

Supplementary Document 2

Table S2. Sensitivity analysis - multivariable linear regression model: Relationship between HbA1c(%) and multimorbidity in participants with type 2 diabetes.

Predictor variables	Non-adjusted			Adjusted*		
	Mean difference in HbA1c (SE)	95% CI	p	Mean difference in HbA1c (SE)	95% CI	p
Participants with HbA1c > 7%						
Categories of diabetes and multimorbidities						
Diabetes present and no chronic conditions (reference)						
Diabetes present and 1 chronic condition	0.00 (0.03)	-0.07, 0.07	0.995	0.00 (0.04)	-0.07, 0.07	0.915
Diabetes present and 2 chronic conditions	-0.03 (0.03)	-0.10, 0.03	0.322	-0.03 (0.03)	-0.10, 0.04	0.359
Diabetes present and 3 chronic conditions	0.02 (0.03)	-0.05, 0.08	0.624	0.02 (0.03)	-0.05, 0.09	0.553
Diabetes present and 4 or more chronic conditions	0.01 (0.03)	-0.05, 0.07	0.726	0.02 (0.03)	-0.04, 0.07	0.592
Categories of diabetes and concordant conditions						
Diabetes present and no chronic conditions (reference)						
Diabetes present and 1 concordant condition	0.02 (0.02)	-0.02, 0.05	0.422	0.02 (0.02)	-0.02, 0.06	0.315
Diabetes present and 2 concordant conditions	0.02 (0.03)	-0.03, 0.07	0.338	0.04 (0.02)	-0.01, 0.09	0.122
Diabetes present and 3 concordant conditions	-0.02 (0.03)	-0.08, 0.05	0.609	-0.02 (0.03)	-0.08, 0.05	0.650
Diabetes present and 4 or more concordant conditions	0.03 (0.04)	-0.056, 0.11	0.513	0.03 (0.04)	-0.05, 0.11	0.472
Categories of diabetes and discordant conditions						
Diabetes present and no chronic conditions (reference)						
Diabetes present and 1 discordant condition	-0.05 (0.03)	-0.10, 0.00	0.063	-0.07 (0.03)	-0.12, 0.02	0.012
Diabetes present and 2 discordant conditions	-0.02 (0.03)	-0.07, 0.04	0.540	-0.03 (0.03)	-0.08, 0.03	0.293
Diabetes present and 3 discordant conditions	0.02 (0.03)	-0.04, 0.07	0.572	0.00 (0.03)	-0.06, 0.06	0.993
Diabetes present and 4 or more discordant conditions	0.00 (0.03)	-0.05, 0.05	0.879	-0.00 (0.03)	-0.05, 0.05	0.970
Participants with HbA1c ≤ 7%						
Categories of diabetes and multimorbidities						
Diabetes present and no chronic conditions (reference)						

Diabetes present and 1 chronic condition	0.01 (0.01)	-0.02, 0.03	0.586	0.00 (0.01)	-0.02, 0.02	0.929
Diabetes present and 2 chronic conditions	0.01 (0.01)	-0.01, 0.03	0.317	0.01 (0.01)	-0.01, 0.03	0.562
Diabetes present and 3 chronic conditions	-0.01 (0.01)	-0.03, 0.01	0.548	-0.01 (0.01)	-0.03, 0.01	0.277
Diabetes present and 4 or more chronic conditions	0.00 (0.01)	-0.02, 0.02	0.771	0.00 (0.01)	-0.02, 0.02	0.978
Categories of diabetes and concordant conditions						
Diabetes present and no chronic conditions (reference)						
Diabetes present and 1 concordant condition	0.01 (0.01)	0.00, 0.02	0.233	0.01 (0.01)	0.00, 0.02	0.232
Diabetes present and 2 concordant conditions	0.01 (0.01)	0.00, 0.03	0.076	0.01 (0.01)	0.00, 0.03	0.136
Diabetes present and 3 concordant conditions	0.01 (0.01)	-0.01, 0.03	0.480	0.00 (0.01)	-0.02, 0.02	0.855
Diabetes present and 4 or more concordant conditions	0.00 (0.01)	-0.03, 0.02	0.939	0.00 (0.01)	-0.03, 0.02	0.919
Categories of diabetes and discordant conditions						
Diabetes present and no chronic conditions (reference)						
Diabetes present and 1 discordant condition	0.01 (0.01)	-0.01, 0.02	0.448	0.00 (0.01)	-0.02, 0.02	0.921
Diabetes present and 2 discordant conditions	-0.02 (0.01)	-0.03, 0.00	0.027	-0.02 (0.01)	-0.04, 0.00	0.020
Diabetes present and 3 discordant conditions	-0.01 (0.01)	-0.02, 0.01	0.495	-0.01 (0.01)	-0.02, 0.01	0.462
Diabetes present and 4 or more discordant conditions	0.00 (0.01)	-0.02, 0.01	0.825	0.00 (0.01)	-0.02, 0.01	0.628

SE: Standard error

*Adjusting for age, sex, SEIFA, smoking status, and number of diabetes medication. All co-variables were treated as fixed effects and the general practice as a random effect to allow for the correlation of HbA1c within each practice.