Supplementary Table 2 Associations between demographic factors and rates of vitamin D testing and prescribing ^a

| Characteristic | Vitamin D Testing | | Vitamin D Prescribing | |
|-------------------------------|-------------------------|----------------------|-------------------------|----------------------|
| | Adjusted RR (95% CI) | P value ^b | Adjusted RR (95% CI) | P value ^b |
| Sex | | < 0.001 | | < 0.001 |
| Male | 1 | | 1 | |
| Female | 1.49 (1.41-1.57) | | 1.41 (1.32-1.50) | |
| Age group | | < 0.001 | | < 0.001 |
| 0-4 years | 1 | | 1 | |
| 5-9 years | 1.62 (1.49-1.77) | | 2.00 (1.78-2.26) | |
| 10-14 years | 2.97 (2.74-3.22) | | 4.40 (3.95-4.90) | |
| 15-17 years | 5.02 (4.62-5.46) | | 6.90 (6.18-7.71) | |
| Ethnicity ^c | | < 0.001 | | < 0.001 |
| White | 1 | | 1 | |
| Asian or Asian British | 6.22 (5.76-6.72) | | 9.60 (8.73-10.6) | |
| Black or black British | 3.80 (3.46-4.18) | | 5.54 (4.93-6.23) | |
| Mixed | 2.55 (2.20-2.94) | | 2.57 (2.11-3.13) | |
| Chinese or other ethnic group | 3.33 (2.94-3.77) | | 3.93 (3.37-4.60) | |
| Area of residence | | 0.231 | | 0.149 |
| Urban | 1 | | 1 | |
| Rural | 0.88 (0.71-1.09) | | 0.85 (0.67-1.06) | |
| Season d | | < 0.001 | | < 0.001 |
| Summer | 1 | | 1 | |
| Autumn | 1.00 (0.93-1.08) | | 0.95 (0.87-1.05) | |
| Winter | 1.00 (0.93-1.08) | | 1.00 (0.91-1.09) | |
| Spring | 1.17 (1.09-1.26) | | 1.16 (1.06-1.27) | |

CI confidence interval, RR rate ratio.

^a Results of multivariable Poisson regression models of rates of vitamin D testing and prescribing. Models adjusted for all variables listed in the table, and additionally included the general practice as a random effect. Missing data was handled using complete cases analysis. N=526,890.

^b P values from likelihood ratio tests comparing nested models.

^c Ethnicity data was taken from the child's THIN or HES record for 82.8% of children. Maternal ethnicity was used as a proxy measure for the remaining 17.2%.

^d Summer was defined as June to August, autumn as September to November, winter as December to February, and spring as March to May.