

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

For the period ending  
30 September 2018

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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 is adding 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 are 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 July 2016 to 30 September 2018)

Denominator: Women screened in the 24 month period preceding the report end date who are eligible for rescreening. (1 July 2014 to 30 June 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 30 September 2018 was extracted from the national BreastScreen Aotearoa database (the Database) on 17 October 2018.

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 30 September 2016, 30 September 2017 and 30 September 2018 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:

- 30 September 2016, the denominator is the projected population for 30 September 2015
- 30 September 2017, the denominator is the projected population for 30 September 2016
- 30 September 2018, the denominator is the projected population for 30 September 2017

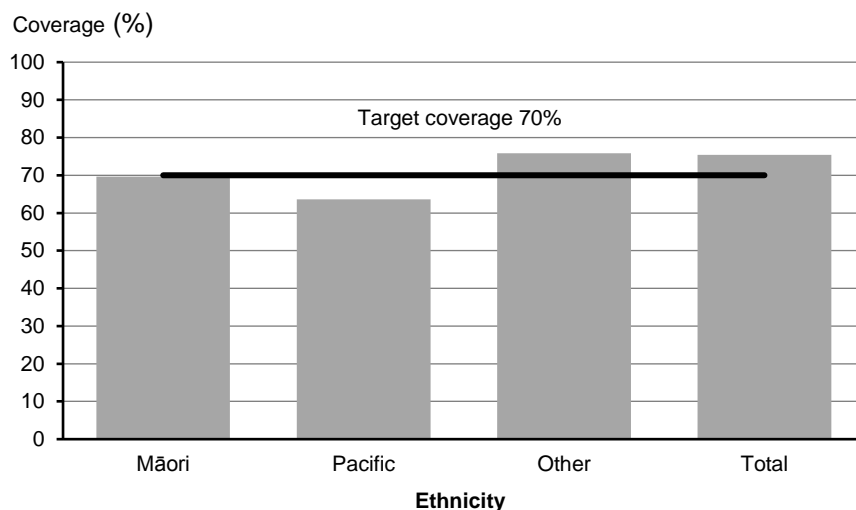
Delivery of BSA services through mobile units may also result in fluctuations in the number of women screened in a quarter which may impact on coverage from year to year depending on the mobile unit schedule.

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

## Canterbury coverage

### Canterbury coverage by ethnicity in the two years ending 30 September 2018

**Figure 1: BSA coverage (%) in the two years ending 30 September 2018 by ethnicity, women aged 50–69 years, Total Coverage**



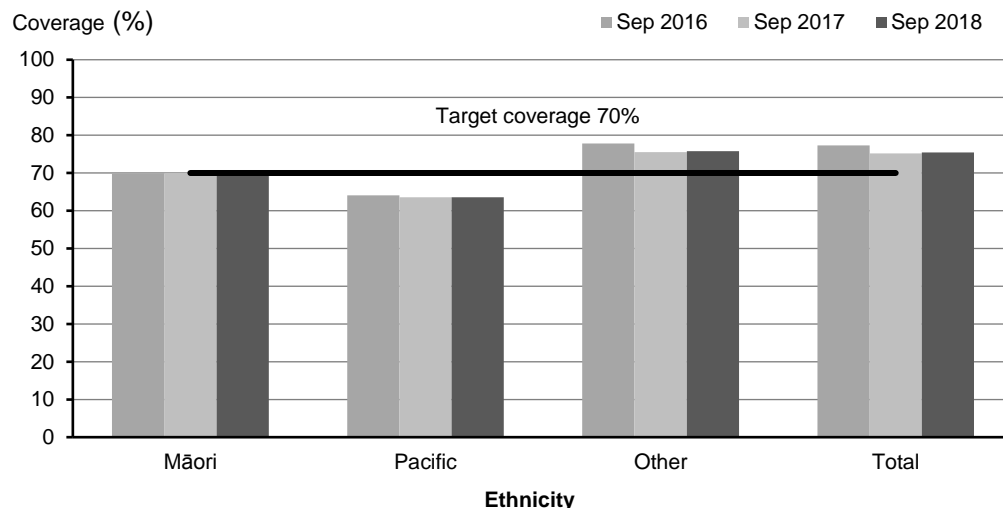
**Table 1: BSA coverage (%) in the two years ending 30 September 2018 by ethnicity, women aged 50–69 years, Total Coverage**

Ethnicity	Population	Women screened in last 2 years	2-year coverage	Additional screens to reach target*
Māori	3,613	2,515	69.60%	14
Pacific	911	579	63.60%	58
Other	63,357	48,018	75.80%	
Unspecified		58		
<b>Total</b>	<b>67,881</b>	<b>51,170</b>	<b>75.40%</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%.

## Canterbury coverage trends by ethnicity

**Figure 2: BSA coverage (%) of women aged 50–69 years in the two years ending 30 September 2018 by ethnicity, Total Coverage**



**Table 2: BSA number of screens in women aged 50–69 years by ethnicity and quarter, Quarter 3 2017 –Quarter 3 2018**

Ethnicity	Number of screens by quarter				
	Q3 (Jul - Sep) 2017	Q4 (Oct- Dec) 2017	Q1 (Jan - Mar) 2018	Q2 (Apr - Jun) 2018	Q3 (Jul - Sep) 2018
Māori	298	305	277	405	336
Pacific	80	71	52	93	93
Other	8,135	5,138	5,683	5,865	7,653
<b>Total</b>	<b>8,513</b>	<b>5,514</b>	<b>6,012</b>	<b>6,363</b>	<b>8,082</b>

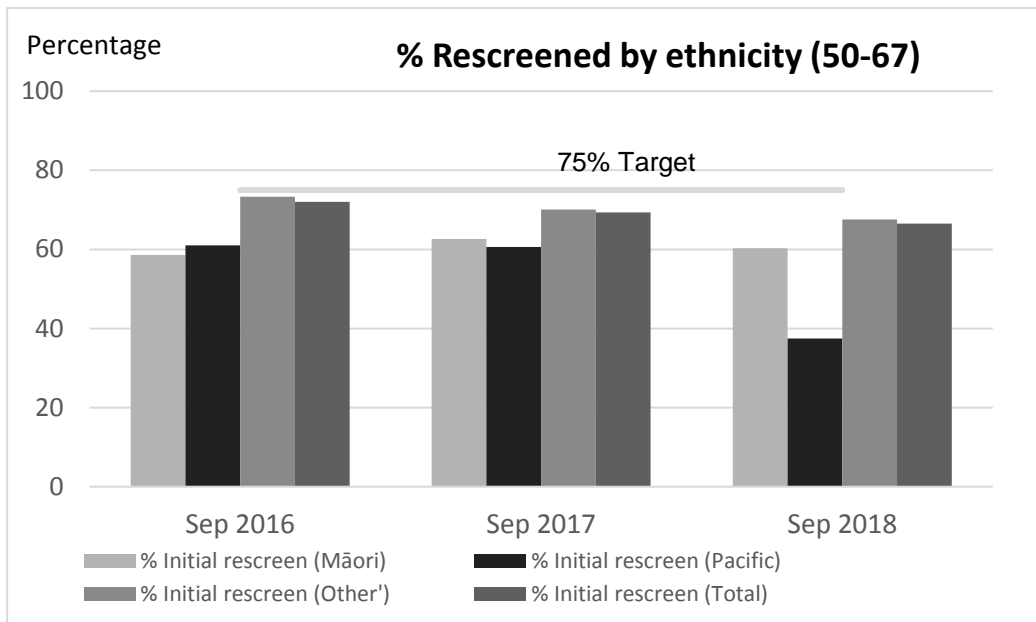


## Number of Initial Rescreens by Ethnicity

**Table 3: BSA number of eligible screens and initial rescreens for women aged 50–67 years by ethnicity for the rescreen period 1 July 2016 to 30 September 2018 (eligible period 1 July 2014 to 30 June 2016)**

Ethnicity	Number of eligible screens	Number of initial rescreens	%	CI (95%)
Māori	73	44	60.3%	(48.1, 71.5)
Pacific	24	9	37.5%	(18.8, 59.4)
Other	1,062	718	67.6%	(64.7, 70.4)
<b>Total</b>	<b>1,159</b>	<b>771</b>	<b>66.5%</b>	<b>(63.7, 69.2)</b>

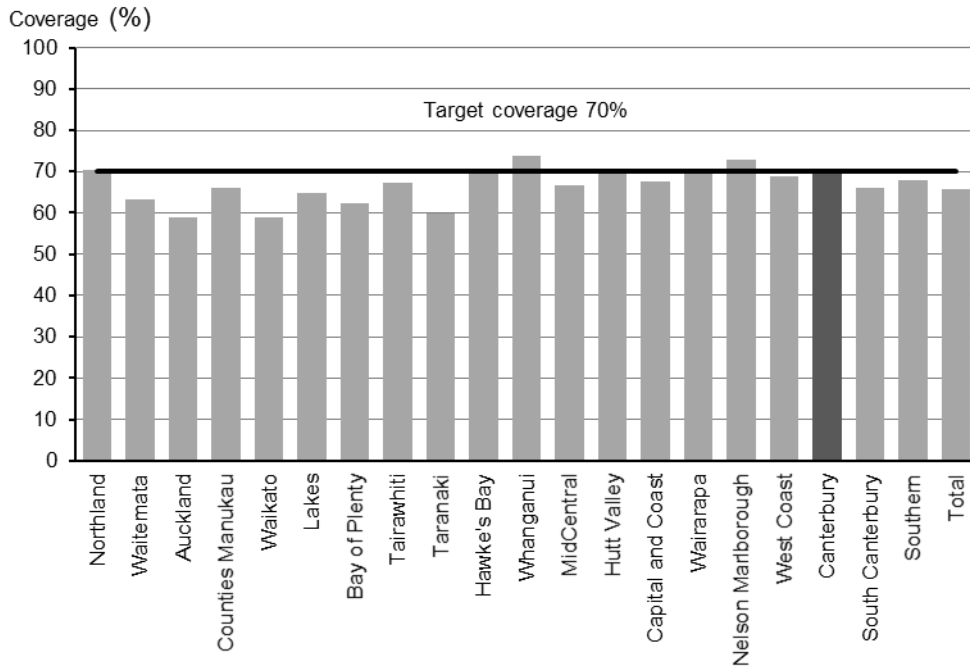
**Figure 3: BSA number of initial eligible rescreens by ethnicity**



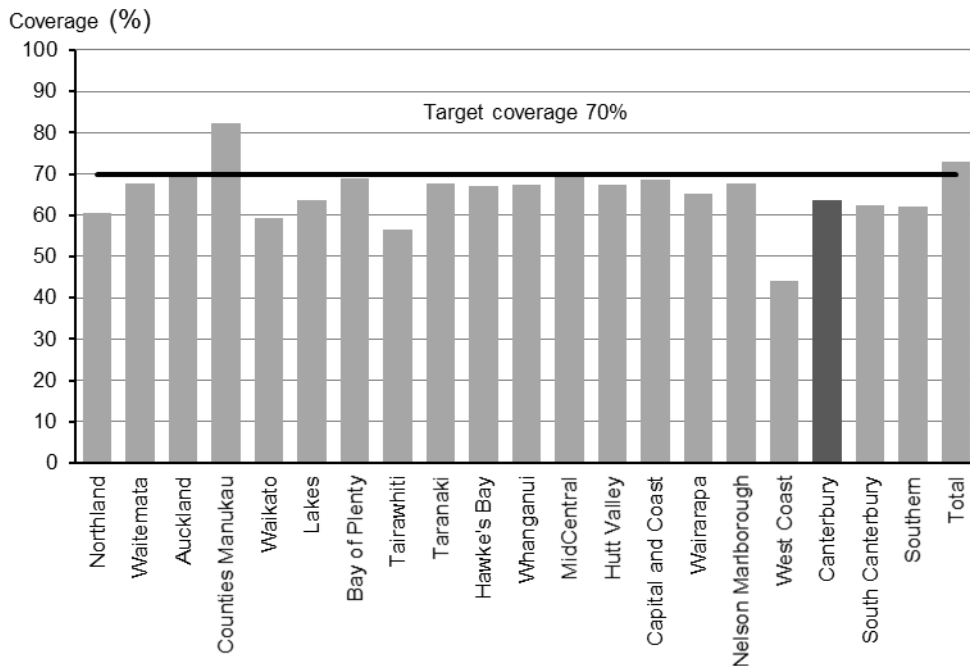
# DHB coverage comparisons

## DHB coverage by ethnicity in the two years ending 30 September 2018

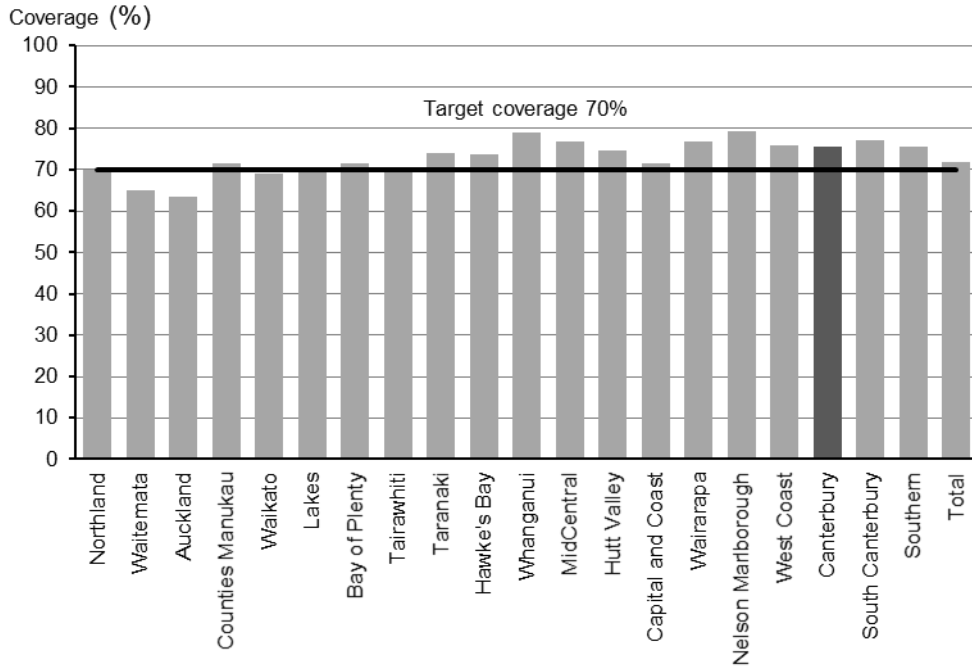
**Figure 4: BSA coverage (%) of Māori women aged 50–69 years in the two years ending 30 September 2018 by District Health Board**



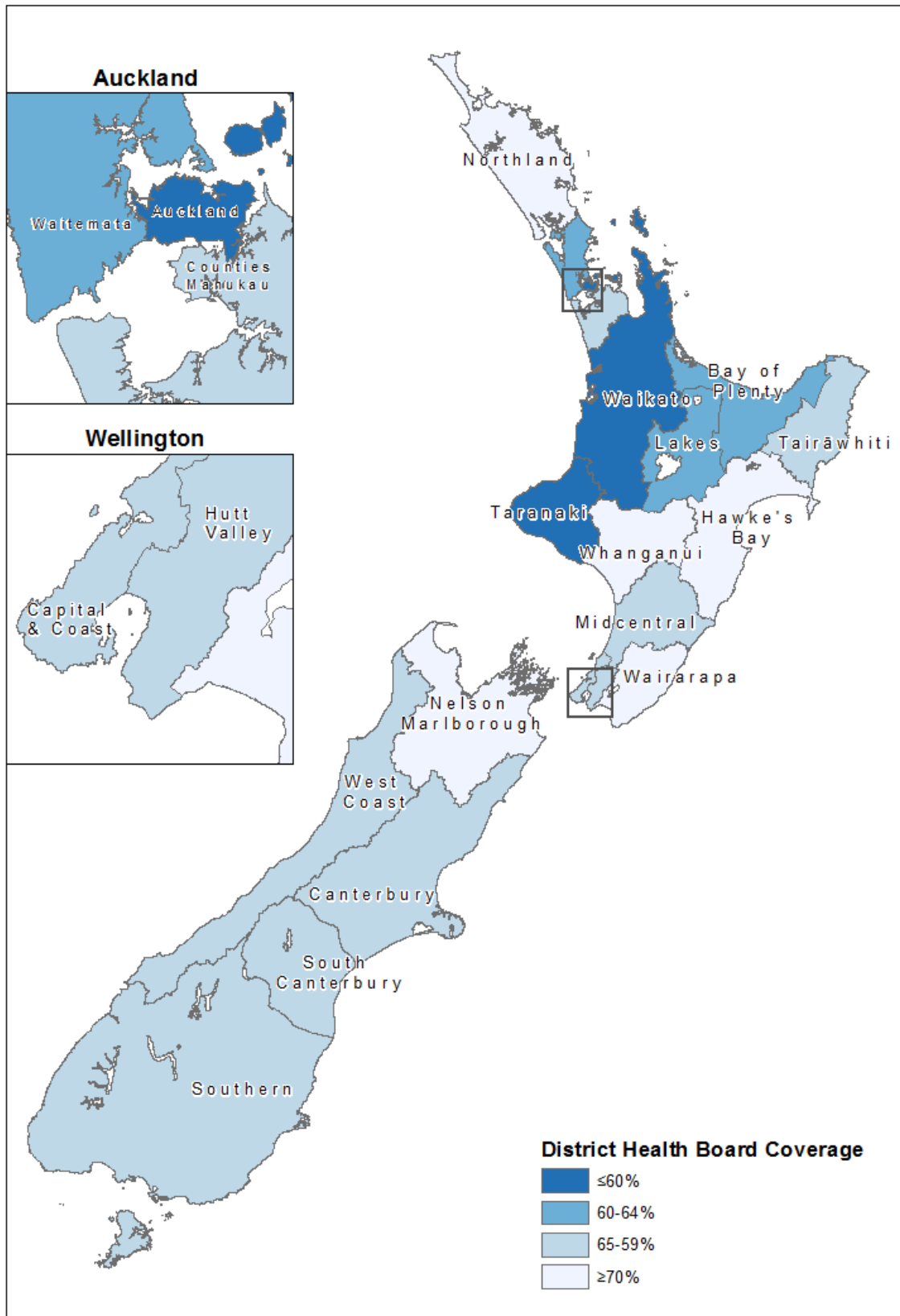
**Figure 5: BSA coverage (%) of Pacific women aged 50–69 years in the two years ending 30 September 2018 by District Health Board**



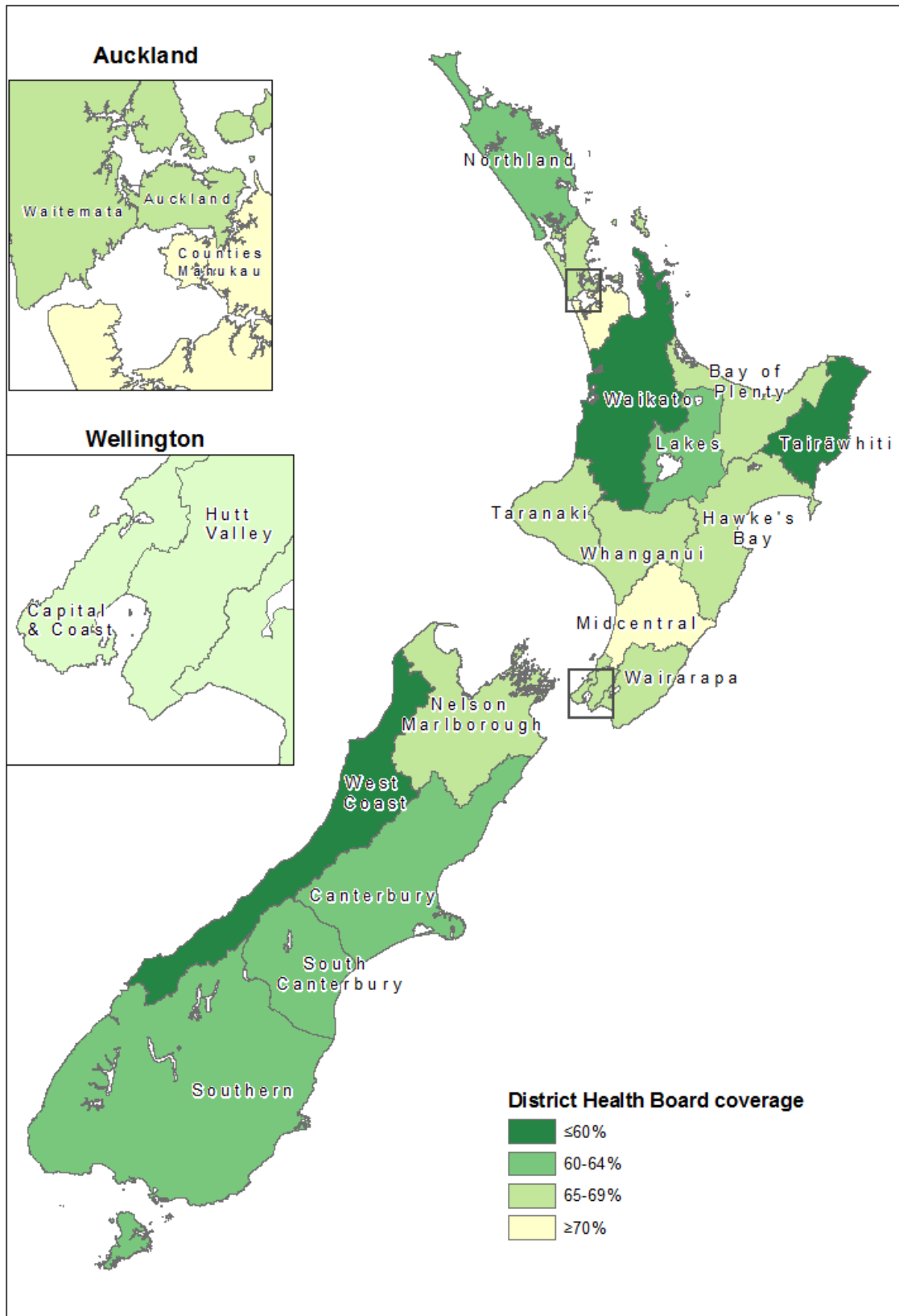
**Figure 6: Overall BSA coverage (%) of women aged 50–69 years in the two years ending 30 September 2018 by District Health Board**



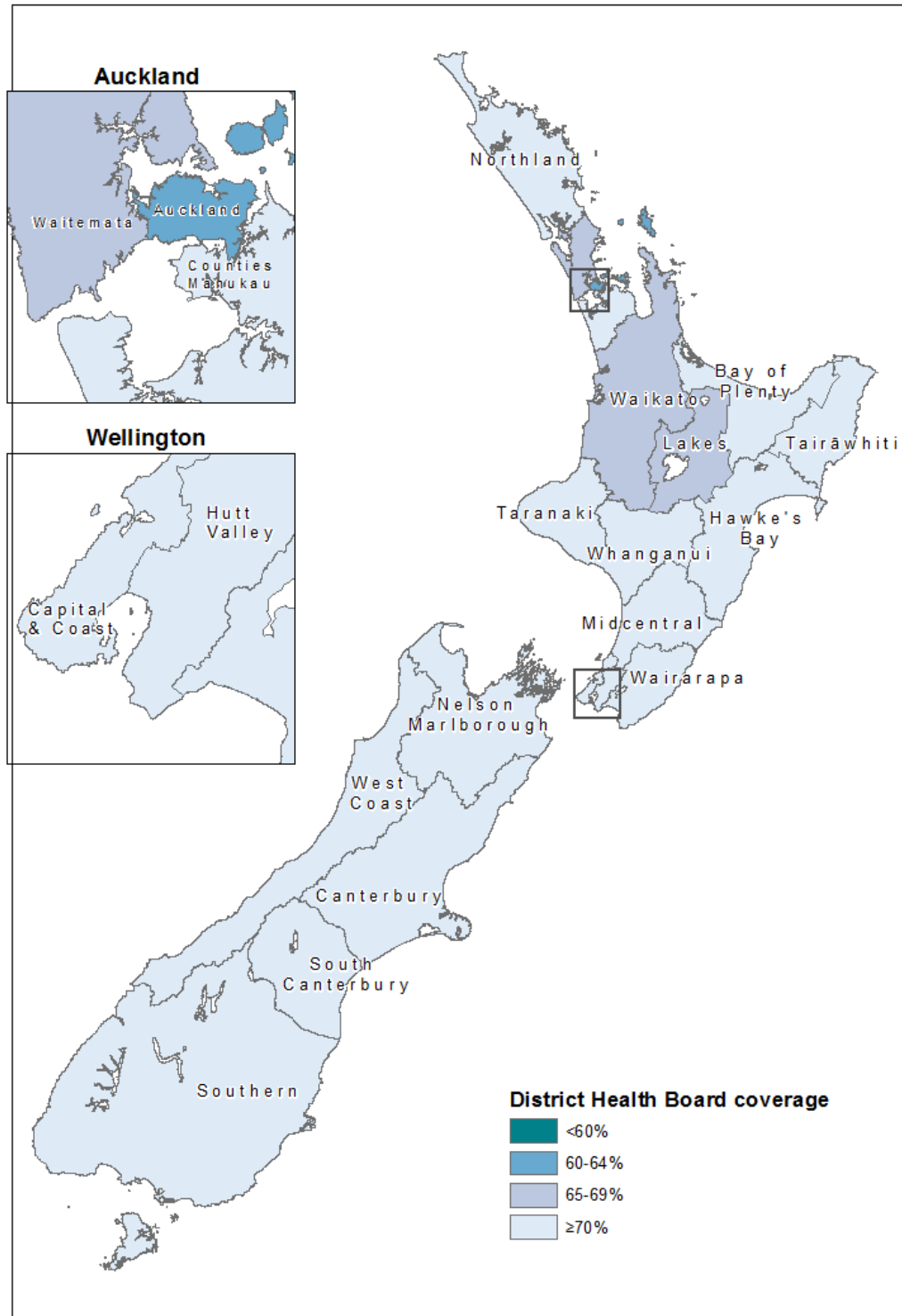
**Figure 7: BSA coverage (%) of Māori women aged 50–69 years in the two years ending 30 September 2018**



**Figure 8: BSA coverage (%) of Pacific women aged 50–69 years in the two years ending 30 September 2018**



**Figure 9: Overall BSA coverage (%) of women aged 50–69 years in the two years ending 30 September 2018 by District Health Board**



**Table 4: BSA number of screens and coverage (%) in women aged 50–69 years in the two years ending 30 September 2018 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	5,911	319	873	17,792	24,895	4,159	193	414	12,655	10	17,431	70.4%	60.5%	47.4%	71.1%	70.0%
Waitemata	4,766	3,600	13,788	48,620	70,774	3,007	2,438	9,085	31,472	18	46,020	63.1%	67.7%	65.9%	64.7%	65.0%
Auckland	3,689	4,906	15,529	29,611	53,735	2,173	3,396	10,192	18,152	91	34,004	58.9%	69.2%	65.6%	61.3%	63.3%
Counties Manukau	6,769	9,128	15,159	27,501	58,557	4,472	7,512	9,948	19,873	22	41,827	66.1%	82.3%	65.6%	72.3%	71.4%
Waikato	7,743	898	3,658	36,731	49,030	4,571	533	1,835	26,853	46	33,838	59.0%	59.4%	50.2%	73.1%	69.0%
Lakes	3,513	241	853	9,216	13,823	2,274	153	390	6,817	14	9,648	64.7%	63.5%	45.7%	74.0%	69.8%
Bay of Plenty	5,356	283	1,576	23,743	30,958	3,337	195	664	17,912	33	22,141	62.3%	68.9%	42.1%	75.4%	71.5%
Tairāwhiti	2,399	101	126	3,403	6,029	1,616	57	68	2,517	1	4,259	67.4%	56.4%	54.0%	74.0%	70.6%
Taranaki	1,792	102	503	12,766	15,163	1,073	69	235	9,843	6	11,226	59.9%	67.6%	46.7%	77.1%	74.0%
Hawke's Bay	3,661	421	819	17,409	22,310	2,579	283	418	13,147	15	16,442	70.4%	67.2%	51.0%	75.5%	73.7%
Whanganui	1,594	117	279	6,651	8,641	1,176	79	133	5,442	4	6,834	73.8%	67.5%	47.7%	81.8%	79.1%
MidCentral	2,765	368	1,339	17,736	22,208	1,846	259	743	14,192	8	17,048	66.8%	70.4%	55.5%	80.0%	76.8%
Hutt Valley	2,124	994	2,016	13,029	18,163	1,477	670	1,374	9,995	13	13,529	69.5%	67.4%	68.2%	76.7%	74.5%
Capital and Coast	2,781	1,963	4,656	26,319	35,719	1,883	1,344	2,762	19,517	44	25,550	67.7%	68.5%	59.3%	74.2%	71.5%
Wairarapa	693	66	156	5,515	6,430	484	43	94	4,316	7	4,944	69.8%	65.2%	60.3%	78.3%	76.9%
Nelson Marlborough	1,363	149	646	19,993	22,151	992	101	292	16,128	28	17,541	72.8%	67.8%	45.2%	80.7%	79.2%
West Coast	386	25	96	4,139	4,646	265	11	53	3,171	21	3,521	68.7%	44.0%	55.2%	76.6%	75.8%
Canterbury	3,613	911	5,339	58,018	67,881	2,515	579	2,629	45,389	58	51,170	69.6%	63.6%	49.2%	78.2%	75.4%
South Canterbury	406	40	229	7,836	8,511	268	25	66	6,204	7	6,570	66.0%	62.5%	28.8%	79.2%	77.2%
Southern	2,444	338	1,784	36,115	40,681	1,656	210	728	28,119	39	30,752	67.8%	62.1%	40.8%	77.9%	75.6%
Unspecified	0	0			0	164	43	262	1,603	1	2,073					
<b>Total</b>	<b>63,768</b>	<b>24,970</b>	<b>69,424</b>	<b>422,143</b>	<b>580,305</b>	<b>41,987</b>	<b>18,193</b>	<b>42,385</b>	<b>313,317</b>	<b>486</b>	<b>416,368</b>	<b>65.8%</b>	<b>72.9%</b>	<b>61.1%</b>	<b>74.2%</b>	<b>71.7%</b>

## DHB coverage comparison trends by ethnicity

**Table 5: BSA coverage (%) of women aged 50–69 years in the two years ending 30 September, 2016, 2017, 2018, by ethnicity and District Health Board**

DHB	Māori			Pacific			Asian			Other			Total		
	Sep-16	Sep-17	Sep-18	Sep-16	Sep-17	Sep-18	Sep-16	Sep-17	Sep-18	Sep-16	Sep-17	Sep-18	Sep-16	Sep-17	Sep-18
Northland	70.5%	71.6%	70.4%	66.8%	66.1%	60.5%	46.0%	42.5%	47.4%	74.0%	73.2%	71.1%	72.4%	72.0%	70.0%
Waitemata	65.4%	63.0%	63.1%	67.7%	67.1%	67.7%	62.8%	60.6%	65.9%	68.1%	65.7%	64.7%	67.8%	65.8%	65.0%
Auckland	57.9%	57.9%	58.9%	71.5%	71.6%	69.2%	64.4%	62.7%	65.6%	61.6%	60.5%	61.3%	64.5%	63.7%	63.3%
Counties Manukau	65.4%	64.3%	66.1%	75.6%	75.7%	82.3%	58.5%	58.9%	65.6%	70.0%	70.4%	72.3%	68.8%	69.0%	71.4%
Waikato	59.0%	58.2%	59.0%	58.3%	57.4%	59.4%	43.6%	43.8%	50.2%	69.8%	72.2%	73.1%	66.5%	68.4%	69.0%
Lakes	61.8%	64.7%	64.7%	55.9%	61.4%	63.5%	39.9%	40.2%	45.7%	70.7%	74.0%	74.0%	67.0%	70.0%	69.8%
Bay of Plenty	61.3%	57.7%	62.3%	69.1%	65.4%	68.9%	41.3%	37.2%	42.1%	75.2%	72.3%	75.4%	71.4%	68.5%	71.5%
Tairāwhiti	68.3%	67.2%	67.4%	61.1%	70.0%	56.4%	40.5%	48.4%	54.0%	73.4%	74.2%	74.0%	70.6%	70.9%	70.6%
Taranaki	60.8%	63.3%	59.8%	63.2%	64.2%	67.6%	41.9%	41.4%	46.7%	76.3%	77.0%	77.1%	73.6%	74.5%	74.0%
Hawke's Bay	68.5%	68.0%	70.4%	65.2%	66.4%	67.2%	50.3%	47.3%	51.0%	75.6%	75.5%	75.5%	73.6%	73.5%	73.7%
Whanganui	72.8%	70.3%	73.7%	76.2%	71.4%	67.5%	51.4%	47.7%	47.7%	80.8%	81.1%	81.8%	78.8%	78.4%	79.1%
MidCentral	66.4%	65.9%	66.8%	65.5%	66.7%	70.7%	54.4%	52.6%	55.5%	78.7%	78.8%	80.0%	76.0%	75.9%	76.8%
Hutt Valley	67.2%	69.1%	69.6%	65.7%	67.5%	67.4%	64.9%	63.6%	68.2%	77.8%	77.4%	76.7%	75.1%	75.2%	74.5%
Capital and Coast	68.4%	68.2%	67.7%	67.6%	68.5%	68.5%	59.1%	57.3%	59.3%	76.3%	75.5%	74.1%	73.7%	73.2%	71.5%
Wairarapa	70.7%	69.3%	70.0%	75.4%	69.2%	65.2%	54.2%	46.2%	60.3%	78.3%	76.8%	78.2%	77.1%	75.4%	76.9%
Nelson Marlborough	74.7%	77.6%	72.8%	67.7%	69.3%	67.8%	41.1%	39.9%	45.2%	81.7%	82.0%	80.7%	80.2%	80.8%	79.2%
West Coast	71.6%	68.6%	68.7%	35.0%	32.0%	44.0%	51.8%	46.9%	55.2%	77.7%	78.0%	76.6%	77.1%	77.0%	75.8%
Canterbury	69.8%	71.2%	69.6%	64.1%	63.4%	63.6%	47.0%	44.2%	49.2%	80.1%	78.5%	78.2%	77.3%	76.0%	75.4%
South Canterbury	66.2%	70.0%	66.0%	54.8%	60.0%	62.5%	22.9%	23.1%	28.8%	79.0%	79.0%	79.2%	77.0%	77.2%	77.2%
Southern	67.3%	67.3%	67.8%	62.7%	62.8%	62.1%	41.9%	37.1%	40.8%	78.5%	76.9%	77.9%	76.6%	75.1%	75.6%
<b>Total</b>	<b>65.5%</b>	<b>65.2%</b>	<b>65.8%</b>	<b>70.7%</b>	<b>70.8%</b>	<b>72.9%</b>	<b>57.7%</b>	<b>56.3%</b>	<b>61.1%</b>	<b>74.5%</b>	<b>73.9%</b>	<b>74.2%</b>	<b>72.1%</b>	<b>71.6%</b>	<b>71.7%</b>