

Table 1: Patient characteristics by acute coronary syndrome type.

	STEMI, n (%)	NSTEMI, n (%)	UA, n (%)	Total, n (%)	p-value*
Total	4,827 (25.0)	10,627 (55.1)	3,829 (19.9)	19,283	
Sex					
Female	1,470 (30.5)	3,876 (36.5)	1,370 (35.8)	6,716 (34.8)	<0.0001
Male	3,357 (69.5)	6,751 (63.5)	2,459 (64.2)	12,567 (65.2)	
Age, years					
Mean (SD)	66.4 (13.6)	69.8 (13.1)	68.9 (11.6)	68.7 (13.1)	<0.0001
Median (IQR)	66.0 (57.0–76.5)	71.0 (61.0–80.0)	70.0 (61.0–77.0)	69.0 (60.0–78.0)	
Age groups, years					
18–39	115 (2.4)	146 (1.4)	31 (0.8)	292 (1.5)	<0.0001
40–49	420 (8.7)	596 (5.6)	172 (4.5)	1,188 (6.2)	
50–59	998 (20.7)	1,661 (15.6)	636 (16.6)	3,295 (17.1)	
60–69	1,292 (26.8)	2,633 (24.8)	1,050 (27.4)	4,975 (25.8)	
70–79	1,086 (22.5)	2,914 (27.4)	1,240 (32.4)	5,240 (27.2)	
80+	916 (19)	2,677 (25.2)	700 (18.3)	4,293 (22.3)	
Ethnicity					
Māori	566 (11.7)	1,204 (11.3)	418 (10.9)	2,188 (11.3)	0.0055
Pacific	268 (5.6)	560 (5.3)	149 (3.9)	977 (5.1)	
Indian	226 (4.7)	425 (4)	148 (3.9)	799 (4.1)	
Non-Indian Asian	168 (3.5)	352 (3.3)	143 (3.7)	663 (3.4)	
Other	56 (1.2)	134 (1.3)	57 (1.5)	247 (1.3)	
European	3,543 (73.4)	7,952 (74.8)	2,914 (76.1)	14,409 (74.7)	
Deprivation quintile, from 1 (least) to 5 (most) deprivation					
1	824 (17.1)	1,713 (16.1)	636 (16.6)	3,173 (16.5)	0.0309
2	904 (18.7)	1,875 (17.6)	643 (16.8)	3,422 (17.7)	
3	879 (18.2)	2,069 (19.5)	807 (21.1)	3,755 (19.5)	
4	1,092 (22.6)	2,454 (23.1)	865 (22.6)	4,411 (22.9)	
5	1,102 (22.8)	2,488 (23.4)	868 (22.7)	4,458 (23.1)	
Missing	26 (0.5)	28 (0.3)	10 (0.3)	64 (0.3)	

Table 1 (continued): Patient characteristics by acute coronary syndrome type.

	STEMI, n (%)	NSTEMI, n (%)	UA, n (%)	Total, n (%)	p-value*
Rurality, from Urban 1 (least) to Rural 3 (most) rural					
Urban 1	2,588 (53.6)	5,405 (50.9)	1,834 (47.9)	9,827 (51.0)	<0.0001
Urban 2	1,042 (21.6)	2,406 (22.6)	892 (23.3)	4,340 (22.5)	
Rural 1	625 (12.9)	1,552 (14.6)	621 (16.2)	2,798 (14.5)	
Rural 2	321 (6.7)	768 (7.2)	314 (8.2)	1,403 (7.3)	
Rural 3	67 (1.4)	145 (1.4)	59 (1.5)	271 (1.4)	
Missing	184 (3.8)	351 (3.3)	109 (2.8)	644 (3.3)	
Transportation to hospital					
Ambulance	3,612 (74.8)	6,455 (60.7)	1,714 (44.8)	11,781 (61.1)	<0.0001
Self	1,215 (25.2)	4,172 (39.3)	2,115 (55.2)	7,502 (38.9)	

STEMI = ST-elevation myocardial infarction; NSTEMI = non-STEMI; UA = unstable angina; SD = standard deviation; IQR = interquartile range.

*p-value for difference by acute coronary syndrome type .

Table 2: Association between patient characteristics and emergency medical services access by acute coronary syndrome type.

	ST-elevation myocardial infarction			Non-ST-elevation myocardial infarction			Unstable angina		
	n/N (%) arriving by EMS	OR (95% CI)		n/N (%) arriving by EMS	OR (95% CI)		n/N (%) arriving by EMS	OR (95% CI)	
		Unadjusted	Adjusted*		Unadjusted	Adjusted*		Unadjusted	Adjusted*
Ethnicity									
Māori	375/566 (66)	0.56 (0.46–0.68)	0.72 (0.58–0.90)	586/1,204 (49)	OR 0.51 (0.46–0.58)	OR 0.72 (0.63–0.82)	150/418 (36)	OR 0.61 (0.49–0.75)	OR 0.87 (0.68–1.10)
Pacific	177/268 (66)	0.55 (0.42–0.72)	0.64 (0.48–0.87)	264/560 (47)	OR 0.48 (0.41–0.57)	OR 0.64 (0.53–0.78)	61/149 (41)	OR 0.76 (0.54–1.06)	OR 0.96 (0.66–1.39)
Indian	153/226 (68)	0.59 (0.45–0.80)	0.63 (0.46–0.86)	226/425 (53)	OR 0.62 (0.51–0.75)	OR 0.84 (0.68–1.04)	55/148 (37)	OR 0.65 (0.46–0.90)	OR 0.91 (0.63–1.32)
Non-Indian Asian	107/168 (64)	0.50 (0.36–0.69)	0.52 (0.37–0.74)	154/352 (44)	OR 0.42 (0.34–0.52)	OR 0.52 (0.42–0.66)	37/143 (26)	OR 0.38 (0.26–0.55)	OR 0.48 (0.32–0.72)
Other	40/56 (71)	0.71 (0.40–1.31)	0.79 (0.43–1.52)	70/134 (52)	OR 0.59 (0.42–0.84)	OR 0.72 (0.50–1.04)	18/57 (32)	OR 0.50 (0.28–0.87)	OR 0.73 (0.39–1.32)
European	2,760/3,543 (78)	1.00	1.00	5,155/7,952 (65)	1.00	1.00	1,393/2,914 (48)	1.00	1.00
Sex									
M	2,442/3,357 (73)	0.68 (0.59–0.79)	0.79 (0.67–0.93)	3,875/6,751 (57)	OR 0.68 (0.62–0.73)	OR 0.79 (0.72–0.86)	1,016/2,459 (41)	OR 0.68 (0.59–0.77)	OR 0.74 (0.64–0.85)
F	1,170/1,470 (80)	1.00	1.00	2,580/3,876 (67)	1.00	1.00	698/1,370 (51)	1.00	1.00
Age, years									
Per increase in year		1.03 (1.02–1.03)	1.02 (1.02–1.03)		OR 1.05 (1.04–1.05)	OR 1.04 (1.04–1.05)		OR 1.05 (1.05–1.06)	OR 1.05 (1.04–1.06)
18–39	72/115 (63)			51/146 (35)			10/31 (32)		
40–49	280/420 (67)			258/596 (43)			52/172 (30)		
50–59	708/998 (71)			761/1,661 (46)			179/636 (28)		
60–69	921/1,292 (71)			1357/2,633 (52)			383/1,050 (37)		

Table 2 (continued): Association between patient characteristics and emergency medical services access by acute coronary syndrome type.

	ST-elevation myocardial infarction			Non-ST-elevation myocardial infarction			Unstable angina		
	n/N (%) arriving by EMS	OR (95% CI)		n/N (%) arriving by EMS	OR (95% CI)		n/N (%) arriving by EMS	OR (95% CI)	
		Unadjusted	Adjusted*		Unadjusted	Adjusted*		Unadjusted	Adjusted*
70–79	827/1,086 (76)			1845/2,914 (63)			588/1,240 (47)		
80+	804/916 (88)			2183/2,677 (82)			502/700 (72)		
Deprivation decile from 1 (least) to 10 (most) deprivation									
Per increase in decile		0.96 (0.93–0.98)	0.98 (0.96–1.01)		OR 0.99 (0.97–1.00)	OR 1.02 (1.00–1.03)		OR 1.02 (1.00–1.04)	OR 1.05 (1.02–1.08)
1–2	642/824 (78)			1,033/1,713 (60)			256/636 (40)		
3–4	692/904 (77)			1,141/1,875 (61)			287/643 (45)		
5–6	677/879 (77)			1,305/2,069 (63)			371/807 (46)		
7–8	796/1,092 (73)			1,542/2,454 (63)			418/865 (48)		
9–10	793/1,102 (72)			1,420/2,488 (52)			377/868 (43)		
Rurality, from Urban 1 (least) to Rural 3 (most) rural									
Urban 2	692/1,042 (66)	0.55 (0.47–0.65)	0.47 (0.40–0.56)	1,366/2,406 (57)	OR 0.83 (0.75–0.91)	OR 0.70 (0.63–0.78)	365/892 (41)	OR 0.87 (0.74–1.02)	OR 0.76 (0.64–0.91)
Rural 1	489/625 (78)	1.00 (0.81–1.24)	0.87 (0.70–1.09)	1,031/1,552 (66)	OR 1.25 (1.11–1.41)	OR 1.10 (0.97–1.25)	319/621 (51)	OR 1.32 (1.10–1.59)	OR 1.21 (0.99–1.47)
Rural 2	223/321 (70)	0.63 (0.49–0.82)	0.57 (0.44–0.75)	438/768 (57)	OR 0.84 (0.72–0.98)	OR 0.73 (0.62–0.86)	134/314 (43)	OR 0.93 (0.73–1.19)	OR 0.86 (0.67–1.12)
Rural 3	51/67 (76)	0.89 (0.51–1.62)	0.92 (0.52–1.69)	78/145 (54)	OR 0.74 (0.53–1.03)	OR 0.71 (0.50–1.00)	25/59 (42)	OR 0.92 (0.54–1.55)	OR 0.81 (0.46–1.40)
Urban 1	2,024/2,588 (78)	1.00	1.00	3,313/5,405 (61)	1.00	1.00	814/1,834 (44)	1.00	1.00

OR = odds ratio; CI = confidence interval.

*Adjusted for all variables listed in table.

Figure 1: Association between ethnicity and emergency medical services access by acute coronary syndrome type, adjusted odds ratios (95% confidence intervals).

