

**Table A3. Regression results of the main model with coefficients for all practice covariates**

	Annual DPP referrals
Proportion practice population male	0.99 [0.98,1.01]
Proportion practice population age 0-14	1.03*** [1.02,1.04]
Proportion practice population age 40-44	1.03 [1.00,1.07]
Proportion practice population age 45-49	1.01 [0.97,1.06]
Proportion practice population age 50-54	1.02 [0.97,1.08]
Proportion practice population age 55-59	1.02 [0.97,1.08]
Proportion practice population age 60-64	1.06* [1.00,1.12]
Proportion practice population age 65-69	1.01 [0.96,1.07]
Proportion practice population age 70-74	1.01 [1.00,1.02]
Proportion practice population age 75+	1.00 [0.98,1.02]
% of practice population living in most deprived quintile	1.00* [1.00,1.00]
% of practice population living in 2nd quintile	1.00 [1.00,1.00]
% of practice population living in 3rd quintile	1.00 [1.00,1.00]
% of practice population living in 4th quintile	1.00 [1.00,1.00]
Type 2 diabetes prevalence	1.08*** [1.06,1.11]
Proportion of practice population of Mixed ethnicity	1.00 [0.96,1.03]
Proportion of practice population of Asian ethnicity	1.01*** [1.01,1.01]
Proportion of practice population of Black ethnicity	1.01 [1.00,1.01]
Proportion of practice population other ethnicity	1.05*** [1.03,1.07]
Rural practice	0.95

	[0.88,1.04]
Wave 2 practice	0.43*** [0.39,0.47]
Wave 3 practice	1.60*** [1.47,1.74]
Year: 2017/18	1.91*** [1.78,2.05]
Year: 2018/19	2.26*** [2.11,2.43]
Year: 2019/20	1.37*** [1.28,1.47]
Year: 2017/18 * Wave 2 practice	2.06*** [1.85,2.30]
Year: 2018/19 * Wave 2 practice	2.05*** [1.88,2.24]
Year: 2018/19 * Wave 3 practice	0.33*** [0.29,0.36]
Proportion of QOF Diabetes achievement†	1.11*** [1.08,1.14]
Proportion of patients reporting good experience making appointments†	1.01 [0.98,1.04]
Log average payment per patient†	0.99 [0.97,1.02]
Observations	22124
General practices	6871
Log-likelihood	-190905.3

Poisson regression with general practice random effects. Coefficients are incidence rate ratios. † Coefficients on these variables represent a one standard deviation change in the explanatory variables. 95% confidence intervals in brackets. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$