

**Appendix 7 (as supplied by the authors): Model output for number of consultations**

	37 conditions						20 conditions					
	NB model		Count model		Binary model P(cons>0)		NB model		Count model		Binary model P(cons>0)	
	RR (95% CI)	p-value	RR (95% CI)	p-value	OR (95% CI)	p-value	RR (95% CI)	p-value	RR (95% CI)	p-value	OR (95% CI)	p-value
Atrial fibrillation	1.52 (1.49-1.55)	<0.001					1.52 (1.49-1.55)	<0.001				
Diabetes	1.40 (1.39-1.42)	<0.001					1.40 (1.38-1.42)	<0.001				
Painful condition	1.34 (1.33-1.35)	<0.001					1.35 (1.33-1.36)	<0.001				
COPD	1.30 (1.27-1.32)	<0.001					1.31 (1.28-1.33)	<0.001				
Cancer	1.28 (1.25-1.31)	<0.001					1.27 (1.25-1.30)	<0.001				
Constipation	1.24 (1.22-1.27)	<0.001					1.27 (1.24-1.29)	<0.001				
Connective tissue disorders	1.25 (1.23-1.28)	<0.001	1.68 (1.58-1.78)	<0.001	5.96 (2.19-16.18)	<0.001	1.27 (1.24-1.29)	<0.001	1.69 (1.59-1.80)	<0.001	5.83 (2.13-15.96)	0.001
Psychosis/bipolar disorder	1.25 (1.21-1.29)	<0.001					1.25 (1.22-1.29)	<0.001				
Epilepsy	1.23 (1.20-1.27)	<0.001					1.25 (1.21-1.28)	<0.001				
Anxiety/Depression	1.25 (1.23-1.26)	<0.001					1.24 (1.23-1.26)	<0.001				
Irritable bowel syndrome	1.18 (1.16-1.20)	<0.001	1.42 (1.38-1.46)	<0.001	3.61 (2.77-4.71)	<0.001	1.20 (1.18-1.22)	<0.001	1.44 (1.41-1.48)	<0.001	3.54 (2.72-4.62)	<0.001
Heart failure	1.18 (1.14-1.21)	<0.001	2.69 (2.04-3.55)	<0.001	2.23 (0.43-11.64)	0.343	1.18 (1.15-1.22)	<0.001	2.65 (2.01-3.50)	<0.001	2.29 (0.41-12.91)	0.346
Asthma	1.16 (1.14-1.17)	<0.001					1.16 (1.14-1.17)	<0.001				
Dementia	1.14 (1.11-1.18)	<0.001					1.14 (1.10-1.18)	<0.001				
Coronary heart disease	1.13 (1.11-1.14)	<0.001					1.13 (1.11-1.14)	<0.001				
Stroke & TIA	1.12 (1.10-1.14)	<0.001					1.12 (1.10-1.14)	<0.001				
Hearing loss	1.10 (1.08-1.11)	<0.001	1.18 (1.15-1.21)	<0.001	2.53 (2.15-2.97)	<0.001	1.11 (1.09-1.12)	<0.001	1.19 (1.16-1.22)	<0.001	2.53 (2.15-2.98)	<0.001
Alcohol problems	1.07 (1.04-1.11)	<0.001	1.35 (1.26-1.44)	<0.001	1.57 (1.19-2.07)	0.002	1.09 (1.06-1.13)	<0.001	1.41 (1.32-1.51)	<0.001	1.65 (1.25-2.18)	<0.001
Chronic kidney disease	1.08 (1.06-1.09)	<0.001					1.08 (1.06-1.09)	<0.001				
Hypertension	1.08 (1.07-1.09)	<0.001					1.07 (1.06-1.08)	<0.001				
Parkinson's disease	1.29 (1.22-1.36)	<0.001										
Inflammatory bowel disease	1.25 (1.20-1.30)	<0.001	1.78 (1.66-1.90)	<0.001	4.58 (2.20-9.51)	<0.001						
Multiple sclerosis	1.25 (1.18-1.32)	<0.001										
Bronchiectasis	1.22 (1.16-1.28)	<0.001	1.42 (1.20-1.69)	<0.001	1.92 (0.47-7.77)	0.363						
Psoriasis or eczema	1.19 (1.16-1.22)	<0.001										
Learning disability	1.15 (1.10-1.21)	<0.001										
Migraine	1.13 (1.09-1.18)	<0.001										

Prostate disorders	1.13 (1.11-1.15)	<0.001										
Chronic Liver Disease	1.13 (1.07-1.18)	<0.001	1.29 (1.17-1.43)	<0.001	4.48 (1.57-12.75)	0.005						
Substance misuse	1.13 (1.09-1.17)	<0.001	1.30 (1.21-1.39)	<0.001	1.48 (1.14-1.91)	0.003						
Anorexia or bulimia	1.11 (1.05-1.17)	<0.001	1.16 (1.06-1.26)	0.001	1.10 (0.56-2.14)	0.782						
Chronic sinusitis	1.11 (1.09-1.13)	<0.001	1.26 (1.21-1.31)	<0.001	3.46 (2.31-5.20)	<0.001						
Thyroid disorders	1.09 (1.08-1.11)	<0.001										
Peripheral vascular disease	1.06 (1.03-1.10)	<0.001										
Diverticular disease	1.06 (1.04-1.08)	<0.001										
Peptic ulcer disease	1.04 (1.01-1.06)	0.007	0.57 (0.37-0.88)	0.011	1.75 (1.14-2.70)	0.011						
Blindness and low vision	1.02 (0.99-1.05)	0.200	1.13 (1.02-1.25)	0.021	1.67 (0.91-3.08)	0.100						
Male	0.85 (0.84-0.86)	<0.001	0.65 (0.64-0.66)	<0.001	0.10 (0.09-0.12)	<0.001	0.86 (0.85-0.87)	<0.001	0.66 (0.65-0.66)	<0.001	0.09 (0.07-0.11)	<0.001
Age at index date (10 yrs)	1.09 (1.07-1.11)	<0.001	1.07 (1.05-1.10)	<0.001	1.14 (1.04-1.25)	0.006	1.10 (1.08-1.11)	<0.001	1.08 (1.05-1.10)	<0.001	1.15 (1.05-1.27)	0.003
Age 21/30	1.26 (1.20-1.33)	<0.001	1.19 (1.11-1.28)	<0.001	0.93 (0.70-1.24)	0.621	1.26 (1.20-1.32)	<0.001	1.19 (1.11-1.28)	<0.001	0.92 (0.69-1.22)	0.552
Age 31/40	1.17 (1.13-1.21)	<0.001	1.11 (1.05-1.17)	<0.001	0.95 (0.77-1.16)	0.588	1.17 (1.13-1.21)	<0.001	1.11 (1.06-1.17)	<0.001	0.93 (0.76-1.14)	0.51
Age 41/50	1.05 (1.03-1.07)	<0.001	1.00 (0.97-1.03)	0.824	1.06 (0.94-1.21)	0.333	1.05 (1.03-1.07)	<0.001	1.00 (0.97-1.03)	0.952	1.05 (0.93-1.20)	0.432
Age 61/70	1.02 (1.00-1.04)	0.093	1.11 (1.07-1.15)	<0.001	1.95 (1.58-2.39)	<0.001	1.02 (1.00-1.04)	0.033	1.11 (1.07-1.15)	<0.001	2.01 (1.62-2.50)	<0.001
Age 71/80	1.07 (1.04-1.11)	<0.001	1.27 (1.20-1.35)	<0.001	3.41 (2.05-5.66)	<0.001	1.09 (1.05-1.12)	<0.001	1.27 (1.20-1.35)	<0.001	3.74 (2.12-6.58)	<0.001
Age 81/max	1.10 (1.05-1.15)	<0.001	1.43 (1.29-1.57)	<0.001	0.75 (0.47-1.19)	0.221	1.11 (1.05-1.16)	<0.001	1.41 (1.28-1.56)	<0.001	0.76 (0.47-1.21)	0.241
incfu			0.57 (0.55-0.60)	<0.001	0.25 (0.23-0.28)	<0.001			0.56 (0.54-0.59)	<0.001	0.27 (0.24-0.30)	<0.001
_cons	3.43 (3.16-3.73)	<0.001	2.55 (2.24-2.90)	<0.001	15.81 (9.25-27.01)	<0.001	3.49 (3.21-3.80)	<0.001	2.53 (2.23-2.89)	<0.001	18.33 (10.52-31.94)	<0.001