



Figure S1. Response and completion rate for the online survey.

Table S1. Associations between comorbidities and symptom attribution (n=2143)

	Cancer	Asthma/COPD	Other lung problems	Infection	Allergy	Heart problems	Obesity	Smoking	Don't know	Environment
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Unadjusted										
Respiratory condition										
Yes	0.96 (0.78,1.18)	3.77 (3.15,4.51)***	0.61 (0.46, 0.83)**	0.85 (0.7,1.02)	1.60 (1.20,2.12)**	0.66 (0.51, 0.86)**	0.82 (0.49, 1.39)	1.10 (0.69,1.73)	0.25 (0.17,0.35)***	2.54 (1.39,4.65)**
No	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Adjusted										
Respiratory condition										
Yes	0.92 (0.75,1.14)	3.64 (3.02,4.39)***	0.64 (0.47,0.87)**	0.84 (0.70,1.00)	1.57 (1.16,2.10)**	0.61 (0.47,0.80)***	0.73 (0.43,1.26)	0.88 (0.53,1.44)	0.27 (0.19,0.39)***	2.98 (1.60,5.56)**
No	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Number of other health conditions										
0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1	0.93 (0.68,1.28)	0.98 (0.75,1.30)	1.19 (0.76,1.86)	1.00 (0.76,1.32)	0.76 (0.48,1.19)	1.20 (0.79,1.83)	1.62 (0.61,4.32)	0.54 (0.23,1.27)	0.77 (0.51,1.18)	0.91 (0.39,2.11)
2	1.21 (0.88,1.66)	1.04 (0.79,1.38)	1.28 (0.82,2.00)	1.36 (1.03,1.78)*	0.91 (0.58,1.43)	1.63 (1.08,2.47)*	2.27 (0.89,5.78)	0.67 (0.30,1.47)	0.46 (0.29,0.74)**	1.09 (0.48,2.48)
3+	1.01 (0.76,1.35)	1.17 (0.92,1.51)	0.92 (0.60,1.41)	1.41 (1.10,1.80)**	1.26 (0.87,1.84)	1.85 (1.27,2.69)**	2.73 (1.17,6.37)*	1.30 (0.70,2.41)	0.58 (0.39,0.86)**	0.80 (0.37,1.71)
Age										
50-59	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
60-69	0.86 (0.68,1.09)	1.08 (0.87,1.33)	0.94 (0.66,1.35)	1.03 (0.84,1.26)	0.81 (0.59,1.11)	1.01 (0.75,1.36)	1.16 (0.65,2.07)	2.36 (1.33,4.20)**	0.98 (0.69,1.39)	2.06 (1.10,3.87)*
70+	0.80 (0.60,1.08)	1.11 (0.86,1.44)	1.59 (1.08,2.34)*	0.83 (0.65,1.07)	0.55 (0.36,0.86)**	1.20 (0.85,1.70)	0.65 (0.28,1.49)	2.83 (1.39,5.78)**	0.91 (0.59,1.39)	1.06 (0.44,2.54)
Sex										
Male	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Female	1.29 (1.04,1.60)*	1.85 (1.53,2.23)***	1.00 (0.73,1.36)	1.33 (1.11,1.60)**	1.80 (1.33,2.44)**	1.81 (1.38,2.38)***	0.89 (0.52,1.52)	0.55 (0.33,0.92)*	0.40 (0.28,0.55)***	0.65 (0.37,1.14)
Education										
Higher education	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
No qualifications	0.54 (0.35,0.83)**	0.59 (0.42,0.84)**	0.73 (0.42,1.29)	0.48 (0.34,0.69)***	0.36 (0.18,0.74)**	0.70 (0.43,1.16)	2.28 (0.89,5.83)	1.40 (0.66,2.95)	2.62 (1.60,4.30)***	0.53 (0.18,1.58)
Secondary education	0.85 (0.68,1.05)	0.87 (0.71,1.05)	0.69 (0.50,0.95)*	0.75 (0.62,0.91)**	0.68 (0.50,0.91)*	0.69 (0.53,0.91)**	2.62 (1.40,4.90)**	1.15 (0.67,1.96)	1.33 (0.95,1.85)	0.82 (0.46,1.47)
Ethnicity										
White	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	-
Non-white	0.27 (0.11,0.68)**	0.69 (0.40,1.19)	0.88 (0.34,2.26)	0.64 (0.37,1.10)	0.64 (0.27,1.53)	0.48 (0.19,1.22)	0.68 (0.09,5.09)	0.94 (0.12,7.39)	2.35 (1.12,4.96)*	-
Marital status										
Single	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Married or living with partner	0.81 (0.65,1.00)*	1.35 (1.11,1.63)**	0.74 (0.55,1.01)	1.02 (0.85,1.23)	1.05 (0.78,1.42)	1.32 (1.00,1.73)	0.94 (0.55,1.61)	0.73 (0.45,1.20)	0.85 (0.62,1.17)	0.63 (0.36,1.10)
Smoking status										
Never smoked	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Current smoker	0.95 (0.70,1.29)	1.01 (0.78,1.32)	0.82 (0.51,1.32)	0.61 (0.47,0.80)***	0.40 (0.25,0.64)***	0.52 (0.33,0.81)**	0.91 (0.43,1.94)	15.25 (7.00,33.20)***	0.98 (0.63,1.53)	0.76 (0.35,1.67)
Previous smoker	1.26 (1.00,1.60)	1.03 (0.84,1.27)	1.15 (0.82,1.61)	0.80 (0.66,0.98)*	0.70 (0.51,0.97)*	0.96 (0.73,1.28)	1.04 (0.57,1.90)	1.72 (0.73,4.04)	0.97 (0.69,1.38)	0.76 (0.40,1.43)

Logistic regression models; OR (95% CI)=Odds ratio (95% Confidence Interval)

*<0.05, **<0.01, ***<0.001

Table S2. Associations between asthma/COPD and reasons for not seeing the GP (n=498)

	The GP has not been able to help me in the past for similar symptoms	The GP would not take the symptoms seriously	I don't want to be seen as a time-waster	I have other health problems that are more important	I don't think the symptoms are serious enough	I would worry about any tests I might need to have	I feel reassured by previous tests	I've had the symptoms before and I know how to manage them
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Unadjusted								
Respiratory condition								
Yes	1.53 (0.74,3.18)	1.26 (0.67,2.38)	0.91 (0.64, 1.30)	1.38 (0.74,2.58)	0.66 (0.46,0.95)*	0.43 (0.19,1.02)	2.35 (0.71, 7.72)	5.30 (3.11,9.01)***
No	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Adjusted								
Respiratory condition								
No	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Yes	1.21 (0.56,2.63)	1.07 (0.54,2.11)	0.81 (0.55,1.19)	0.95 (0.48,1.87)	0.68 (0.46,1.00)	0.35 (0.14,0.87)*	2.30 (0.65,8.11)	5.93 (3.38,10.43)***
Number of other health conditions								
0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1	1.49 (0.32,6.93)	0.49 (0.14,1.68)	0.92 (0.54,1.56)	3.43 (0.67,17.59)	0.76 (0.44,1.31)	1.05 (0.33,3.31)	1.52 (0.28,8.16)	0.85 (0.41,1.77)
2	4.60 (1.22,17.44)*	1.53 (0.58,4.04)	0.66 (0.38,1.16)	6.46 (1.37,30.58)*	0.95 (0.54,1.66)	0.67 (0.19,2.44)	0.81 (0.13,5.20)	0.77 (0.37,1.60)
3+	3.44 (0.93,12.67)	1.78 (0.74,4.32)	1.69 (1.03,2.79)*	11.71 (2.63,52.03)**	1.37 (0.81,2.30)	1.00 (0.34,2.97)	1.33 (0.29,6.18)	0.84 (0.44,1.63)
Age								
50-59	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
60-69	0.73 (0.32,1.67)	0.44 (0.20,0.96)*	1.23 (0.81,1.86)	1.12 (0.55,2.27)	0.95 (0.62,1.46)	0.87 (0.34,2.25)	1.06 (0.28,3.99)	1.89 (1.10,3.26)*
70+	0.66 (0.21,2.12)	0.40 (0.13,1.21)	0.81 (0.47,1.39)	0.47 (0.15,1.49)	0.54 (0.31,0.92)*	1.27 (0.38,4.22)	2.26 (0.51,9.98)	1.83 (0.91,3.67)
Sex								
Male	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Female	0.90 (0.43,1.91)	0.96 (0.49,1.86)	1.25 (0.86,1.83)	0.98 (0.50,1.90)	0.73 (0.49,1.07)	1.31 (0.56,3.11)	0.43 (0.13,1.39)	0.97 (0.59,1.59)
Education								
Higher education	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
No qualifications	2.62 (0.88,7.79)	1.56 (0.47,5.22)	0.92 (0.44,1.92)	2.32 (0.83,6.48)	0.67 (0.32,1.37)	3.36 (0.91,12.48)	0.67 (0.07,6.12)	0.50 (0.19,1.28)
Secondary education	0.96 (0.42,2.18)	1.13 (0.56,2.29)	1.28 (0.87,1.89)	1.02 (0.50,2.09)	1.01 (0.67,1.50)	1.29 (0.51,3.24)	0.51 (0.15,1.81)	0.54 (0.33,0.91)*
Ethnicity								
White	1.0	1.0	1.0	1.0	1.0	1.0	-	1.0
Non-white	3.84 (0.40,37.19)	5.13 (0.88,30.03)	1.15 (0.27,4.82)	2.05 (0.22,19.56)	0.32 (0.07,1.42)	3.58 (0.34,38.06)	-	0.49 (0.05,4.35)
Marital status								
Single	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Married or living with partner	0.62 (0.28,1.34)	1.23 (0.60,2.51)	1.01 (0.68,1.50)	1.62 (0.78,3.35)	0.84 (0.56,1.26)	0.64 (0.27,1.52)	1.15 (0.34,3.93)	0.96 (0.58,1.62)
Smoking status								
Never smoked	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Current smoker	0.99 (0.36,2.72)	1.29 (0.54,3.07)	1.05 (0.63,1.74)	1.06 (0.39,2.84)	0.60 (0.36,1.01)	1.61 (0.60,4.28)	2.02 (0.54,7.59)	1.17 (0.61,2.23)
Previous smoker	1.14 (0.48,2.74)	1.13 (0.52,2.47)	0.91 (0.59,1.39)	1.83 (0.86,3.88)	0.82 (0.53,1.27)	0.50 (0.16,1.51)	0.34 (0.06,1.79)	0.98 (0.56,1.74)
Symptom attribution								
Cancer	0.90 (0.33,2.48)	0.73 (0.29,1.84)	1.26 (0.77,2.04)	1.57 (0.71,3.50)	0.61 (0.37,0.99)*	3.32 (1.34,8.21)*	1.62 (0.42,6.29)	0.56 (0.28,1.10)

Logistic regression models; OR (95% CI)=Odds ratio (95% Confidence Interval)

*<0.05, **<0.01, ***<0.001