Unmet need for prescriptions due to cost							
	Unmet need		No unmet need				
	N=5,889		N=65,613				
	%	95% CI	%	95% CI			
Sex							
Female	71.5	(70.3–72.6)	56.0	(55.6–56.4)			
Male	28.5	(27.4–29.7)	44.0	(43.6-44.4)			
Age group							
15–24	12.3	(11.4–13.1)	11.1	(10.8–11.3)			
25–34	22.1	(21.0-23.1)	15.1	(14.9–15.4)			
35–44	19.5	(18.4–20.5)	16.2	(15.9–16.5)			
45–54	19.7	(18.6–20.7)	15.8	(15.6–16.1)			
55-64	15.6	(14.7–16.6)	16.2	(15.9–16.5)			
65–74	7.5	(6.9–8.2)	14.4	(14.1–14.6)			
75+	3.4	(2.9–3.8)	11.1	(10.9–11.4)			
Prioritised ethnicity							
Māori	39.1	(37.9–40.4)	19.0	(18.7–19.3)			
Pacific people	11.9	(11.1–12.7)	4.6	(4.5–4.8)			
Asian	4.5	(4.0–5.0)	8.4	(8.2–8.6)			
NZ European/Other	44.5	(43.2–45.7)	67.9	(67.6–68.3)			
NZDep quintiles		1					
1 (least deprived)	5.0	(4.4–5.5)	14.6	(14.3–14.9)			
2	8.8	(8.1–9.5)	17.5	(17.2–17.8)			
3	15.2	(14.3–16.1)	20.3	(20.0–20.6)			
4	22.3	(21.2–23.4)	22.8	(22.5–23.1)			
5 (most deprived)	48.7	(47.4–50.0)	24.8	(24.5–25.1)			
Highest educational	qualification						
None	37.0	(35.8–38.2)	29.9	(29.5–30.2)			
Secondary	20.5	(19.4–21.5)	14.7	(14.4–15.0)			
Post-secondary	32.5	(31.3–33.7)	34.2	(33.8–34.6)			

Table 1: Demographic and health profile of 71,502 people in Aotearoa, according to unmet need in paying for prescriptions.

buying for prescription								
Undergraduate	6.3	(5.7–6.9)	11.7	(11.5–12.0)				
Postgraduate	3.7	(3.2–4.2)	9.5	(9.3–9.7)				
Household income (NZ\$)								
Loss or up to 20,000	24.6	(23.5–25.7)	9.3	(9.1–9.5)				
20,001–30,000	17.1	(16.1–18.0)	11.5	(11.3–11.8)				
30,001–50,000	19.0	(18.0-20.0)	16.3	(16.1–16.6)				
50,001–70,000	12.8	(12.0–13.7)	15.4	(15.1–15.6)				
70,001–100,000	7.7	(7.1-8.4)	14.6	(14.3–14.9)				
100,001+	6.6	(6.0–7.3)	24.1	(23.8–24.4)				
Missing	12.1	(11.3–13.0)	8.8	(8.6–9.0)				
Self-rated health								
Excellent	5.8	(5.2–6.4)	13.9	(13.6–14.1)				
Very good	22.3	(21.2–23.3)	40.5	(40.1–40.9)				
Good	38.9	(37.6–40.1)	33.6	(33.2–34.0)				
Poor	22.4	(21.3–23.5)	9.8	(9.5–10.0)				
Very poor	10.6	(9.9–11.4)	2.3	(2.1–2.4)				
Have you been told b	oy a doctor that you ha	ve	-					
had a heart attack	5.2	(4.6–5.8)	4.1	(4.0–4.3)				
angina	6.4	(5.8–7.0)	3.9	(3.8–4.1)				
heart failure	4.4	(3.9–4.9)	2.4	(2.3–2.6)				
other heart disease	10.7	(10.0–11.5)	8.5	(8.3–8.7)				
had a stroke ^a	3.1	(2.6–3.5)	2.1	(2.0–2.2)				
diabetes⁵	12.2	(11.3–13.0)	6.9	(6.7–7.1)				
asthma	35.9	(34.6–37.1)	19.7	(19.4–20.0)				
arthritis ^c	23.9	(22.9–25.0)	20.9	(20.5–21.2)				
depression ^d	39.1	(37.8–40.3)	16.8	(16.5–17.1)				
bipolar disorder ^d	4.3	(3.8–4.8)	1.1	(1.0-1.1)				
anxiety disorder ^{d,e}	27.0	(25.9–28.1)	9.9	(9.7–10.2)				

Table 1 (continued): Demographic and health profile of 71,502 people in Aotearoa, according to unmet need inpaying for prescriptions.

Note: a) does not include transient ischaemic attacks; b) does not include diabetes during pregnancy; c) includes gout, lupus and psoriatic arthritis d) conditions that lasted or expected to last more than 6 months; e) includes panic attacks, post-traumatic stress disorder, phobias and obsessive-compulsive disorders.

	Percenta	Percentage hospitalised during the study period			Number of hospitalisations during the study period*				Length of first hospital stay during the study period*			
	Unmet ne	ed	No unmet	t need	Unmet ne	Unmet need No unmet n=3,531 n=28,827		t need	Unmet need		No unmet need	
	n=5,889		n=65,613		n=3,531			n=28,827		n=3,531		n=28,827
	%	95% CI	%	95% CI	Mean	95% CI	Mean	95% CI	Mean	95% CI	Mean	95% CI
All	60.0	(58.7–61.2)	43.9	(43.6–44.3)	3.8	(3.6–4.0)	3.1	(3.1-3.1)	2.7	(2.6–2.8)	3.2	(3.0–3.4)
Sex							·		·			
Female	62.2	(60.8–63.7)	47.0	(46.5–47.5)	3.7	(3.5–3.9)	3.0	(3.0-3.1)	2.6	(2.4–2.7)	3.1	(2.9–3.3)
Male	54.5	(52.1–56.8)	40.0	(39.5–40.6)	4.1	(3.6–4.5)	3.2	(3.1–3.3)	3.1	(2.8–3.4)	3.4	(3.1–3.8)
Age group	Ì											
15-24	58.5	(54.9–62.1)	34.7	(33.6–35.8)	3.8	(3.3–4.3)	2.4	(2.3–2.5)	2.2	(2.0–2.3)	2.8	(2.2–3.3)
25–34	59.9	(57.2–62.6)	40.5	(39.5–41.4)	3.4	(3.1–3.7)	2.5	(2.3–2.6)	2.3	(2.1–2.5)	2.5	(2.4–2.7)
35-44	54.7	(51.8–57.6)	31.3	(30.4–32.1)	3.2	(2.9–3.5)	2.3	(2.2–2.4)	2.8	(2.5–3.2)	2.7	(2.4–3.0)
45-54	57.1	(54.3–60.0)	35.2	(34.3–36.1)	3.6	(3.3–4.0)	2.7	(2.6–2.8)	2.7	(2.4–3.0)	2.7	(2.5–2.9)
55–64	60.6	(57.4–63.7)	43.1	(42.2-44.1)	4.5	(3.8–5.1)	3.0	(2.9–3.1)	2.9	(2.6–3.2)	2.9	(2.6–3.2)
65-74	75.2	(71.2–79.2)	56.5	(55.5–57.5)	4.5	(4.0–5.0)	3.6	(3.4–3.7)	3.4	(2.8–4.0)	3.1	(3.0–3.3)
75+	76.9	(71.0-82.8)	73.5	(72.5–74.5)	5.2	(4.3–6.2)	4.3	(4.2–4.4)	3.9	(3.3–4.5)	5.1	(4.0-6.1)
Prioritised ethnicit	ty .						·		·	·		
Māori	63.0	(61.0–65.0)	45.9	(45.0–46.7)	3.8	(3.6–4.1)	3.1	(3.0–3.2)	2.6	(2.4–2.8)	3.1	(2.8–3.5)
Pacific people	59.8	(56.2–63.5)	42.6	(40.8–44.3)	4.2	(3.4–5.0)	3.0	(2.8–3.2)	2.9	(2.6–3.2)	3.1	(2.8–3.4)
Asian	40.4	(34.6–46.3)	28.5	(27.3–29.6)	2.8	(2.2–3.4)	2.4	(2.2–2.5)	2.8	(2.1–3.5)	2.6	(2.4–2.8)

Table 2: Inpatient hospitalisations and length of hospital stay according to unmet need for paying for prescriptions, by demographic variables.

	Percentage hospitalised during the study period			Number of hospitalisations during the study period*				Length of first hospital stay during the study period*				
	Unmet nee	d	No unmet r	need	Unmet nee	ed	No unmet	need	Unmet nee	d	No unmet	need
	n=5,889		n=65,613		n=3,531		n=28,827		n=3,531		n=28,827	
	%	95% CI	%	95% CI	Mean	95% CI	Mean	95% CI	Mean	95% CI	Mean	95% CI
NZ European/ Other	59.3	(57.4–61.2)	45.4	(44.9–45.9)	3.8	(3.5–4.0)	3.2	(3.1–3.2)	2.8	(2.6–3.0)	3.3	(3.0–3.6)
NZDep quintiles												
1 (least deprived)	53.1	(47.4–58.8)	36.8	(35.8–37.8)	4.0	(3.2–4.7)	2.7	(2.6–2.8)	2.7	(2.2–3.1)	2.9	(2.7–3.0)
2	58.4	(54.1–62.6)	40.5	(39.6–41.4)	4.0	(3.4–4.5)	3.0	(2.9–3.1)	2.8	(2.4–3.1)	3.1	(2.6–3.6)
3	58.2	(55.0-61.5)	43.8	(43.0–44.7)	3.6	(3.2-4.1)	3.1	(3.0–3.2)	2.5	(2.2–2.8)	2.9	(2.7–3.1)
4	58.5	(55.9–61.2)	46.0	(45.2–46.8)	4.0	(3.6–4.3)	3.1	(3.0–3.2)	2.7	(2.4–3.0)	3.5	(2.8-4.1)
5 (most deprived)	62.2	(60.5–64.0)	48.7	(48.0–49.5)	3.8	(3.5–4.0)	3.4	(3.3–3.5)	2.8	(2.6–2.9)	3.5	(3.1–3.9)
Highest educational o	qualification											
None	66.4	(64.4–68.4)	53.4	(52.7–54.1)	4.2	(3.8–4.5)	3.6	(3.5–3.7)	2.7	(2.5–2.9)	3.7	(3.2–4.2)
Secondary	55.5	(52.7–58.3)	39.0	(38.0–39.9)	3.3	(3.0–3.6)	2.7	(2.6–2.8)	2.6	(2.3–3.0)	3.1	(2.7–3.5)
Post-secondary	59.9	(57.7–62.1)	44.3	(43.7–45.0)	3.9	(3.6–4.2)	3.0	(2.9–3.1)	2.8	(2.6–3.1)	3.1	(2.8–3.4)
Undergraduate	45.2	(40.1–50.2)	33.9	(32.9–35.0)	3.1	(2.4–3.7)	2.6	(2.4–2.7)	2.6	(2.1-3.1)	2.6	(2.5–2.8)
Postgraduate	46.6	(40.0–53.2)	32.8	(31.7–34.0)	2.8	(2.1–3.6)	2.6	(2.4–2.8)	2.7	(2.2–3.2)	2.5	(2.4–2.7)
Household income (\$)												
Loss, 0–20,000	66.0	(63.6–68.5)	57.6	(56.3–58.8)	4.5	(4.0-4.9)	4.0	(3.8–4.2)	3.2	(2.9–3.5)	3.9	(3.4–4.4)

Table 2 (continued): Inpatient hospitalisations and length of hospital stay according to unmet need for paying for prescriptions, by demographic variables.

	Percenta	Percentage hospitalised during the study period			Number of hospitalisations during the study period*				Length of first hospital stay during the study period*				
	Unmet no	eed	No unme	t need	Unmet ne	ed	No unmet	No unmet need		ed	No unmet need		
	n=5,889		n=65,613		n=3,531		n=28,827	n=28,827		n=3,531		n=28,827	
	%	95% CI	%	95% CI	Mean	95% CI	Mean	95% CI	Mean	95% CI	Mean	95% CI	
20,001-30,000	64.5	(61.5–67.4)	59.5	(58.4–60.6)	3.9	(3.5–4.3)	3.8	(3.7–3.9)	2.5	(2.3–2.7)	3.9	(3.2–4.6)	
30,001-50,000	59.5	(56.6–62.4)	48.9	(47.9–49.8)	3.2	(2.9–3.4)	3.2	(3.1–3.3)	2.7	(2.4–3.0)	3.2	(2.9–3.5)	
50,001-70,000	50.4	(46.8–54.0)	40.9	(39.9–41.8)	3.3	(2.9–3.6)	2.7	(2.6–2.8)	2.4	(2.2–2.7)	2.8	(2.2–3.4)	
70,001–100,000	53.3	(48.7–57.9)	36.9	(35.9–37.8)	3.1	(2.6–3.7)	2.5	(2.4–2.6)	2.5	(2.1–2.9)	2.5	(2.4–2.7)	
100,001+	46.9	(42.0–51.9)	31.7	(30.9–32.4)	3.1	(2.4–3.7)	2.3	(2.2–2.4)	2.0	(1.8–2.2)	2.6	(2.4–2.7)	
Missing	63.9	(60.3–67.4)	50.8	(49.5–52.0)	4.4	(3.9–4.9)	3.4	(3.2–3.5)	2.8	(2.5–3.1)	4.1	(2.8–5.5)	
Self-rated health						·							
Excellent	53.5	(48.2–58.8)	36.7	(35.7–37.7)	3.0	(2.5–3.4)	2.6	(2.5–2.7)	2.6	(2.2–3.0)	2.9	(2.6–3.2)	
Very good	53.7	(51.0-56.4)	40.7	(40.1-41.3)	3.0	(2.8–3.3)	2.8	(2.7–2.8)	2.6	(2.3–2.8)	3.1	(2.8–3.4)	
Good	60.2	(58.2–62.2)	46.1	(45.5–46.8)	3.8	(3.4-4.1)	3.2	(3.1–3.2)	2.7	(2.5–2.9)	3.1	(2.8–3.5)	
Poor	63.0	(60.4–65.6)	54.4	(53.2–55.6)	3.9	(3.7–4.2)	4.0	(3.8–4.1)	2.8	(2.5-3.1)	4.0	(3.1-4.8)	
Very poor	69.4	(65.8–73.0)	67.4	(65.0–69.8)	5.4	(4.7–6.0)	4.8	(4.4–5.3)	3.0	(2.6–3.3)	4.7	(3.4–6.1)	

Table 2 (continued): Inpatient hospitalisations and length of hospital stay according to unmet need for paying for prescriptions, by demographic variables.

*For those people with at least one inpatient hospitalisation.

Days till first inpatient hospitalisation*							
	Unmet need		No unmet need				
	n=3,531		n=28,827				
	Mean	95% CI	Mean	95% CI			
All	582	(564–599)	650	(644–657)			
Sex							
Female	576	(556–596)	643	(635–651)			
Male	596	(561–630)	662	(652–672)			
Age group							
15–24	579	(531–627)	743	(720–765)			
25-34	567	(530–603)	650	(633–666)			
35–44	611	(568–654)	693	(674–712)			
45–54	617	(575–660)	729	(710–749)			
55–64	579	(536–621)	702	(685–719)			
65–74	534	(482–587)	624	(609–638)			
75+	497	(413–580)	510	(498–523)			
Prioritised ethnicity							
Māori	573	(546–601)	660	(645–675)			
Pacific people	567	(517–617)	642	(611–672)			
Asian	630	(524–737)	671	(644–698)			
NZ European/ Other	590	(564–616)	647	(639–654)			
NZDep quintiles							
1 (least deprived)	604	(529–680)	687	(669–706)			
2	638	(576–700)	683	(667–700)			
3	575	(530–620)	674	(659–688)			
4	563	(526–599)	625	(612–637)			
5 (most deprived)	580	(555–604)	620	(608–632)			
Highest educational qualification							
None	613	(585–641)	666	(655–677)			
Secondary	554	(515–592)	600	(583–616)			
Post-secondary	552	(523–582)	648	(637–659)			

Table 3: Time to first inpatient hospitalisation according to unmet need for paying for prescriptions, by demographic variables, among 32,358 people who were hospitalised.

[1							
Undergraduate	616	(536–697)	662	(641–683)				
Postgraduate	594	(483–704)	663	(639, –686)				
Household income								
Loss, 0–20,000	553	(520–587)	600	(582–618)				
20,001-30,000	589	(549–629)	557	(543–572)				
30,001-50,000	581	(543–620)	641	(626–656)				
50,001-70,000	609	(556–662)	689	(671–706)				
70,001–100,000	610	(543–676)	687	(669–706)				
100,001+	584	(505–662)	691	(676–706)				
Missing	589	(538–641)	703	(681–725)				
Self-rated health								
Excellent	713	(632–795)	734	(714–753)				
Very good	656	(615–696)	696	(685–706)				
Good	593	(565–621)	633	(623–644)				
Poor	538	(503–572)	544	(528–561)				
Very poor	455	(412–499)	423	(396–450)				

Table 3 (continued): Time to first inpatient hospitalisation according to unmet need for paying for prescriptions, by demographic variables, among 32,358 people who were hospitalised.

*For those people with at least one inpatient hospitalisation

	Hazard ratio	95% CI	P-value
Need groups			
Unmet need	1.34	(1.29–1.39)	<0.001
Met need	1		
Sex	1		
Female	1.19	(1.17–1.22)	<0.001
Male	1		
Age group			
15–24	1.08	(1.03–1.13)	0.002
25–34	1.37	(1.32–1.43)	<0.001
35–44	1		
45–54	1.09	(1.05–1.14)	<0.001
55-64	1.40	(1.34–1.46)	<0.001
65–74	2.08	(1.99–2.17)	<0.001
75+	3.27	(3.13–3.43)	<0.001
Prioritised ethnicity			
Māori	1.49	(1.41–1.57)	<0.001
Pacific people	1.43	(1.34–1.54)	<0.001
Asian	1		
NZ European/Other	1.42	(1.35–1.50)	<0.001
NZDep quintiles			· ·
1 (least deprived)	1		
2	1.07	(1.02–1.12)	0.002
3	1.15	(1.10–1.19)	<0.001
4	1.21	(1.17–1.26)	<0.001
5 (most deprived)	1.27	(1.21–1.32)	<0.001
Highest educational qu	alification		
None	1.16	(1.10–1.22)	<0.001
Secondary	1.10	(1.04–1.16)	<0.001
Post-secondary	1.15	(1.09–1.20)	<0.001

Table 4: Fully adjusted model of time to first hospitalisation.

Undergraduate	1.03	(0.98–1.09)	0.27						
Postgraduate	1								
Household income	Household income								
Loss, 0–20,000	1								
20,001-30,000	1.28	(1.23–1.34)	<0.001						
30,001-50,000	1.24	(1.19–1.30)	<0.001						
50,001-70,000	1.16	(1.11–1.20)	<0.001						
70,001–100,000	1.08	(1.04–1.13)	<0.001						
100,001+	1.06	(1.02–1.11)	0.004						
Missing	1.16	(1.11–1.21)	<0.001						
Self-rated health									
Excellent	1								
Very good	1.14	(1.10–1.18)	<0.001						
Good	1.41	(1.36–1.47)	<0.001						
Poor	1.80	(1.72–1.88)	<0.001						
Very poor	2.45	(2.30–2.61)	<0.001						

Table 4 (continued): Fully adjusted model of time to first hospitalisation.

Note: Hazard ratios are adjusted for all other variables in the table.