Table 2: Differences in hospitalisations and healthcare utilisation between Māori and non-Māori children, by age group, 2003–2014.

		Per 100,000			Annual excess		
	Period	Māori	Non-Māori	Māori:non-Māori	Interactions for Māori		
All ages 0-<15 years)	All ages 0-<15 years)						
Avoidable hospital admissions	2003–2014	6,665	4,893	1.36 (1.35, 1.37)	3,987		
Laboratory claims	2006–2014	52,348	88,060	0.59 (0.59, 0.59)	-81,126		
Pharmaceutical claims	2006–2014	443,003	487,799	0.91 (0.91, 0.91)	-101,763		
Mental health consultations	2009–2014	24,619	24,377	1.01 (1.01, 1.01)	558		
Outpatient consultations	2006–2014	33,421	43,004	0.78 (0.78, 0.78)	-21,770		
ACC claims	2003–2014	28,983	38,757	0.75 (0.75, 0.75)	-21,996		
Primary care – GP consults	2008–2014	171,794	238,190	0.72 (0.72, 0.72)	-152,540		
Primary care – nursing consults	2008–2014	30,666	25,018	1.23 (1.22, 1.23)	12,976		
Age 0-<1 year							
Avoidable hospital admissions	2003–2014	23,093	15,888	1.45 (1.44, 1.47)	1,248		
Laboratory claims	2006–2014	60,218	115,897	0.52 (0.52, 0.52)	-9,763		
Pharmaceutical claims	2006–2014	771,750	971,359	0.79 (0.79, 0.80)	-34,999		
Mental health consultations	2009–2014	291	581	0.50 (0.44, 0.57)	-49		
Outpatient consultations	2006–2014	60,139	87,618	0.69 (0.68, 0.69)	-4,818		
ACC claims	2003–2014	11,737	15,989	0.73 (0.72, 0.74)	-737		
Age 1-<5 years							
Avoidable hospital admissions	2003–2014	10,435	8,876	1.18 (1.17, 1.19)	989		
Laboratory claims	2006–2014	41,046	81,799	0.50 (0.50, 0.50)	-26,491		

Table 2 (continued): Differences in hospitalisations and healthcare utilisation between Māori and non-Māori children, by age group, 2003–2014.

		Per 100,000		Ratio (95% CI)	Annual excess	
	Period	Māori	Non-Māori	Māori:non-Māori	Interactions for Māori	
Age 1-<5 years						
Pharmaceutical claims	2006–2014	673,331	743,656	0.91 (0.90, 0.91)	-45,713	
Mental health consultations	2009–2014	2,451	2,805	0.87 (0.85, 0.89)	-240	
Outpatient consultations	2006–2014	35,310	48,531	0.73 (0.72, 0.73)	-8,594	
ACC claims	2003–2014	29,961	37,061	0.81 (0.81, 0.81)	-4,502	
Primary care – GP consults (age 0–<5 years)*	2008–2014	267,654	399,184	0.67 (0.67, 0.67)	-110,888	
Primary care – nursing consults (age 0-<5 years)*	2008–2014	46,081	38,451	1.20 (1.19, 1.20)	6,432	
Age 5-<15 years						
Avoidable hospital admissions	2003–2014	3,037	2,309	1.31 (1.30, 1.33)	1,049	
Laboratory claims	2006–2014	56,474	87,863	0.64 (0.64, 0.64)	-45,399	
Pharmaceutical claims	2006–2014	299,632	339,746	0.88 (0.88, 0.88)	-58,018	
Mental health consultations	2009–2014	37,730	35,430	1.06 (1.06, 1.07)	3,361	
Outpatient consultations	2006–2014	29,333	36,516	0.80 (0.80, 0.81)	-10,389	
ACC claims	2003-2014	30,623	41,567	0.74 (0.73, 0.74)	-15,794	
Primary care – GP consults	2008–2014	116,227	157,696	0.74 (0.74, 0.74)	-60,312	
Primary care – nursing consults	2008-2014	21,731	18,302	1.19 (1.18, 1.19)	4,987	

Note: *The primary care data were only available for two age groups: under 5 years (including <1 year) and under 15 years.

 Table 3: Differences in avoidable deaths between Māori and non-Māori children, by sex and age group, 2003–2014.

	Per 100,00		00,000	Ratio (95% CI)			
	Period	Māori	Non-Māori	Māori:non- Māori	Annual excess deaths in Māori		
Age 0-<1 year							
Female	2003-2014	359.16	222.44	1.61 (1.41, 1.84)	11.10		
Male	2003-2014	452.43	271.34	1.67 (1.49, 1.87)	15.58		
Age 1-<5 years							
Female	2003-2014	18.66	9.29	2.01 (1.47, 2.74)	2.89		
Male	2003-2014	25.05	10.06	2.49 (1.90, 3.27)	4.89		
Age 5-<15 years							
Female	2003-2014	10.44	4.28	2.44 (1.85, 3.22)	4.33		
Male	2003-2014	14.06	6.51	2.16 (1.72, 2.71)	5.60		
Total (0-<15 years)	2003-2014	44.32	22.34	1.98 (1.84, 2.13)	49.47		

 Table 4: Cost estimates for the inequity in healthcare utilisation between Māori and non-Māori children, 2003–2014.

	Annual excess for Māori	Unit cost	Source for cost	Annual cost			
Costs to government	Costs to government health sector						
Avoidable hospital admissions	3,987	\$2,314.29	NMDS 2003–2014, mean non-Māori cost weight 0.48, and Ministry of Health national hospital admission mean price 2016/2017 \$4824.67 NZD	\$9,227,420			
Laboratory claims	-81,126	\$11.34	NZHIS 2006–2014, weighted mean non-Māori claim cost	-\$920,268			
Pharmaceutical claims	-101,763	\$11.91	NZHIS 2006–2014, weighted mean non-Māori claim cost	-\$1,212,206			
Mental health consultations	558	\$168.43	Ministry of Health (2016), population-based funding formula for community mental health residential	\$94,053			
Outpatient consultations	-21,770	\$192.42	Auckland DHB and Waikato DHB, hospital outpatient per day	-\$4,189,047			
ACC claims	-21,996	\$263.11	ACC data 2003–2014, weighted mean non-Māori claim cost	-\$5,787,358			
Primary care – GP consults	-152,540	\$10.54	MoH data 2008–2014, non-Māori GP utilisation weights by age groups, and Ministry of Health national average GP fees 2008–2014	-\$1,608,424			
Primary care – nursing consults	12,976	\$30.00	Mills et al (2012), assumed amount per consult	\$389,290			
Subtotal				-\$4,006,540			
Direct costs to Māori	families						
Parental loss of wages (hospital caregiving)	3,987	\$274.00	Assumed amount, 2 days, one caregiver, Statistics NZ median weekly wage in 2017 \$959 NZD	\$1,092,479			
Parental out of pocket (GP consults)	-65,592	\$25.00	Assumed amount, for 43% of GP visits	-\$1,639,804			
Parental out of pocket (nursing consults)	5,839	\$15.00	Assumed amount, for 45% of nursing visits	\$87,590			
Subtotal				-\$459,734			

Table 5: Cost estimates for the inequity in avoidable deaths between Māori and non-Māori children, by sex and age group, 2003–2014.

	Annual excess Māori deaths	VoSL	Non- Māori life expectancy	Annual VoSL	Annual YLL	Annual cost
Age 0-<1 year						
Female	11.10	\$3,950,000	83.92	\$47,066	931.81	\$43,856,283
Male	15.58	\$3,950,000	80.31	\$49,186	1,250.95	\$61,529,002
Age 1-<5 years	Age 1-<5 years					
Female	2.89	\$3,950,000	81.75	\$48,319	236.02	\$11,404,218
Male	4.89	\$3,950,000	78.19	\$50,519	382.11	\$19,303,476
Age 5-<15 years						
Female	4.33	\$3,950,000	74.81	\$52,800	323.66	\$17,089,232
Male	5.60	\$3,950,000	71.26	\$55,432	398.77	\$22,104,896
Total						\$175,287,107

Table 6: Estimates of total costs of health inequity between Māori and non-Māori children, 2003–2014.

		Annual cost			
Costs to government health sector					
Avoidable hospital admissions		\$9,227,420			
Laboratory claims		-\$920,268			
Pharmaceutical claims		-\$1,212,206			
Mental health consultations		\$94,053			
Outpatient consultations		-\$4,189,047			
ACC claims		-\$5,787,358			
Primary care – GP and nursing consults		-\$1,219,134			
	Subtotal	-\$4,006,540			
Costs to society					
Caregiver loss of wages (hospital caregiving)		\$1,092,479			
Caregiver out of pocket (GP consults)		-\$1,639,804			
Caregiver out of pocket (nursing consults)		\$87,590			
Avoidable deaths		\$175,287,107			
	Subtotal	\$174,827,373			
	Total	\$170,820,834			