

Appendix 1: Unadjusted and adjusted multilevel regression analysis of health centre and patient level characteristics on recording of absolute CVRA for patients with diabetes in participating health centres between 1 January 2012 and 31 December 2014 (n=121 health centres; 1,728 patient records)

Predictors		Unadjusted odds ratio			Empty Model	Model A – Health centre characteristics only			Model B – Health centre and patient characteristics		
		UOR	95%CI	p value		OR	95%CI	p value	OR	95%CI	p value
Health Centre Characteristics											
State	Northern Territory	127.42	48.30–336.17	0.000 ^b		133.00	57.77–306.19	0.000 ^b	130.33	55.45–306.35	0.000 ^b
	Other states ^a	1	(base)			1	(base)		1	(base)	
Location	Non-remote	1	(base)			1	(base)		1	(base)	
	Remote	13.79	1.12–169.73	0.040 ^b		1.32	9.31–5.66	0.705	1.46	0.33–6.50	0.623
	Very remote	6.83	1.17–39.93	0.033 ^b		0.33	0.10–1.07	0.066	0.29	0.09–0.97	0.045 ^b
Type of health centre:	Community–controlled	1	(base)			1	(base)		1	(base)	
	Government	3.02	0.72–12.55	0.129		14.61	5.62–37.95	0.000 ^b	14.19	5.33–37.80	0.000 ^b
Service population											
	≤500	1	(base)			1	(base)		1	(base)	
	501 – 999	0.32	0.08–1.31	0.115		0.91	0.38–2.14	0.823	0.97	0.40–2.33	0.944
	≥1000	0.27	0.08–0.89	0.032 ^b		0.64	0.30–1.38	0.256	0.64	0.29–1.37	0.248
CQI experience	Nil previous cycles	1	(base)			1	(base)		1	(base)	
	1–2 previous cycles	2.19	0.33–14.42	0.416		0.66	0.21–2.09	0.479	0.58	0.18–1.89	0.368
	≥3 previous cycles	2.01	0.30–13.37	0.469		0.78	0.25–2.42	0.668	0.69	0.22–2.19	0.532
Patient Characteristics											
Sex	Male	1	(base)						1	(base)	
	Female	1.48	1.09–2.00	0.012 ^b					1.52	1.11–2.08	0.009 ^b
Age Group	15 – <30	1	(base)						1	(base)	
	30 – <45	1.07	0.64–1.80	0.791					1.07	0.64–1.80	0.797
	45 – 60	1.20	0.72–2.02	0.483					1.27	0.74–2.17	0.386
Comorbidities ^c	Hypertension	1.03	0.75–1.42	0.835					0.97	0.69–1.37	0.866
	COPD	0.94	0.60–1.47	0.793					0.88	0.56–1.39	0.592
	Dyslipidaemia	1.23	0.91–1.67	0.183					1.21	0.88–1.67	0.246
	CKD	1.55	1.08–2.22	0.017 ^b					1.32	0.92–1.90	0.136
	Depression	0.81	0.42–1.55	0.527					0.89	0.45–1.76	0.737
	Other mental illness	0.70	0.34–1.45	0.337					0.74	0.35–1.55	0.420
Complications ^c	Retinopathy	0.90	0.44–1.83	0.764					0.89	0.43–1.86	0.764
	Neuropathy	0.74	0.35–1.56	0.429					0.73	0.34–1.56	0.410
	Foot ulcer	2.14	0.65–6.99	0.210					2.41	0.71–8.18	0.158
	Amputation	1.45	0.27–7.79	0.667					1.31	0.26–6.67	0.748
	Gastroparesis	1	(empty) ^d						1	(empty) ^d	
Random effects (intercepts)					10.04 (2.46)	1.22 (0.35)		1.26 (0.36)			
Variance (SE)						87.82%		87.40%			
Proportional change in variance											

^aOther states include Queensland, South Australia and Western Australia

^b Statistically significant

^cComorbidities and complications were compared with patients without the specific comorbidity or complication, such that an odds ratio of 1 relates to not having the specific comorbidity or complication.

^{cd}The 19 patients with gastroparesis did not have any recorded CVRA.