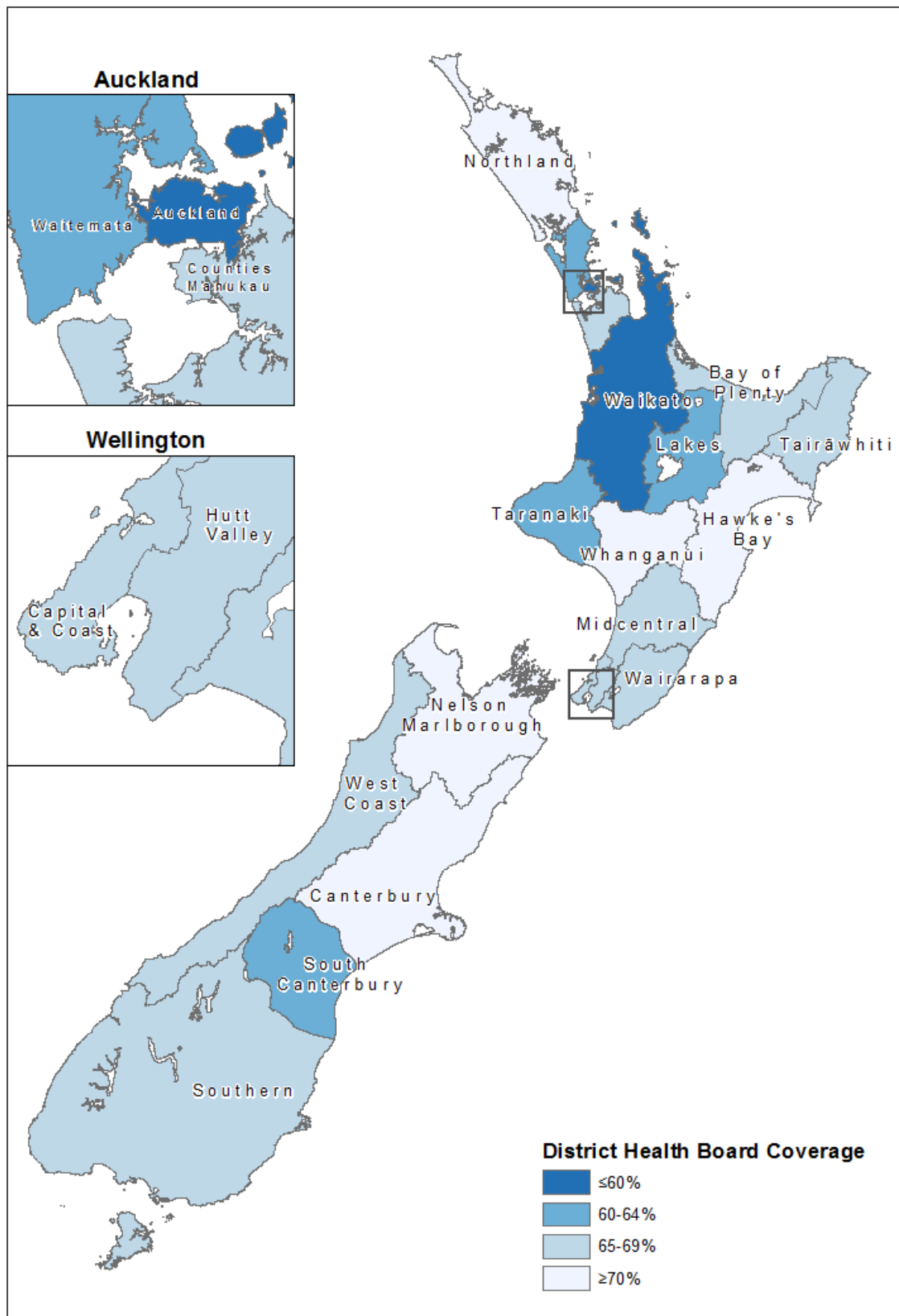
**Figure 5: BSA coverage (%) of Pacific women aged 50–69 years in the two years ending 31 March 2019 by District Health Board**



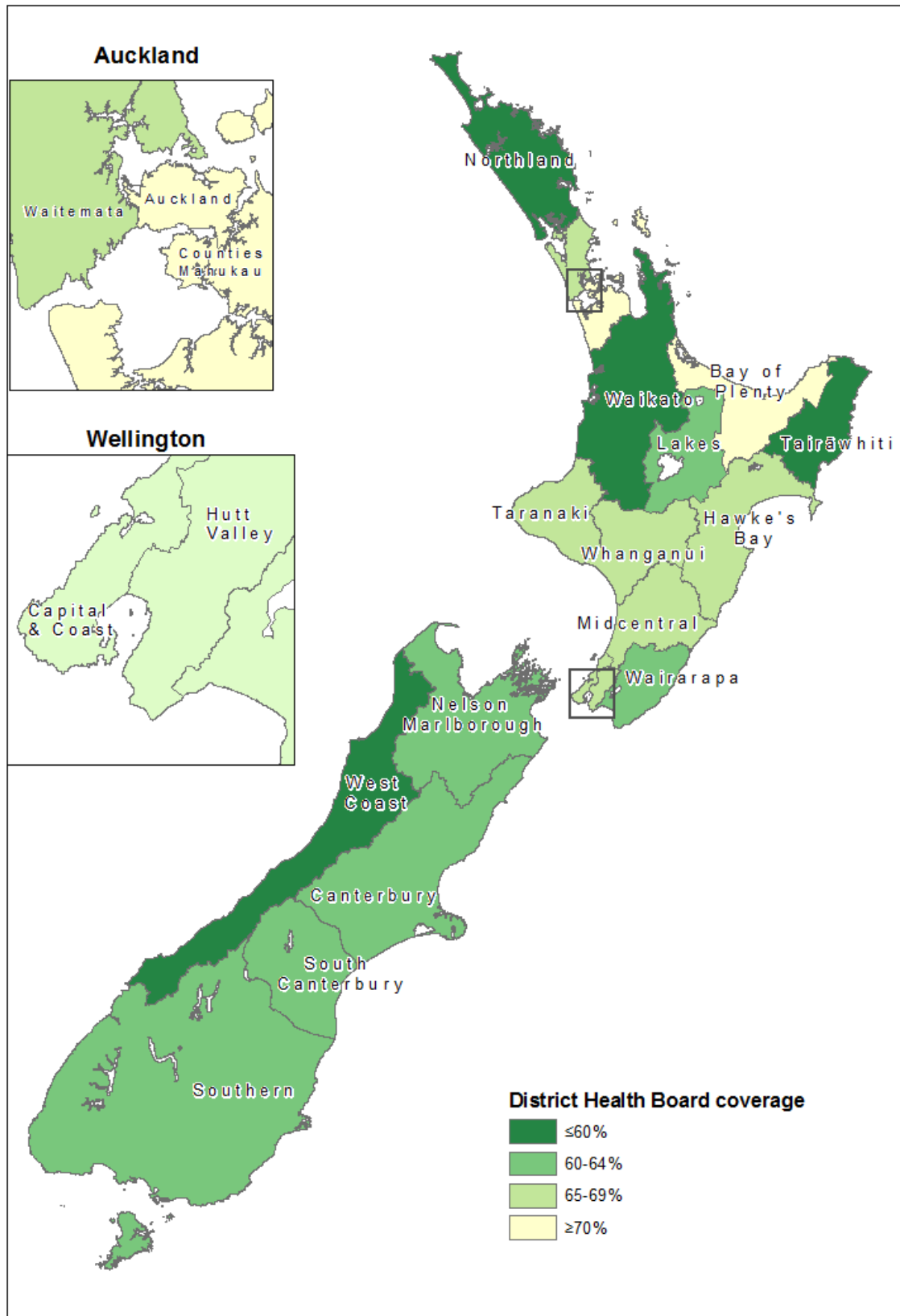
**Figure 6: Overall BSA coverage (%) of women aged 50–69 years in the two years ending 31 March 2019 by District Health Board**



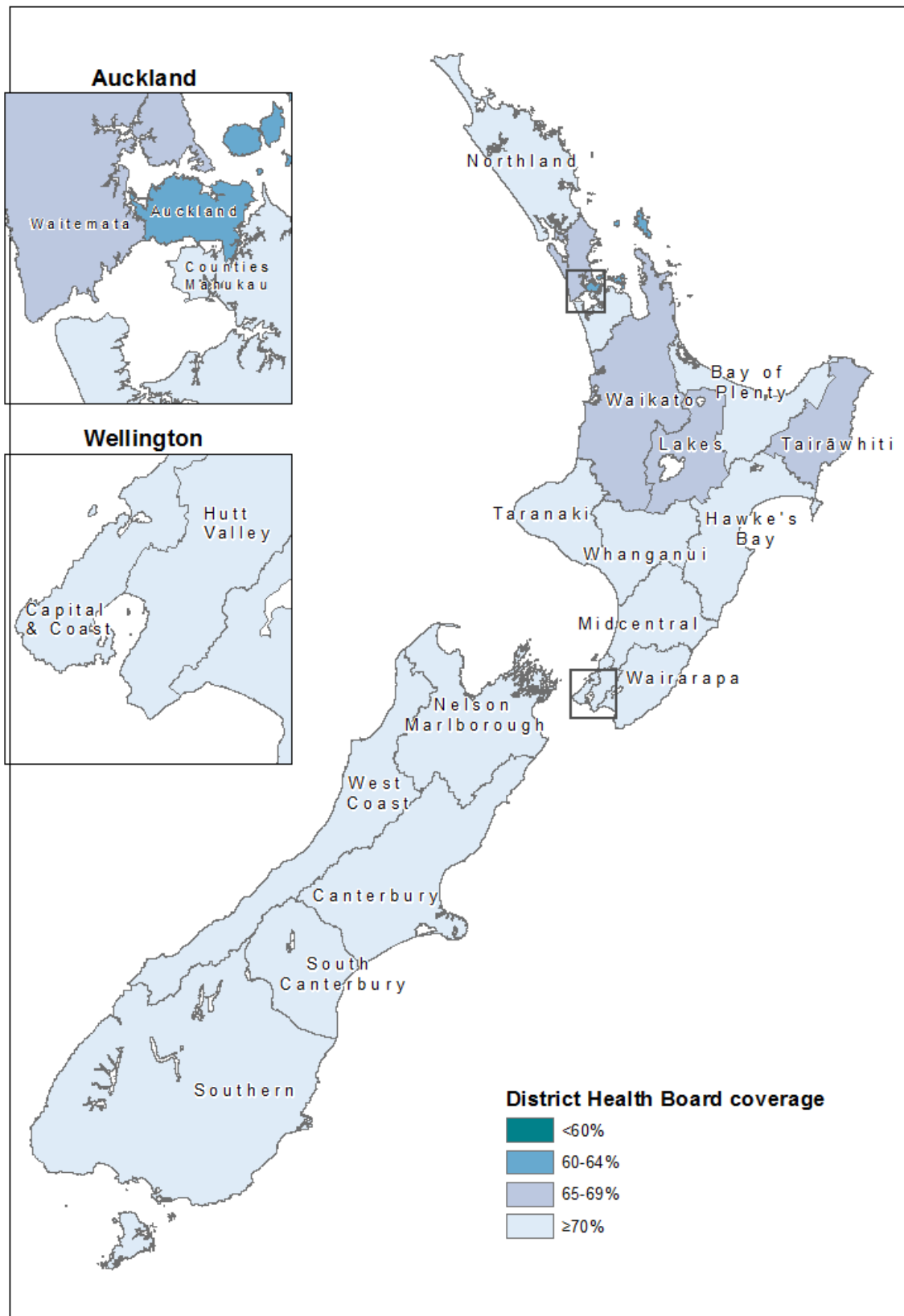
**Figure 7: BSA coverage (%) of Māori women aged 50–69 years in the two years ending 31 March 2019**



**Figure 8: BSA coverage (%) of Pacific women aged 50–69 years in the two years ending 31 March 2019**



**Figure 9: Overall BSA coverage (%) of women aged 50–69 years in the two years ending 31 March 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 March 2019 by District Health Board**

DHB	Eligible Population					Screens						Coverage				
	Māori	Pacific	Asian	Other	Total	Māori	Pacific	Asian	Other	Unspecified	Total	Māori	Pacific	Asian	Other	Total
Northland	5,991	334	918	17,872	25,115	4,347	196	447	12,740	9	17,739	72.6%	58.7%	48.7%	71.3%	70.6%
Waitemata	4,856	3,680	14,283	48,880	71,699	3,139	2,532	9,456	31,566	17	46,710	64.6%	68.8%	66.2%	64.6%	65.1%
Auckland	3,764	4,976	16,084	29,571	54,395	2,232	3,549	10,434	18,361	103	34,679	59.3%	71.3%	64.9%	62.1%	63.8%
Counties Manukau	6,904	9,343	15,654	27,361	59,262	4,523	7,778	10,182	20,032	15	42,530	65.5%	83.2%	65.0%	73.2%	71.8%
Waikato	7,848	933	3,833	36,951	49,565	4,612	558	1,908	26,690	22	33,790	58.8%	59.8%	49.8%	72.2%	68.2%
Lakes	3,558	241	898	9,206	13,903	2,216	149	362	6,587	17	9,331	62.3%	61.8%	40.3%	71.6%	67.1%
Bay of Plenty	5,426	288	1,666	23,888	31,268	3,538	201	692	18,234	5	22,670	65.2%	69.8%	41.5%	76.3%	72.5%
Tairāwhiti	2,434	104	129	3,388	6,055	1,585	59	59	2,444	1	4,148	65.1%	56.7%	45.7%	72.1%	68.5%
Taranaki	1,832	108	528	12,816	15,284	1,142	73	242	9,891	6	11,354	62.3%	67.6%	45.8%	77.2%	74.3%
Hawke's Bay	3,701	421	854	17,444	22,420	2,602	291	407	13,053	19	16,372	70.3%	69.1%	47.7%	74.8%	73.0%
Whanganui	1,619	123	294	6,651	8,687	1,184	80	135	5,489	3	6,891	73.1%	65.0%	45.9%	82.5%	79.3%
MidCentral	2,815	383	1,394	17,746	22,338	1,884	263	758	14,199	9	17,113	66.9%	68.7%	54.4%	80.0%	76.6%
Hutt Valley	2,149	999	2,086	13,024	18,258	1,475	678	1,420	10,083	12	13,668	68.6%	67.9%	68.1%	77.4%	74.9%
Capital and Coast	2,841	1,988	4,826	26,334	35,989	1,902	1,363	2,889	19,721	36	25,911	66.9%	68.6%	59.9%	74.9%	72.0%
Wairarapa	698	69	155	5,505	6,427	468	44	100	4,349	7	4,968	67.0%	63.8%	64.5%	79.0%	77.3%
Nelson Marlborough	1,388	164	676	19,998	22,226	1,019	104	315	16,244	28	17,710	73.4%	63.4%	46.6%	81.2%	79.7%
West Coast	396	25	99	4,154	4,674	268	12	54	3,028	19	3,381	67.7%	48.0%	54.5%	72.9%	72.3%
Canterbury	3,698	931	5,574	58,373	68,576	2,602	583	2,758	46,332	54	52,329	70.4%	62.6%	49.5%	79.4%	76.3%
South Canterbury	416	40	244	7,846	8,546	254	25	64	6,042	3	6,388	61.1%	62.5%	26.2%	77.0%	74.7%
Southern	2,489	353	1,889	36,125	40,856	1,700	212	771	28,135	34	30,852	68.3%	60.1%	40.8%	77.9%	75.5%
Unspecified	0	0			0	160	34	45	1,473	0	1,712					
<b>Total</b>	<b>64,823</b>	<b>25,503</b>	<b>72,084</b>	<b>423,133</b>	<b>585,543</b>	<b>42,852</b>	<b>18,784</b>	<b>43,498</b>	<b>314,693</b>	<b>419</b>	<b>420,246</b>	<b>66.1%</b>	<b>73.7%</b>	<b>60.3%</b>	<b>74.4%</b>	<b>71.8%</b>

## DHB coverage comparison trends by ethnicity

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

DHB	Māori			Pacific			Asian			Other			Total		
	Mar-17	Mar-18	Mar-19	Mar-17	Mar-18	Mar-19	Mar-17	Mar-18	Mar-19	Mar-17	Mar-18	Mar-19	Mar-17	Mar-18	Mar-19
Northland	71.5%	69.6%	72.6%	66.8%	62.2%	58.7%	50.2%	48.6%	48.7%	74.2%	72.3%	71.3%	72.5%	70.8%	70.6%
Waitemata	65.1%	64.3%	64.6%	67.1%	66.7%	68.8%	67.7%	66.5%	66.2%	67.5%	65.0%	64.6%	67.1%	65.3%	65.1%
Auckland	58.3%	58.3%	59.3%	71.6%	69.2%	71.3%	69.6%	66.7%	64.9%	61.3%	61.5%	62.1%	64.8%	63.6%	63.8%
Counties Manukau	64.0%	64.9%	65.5%	76.0%	80.1%	83.2%	63.2%	65.4%	65.0%	69.5%	71.6%	73.2%	68.7%	70.6%	71.8%
Waikato	58.6%	58.5%	58.8%	56.7%	58.3%	59.8%	48.6%	49.9%	49.8%	70.2%	72.8%	72.2%	67.5%	68.7%	68.2%
Lakes	62.5%	65.4%	62.3%	62.4%	64.4%	61.8%	45.2%	47.1%	40.3%	71.5%	75.9%	71.6%	68.8%	71.5%	67.1%
Bay of Plenty	60.0%	60.8%	65.2%	67.5%	66.2%	69.8%	44.5%	42.7%	41.5%	74.1%	74.8%	76.3%	69.2%	70.8%	72.5%
Tairāwhiti	69.0%	67.4%	65.1%	65.6%	63.3%	56.7%	50.4%	52.4%	45.7%	73.0%	72.2%	72.1%	71.5%	69.8%	68.5%
Taranaki	62.4%	62.1%	62.3%	62.4%	61.6%	67.6%	47.3%	46.8%	45.8%	76.5%	77.6%	77.2%	74.1%	74.7%	74.3%
Hawke's Bay	67.6%	70.1%	70.3%	67.3%	66.7%	69.1%	54.1%	51.9%	47.7%	75.4%	74.3%	74.8%	73.6%	72.8%	73.0%
Whanganui	72.1%	71.6%	73.1%	71.4%	68.1%	65.0%	53.2%	49.6%	45.9%	80.6%	81.1%	82.5%	78.4%	78.3%	79.3%
MidCentral	66.4%	66.8%	66.9%	66.6%	68.4%	68.7%	57.8%	56.1%	54.4%	79.0%	79.3%	80.0%	76.3%	76.3%	76.6%
Hutt Valley	68.2%	68.7%	68.6%	66.6%	66.2%	67.9%	69.7%	65.1%	68.1%	77.3%	73.5%	77.4%	75.5%	71.7%	74.9%
Capital and Coast	68.0%	68.2%	66.9%	67.6%	67.8%	68.6%	63.6%	62.1%	59.9%	74.8%	75.3%	74.9%	72.9%	72.8%	72.0%
Wairarapa	68.9%	70.4%	67.0%	70.3%	70.8%	63.8%	53.6%	57.2%	64.5%	77.5%	75.3%	79.0%	76.4%	74.4%	77.3%
Nelson Marlborough	76.7%	74.3%	73.4%	66.7%	67.9%	63.4%	45.2%	44.5%	46.6%	81.4%	80.8%	81.2%	80.6%	79.4%	79.7%
West Coast	68.5%	62.8%	67.7%	35.0%	32.0%	48.0%	51.3%	52.2%	54.5%	78.9%	73.4%	72.9%	76.3%	72.3%	72.3%
Canterbury	69.9%	68.0%	70.4%	65.0%	63.6%	62.6%	50.6%	50.2%	49.5%	79.9%	78.8%	79.4%	76.4%	76.0%	76.3%
South Canterbury	66.8%	67.3%	61.1%	50.0%	59.0%	62.5%	26.0%	26.9%	26.2%	79.9%	78.4%	77.0%	77.7%	76.5%	74.7%
Southern	66.7%	68.6%	68.3%	63.3%	62.2%	60.1%	45.4%	41.5%	40.8%	76.5%	77.0%	77.9%	74.9%	75.0%	75.5%
<b>Total</b>	<b>65.4%</b>	<b>65.5%</b>	<b>66.1%</b>	<b>70.8%</b>	<b>71.7%</b>	<b>73.7%</b>	<b>62.5%</b>	<b>61.7%</b>	<b>60.3%</b>	<b>74.1%</b>	<b>74.0%</b>	<b>74.4%</b>	<b>71.9%</b>	<b>71.7%</b>	<b>71.8%</b>