

## Understanding the gender gap in antibiotic prescribing: a cross-sectional analysis of English primary care

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### Online supplementary appendix

**Table S1.** Primary care consultations and antibiotic prescribing proportions per consultation in adult men and women (aged 19 – 64 years) with and without comorbidities for 12 different conditions. Consultations from all practices in THIN are included, regardless of whether or not patients were registered there.

	Number of consultations (% of total)		Ratio of female:male consultation	Proportion of patients receiving prescription when consulting (95% CI)		Relative risk of receiving antibiotic prescription when consulting as female (95% CI) (p-value)
	Women	Men		Women	Men	
Acne	46,041 (74%)	16,456 (26%)	2.80	41% (40% – 41%)	60% (59% – 61%)	0.67 (0.67 – 0.69) (p<0.001)
Acne with comorbidity	3,938 (66%)	1,993 (34%)	1.98	42% (40% – 44%)	55% (53% – 58%)	0.76 (0.72 – 0.80) (p<0.001)
Bronchitis	12,318 (61%)	7,977 (39%)	1.54	83% (82% – 84%)	84% (83% – 85%)	0.99 (0.98 – 1.00) (p=0.09)
Bronchitis with comorbidity	4,916 (59%)	3,375 (41%)	1.46	87% (86% – 88%)	89% (88% – 90%)	0.98 (0.96 – 1.00) (p=0.01)
COPD	5,263 (59%)	3,688 (41%)	1.43	71% (70% – 73%)	69% (67% – 71%)	1.03 (1.00 – 1.06) (p=0.04)
COPD with non-RTI comorbidity	2,050 (54%)	1,718 (46%)	1.19	70% (67% – 72%)	67% (64% – 70%)	1.04 (1.00 – 1.09) (p=0.08)
Cough	255,587 (60%)	166,899 (40%)	1.53	49% (49% – 50%)	49% (49% – 49%)	1.01 (1.00 – 1.02) (p<0.001)
Cough with comorbidity	104,317 (59%)	71,401 (41%)	1.46	58% (58% – 58%)	56% (56% – 57%)	1.03 (1.02 – 1.04) (p<0.001)
Gastroenteritis	70,835 (57%)	52,796 (43%)	1.34	6% (6% – 6%)	6% (6% – 6%)	0.98 (0.93 – 1.02) (p=0.32)
Gastroenteritis with	19,636 (56%)	15,118 (44%)	1.30	7% (7% – 7%)	8% (7% – 8%)	0.91 (0.85 – 0.99) (p=0.02)

comorbidity						
ILI	17,050 (58%)	12,546 (42%)	1.36	20% (19% – 20%)	20% (19% – 20%)	1.01 (0.96 – 1.05) (p=0.83)
ILI with comorbidity	3,034 (56%)	2,336 (44%)	1.30	26% (24% – 27%)	28% (26% – 30%)	0.93 (0.85 – 1.01) (p=0.09)
Impetigo	8,707 (64%)	4,803 (36%)	1.81	52% (51% – 53%)	61% (59% – 62%)	0.85 (0.83 – 0.88) (p<0.001)
Impetigo with comorbidity	1,686 (65%)	925 (35%)	1.82	51% (49% – 54%)	61% (58% – 65%)	0.84 (0.78 – 0.90) (p<0.001)
LRTI	89,644 (59%)	61,550 (41%)	1.46	88% (88% – 89%)	87% (87% – 87%)	1.01 (1.01 – 1.02) (p<0.001)
LRTI with comorbidity	57,609 (59%)	39,687 (41%)	1.45	88% (87% – 88%)	86% (85% – 86%)	1.02 (1.02 – 1.03) (p<0.001)
Otitis media	19,440 (64%)	10,985 (36%)	1.77	82% (81% – 82%)	81% (80% – 82%)	1.01 (1.00 – 1.03) (p = 0.05)
Otitis media with comorbidity	3,935 (64%)	2,246 (36%)	1.75	83% (82% – 84%)	82% (80% – 83%)	1.02 (0.99 – 1.04) (p=0.13)
Sinusitis	74,863 (73%)	27,339 (27%)	2.74	87% (87% – 88%)	86% (85% – 86%)	1.02 (1.02 – 1.03) (p<0.001)
Sinusitis with comorbidity	18,475 (73%)	6,865 (27%)	2.69	90% (89% – 90%)	88% (87% – 89%)	1.02 (1.01 – 1.03) (p<0.001)
Sore throat	224,537 (67%)	109,975 (33%)	2.04	57% (56% – 57%)	57% (57% – 57%)	0.99 (0.99 – 1.00) (p=0.03)
Sore throat with comorbidity	37,446 (66%)	18,973 (34%)	1.97	53% (53% – 54%)	50% (50% – 51%)	1.06 (1.04 – 1.08) (p<0.001)
URTI	148,959 (68%)	71,244 (32%)	2.09	35% (34% – 35%)	36% (36% – 37%)	0.96 (0.95 – 0.97) (p<0.001)
URTI with comorbidity	35,450 (64%)	19,630 (36%)	1.81	45% (45% – 46%)	46% (45% – 47%)	0.99 (0.97 – 1.01) (p=0.46)

**Table S2.** The relative risk of receiving an antibiotic prescription when consulting with comorbidity. All adult patients consulting at their primary registered practice are included.

	Relative Risk (95% Confidence Interval) (p-value)	
	Women	Men
Acne	0.99 (0.94 – 1.05) (p=0.80)	0.91 (0.87 – 0.97) (p<0.001)
Bronchitis	1.05 (1.03 – 1.06) (p<0.001)	1.06 (1.04 – 1.08) (p<0.001)
COPD (non-respiratory comorbidity)	1.02 (0.98 – 1.05) (p=0.32)	0.98 (0.94 – 1.03) (p=0.42)
Cough	1.19 (1.18 – 1.20) (p<0.001)	1.17 (1.16 – 1.18) (p<0.001)
Gastroenteritis	1.27 (1.18 – 1.40) (p<0.001)	1.24 (1.14 – 1.35) (p<0.001)
ILI	1.29 (1.18 – 1.40) (p<0.001)	1.51 (1.38 – 1.65) (p<0.001)
Impetigo	1.04 (0.98 – 1.10) (p=0.24)	1.02 (0.95 – 1.09) (p=0.68)
LRTI	0.99 (0.99 – 1.00) (p=0.002)	0.99 (0.98 – 0.99) (p<0.001)
Otitis media	1.01 (0.99 – 1.03) (p=0.18)	1.00 (0.98 – 1.03) (p=0.76)
Sinusitis	1.02 (1.02 – 1.03) (p<0.001)	1.03 (1.02 – 1.04) (p<0.001)
Sore throat	0.94 (0.93 – 0.95) (p<0.001)	0.88 (0.87 – 0.90) (p<0.001)
URTI	1.32 (1.30 – 1.35) (p<0.001)	1.27 (1.24 – 1.30) (p<0.001)

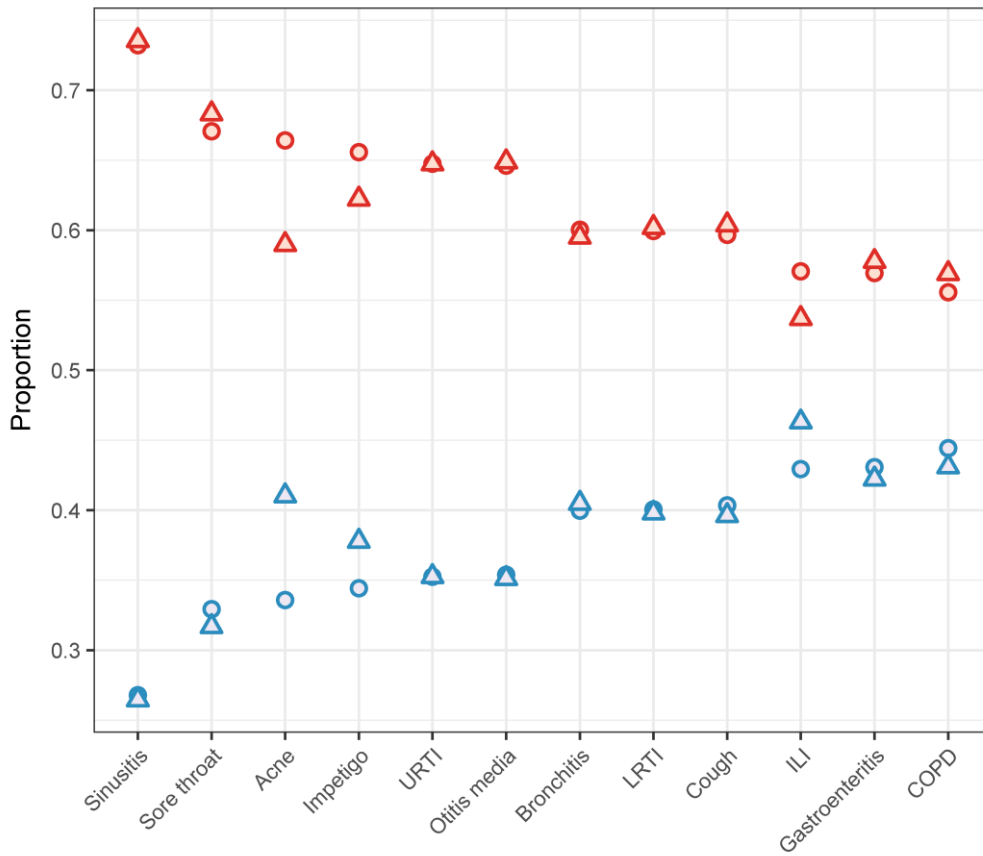


Figure S1. For common conditions in general practice, the proportions of all consultations (circles) and prescriptions (triangles) attributed to women (red) and men (blue). Consultations and prescriptions include all adult patients (aged 19-64) with comorbidity who consulted at their primary registered practice. Conditions are ordered by consultation proportion.

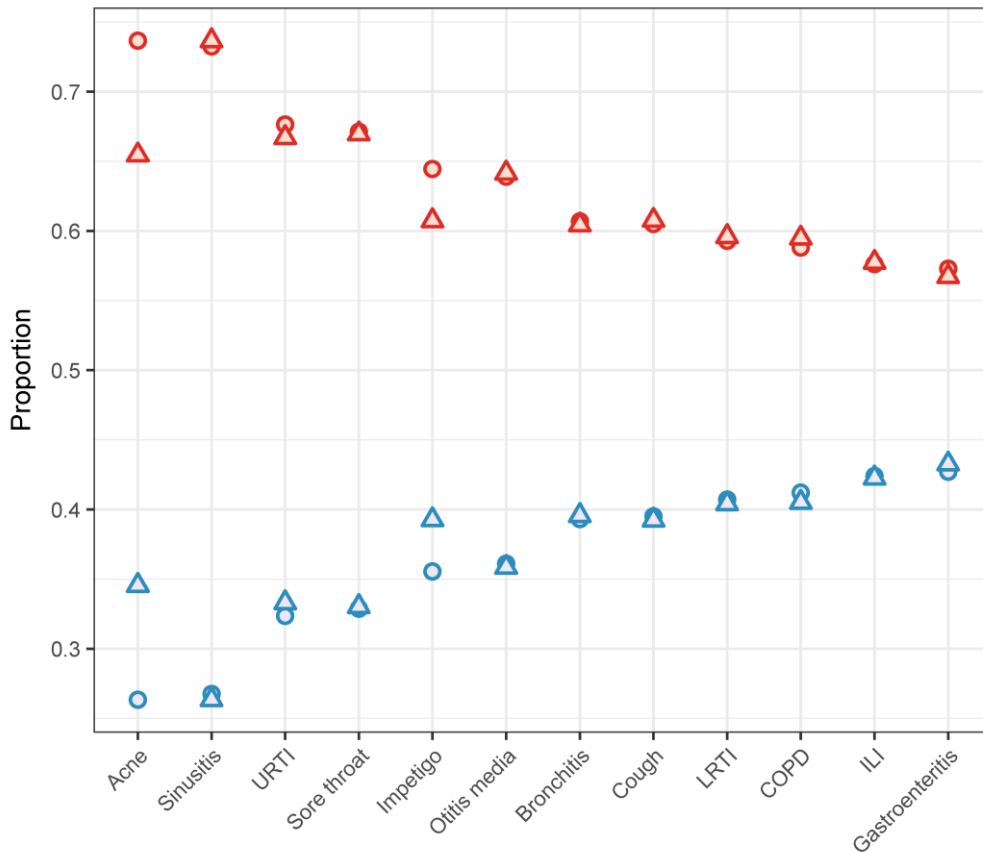


Figure S2. For common conditions in general practice, the proportions of all consultations (circles) and prescriptions (triangles) attributed to women (red) and men (blue). Consultations and prescriptions include all adult patients (aged 19-64) without comorbidity, including those who consulted outside their primary registered practice. Conditions are ordered by consultation proportion.

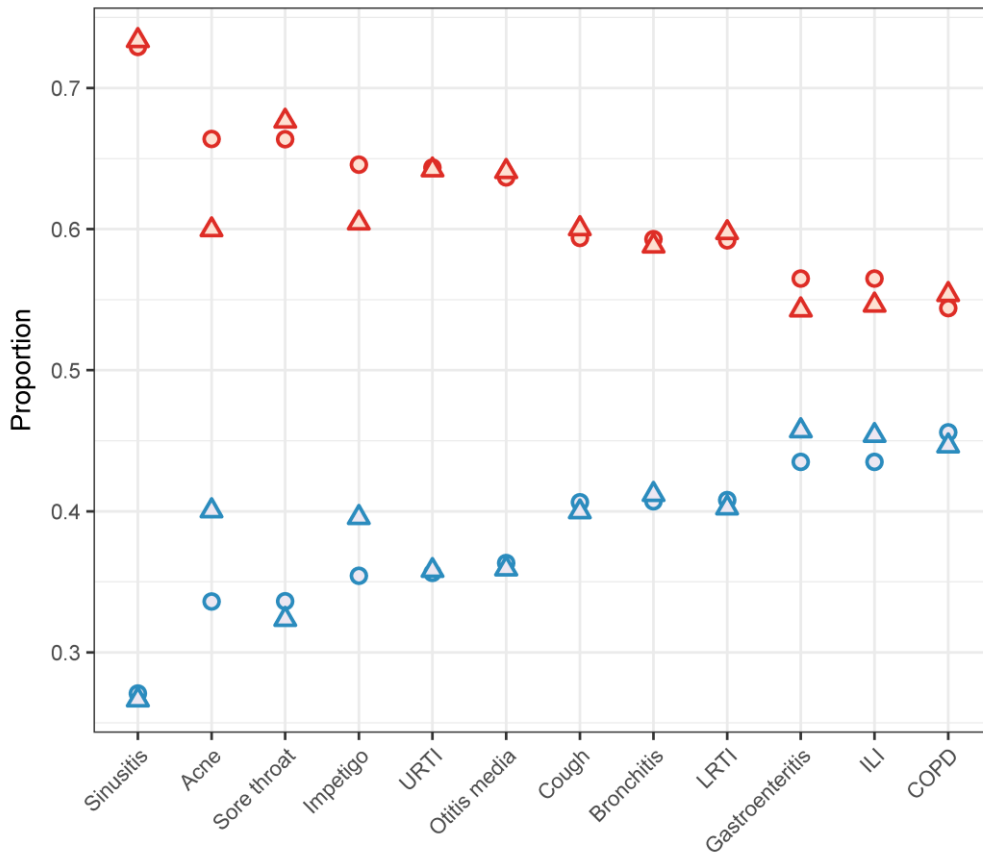


Figure S3. For common conditions in general practice, the proportions of all consultations (circles) and prescriptions (triangles) attributed to women (red) and men (blue). Consultations and prescriptions include all adult patients (aged 19-64) with comorbidity, including those who consulted outside their primary registered practice. Conditions are ordered by consultation proportion.