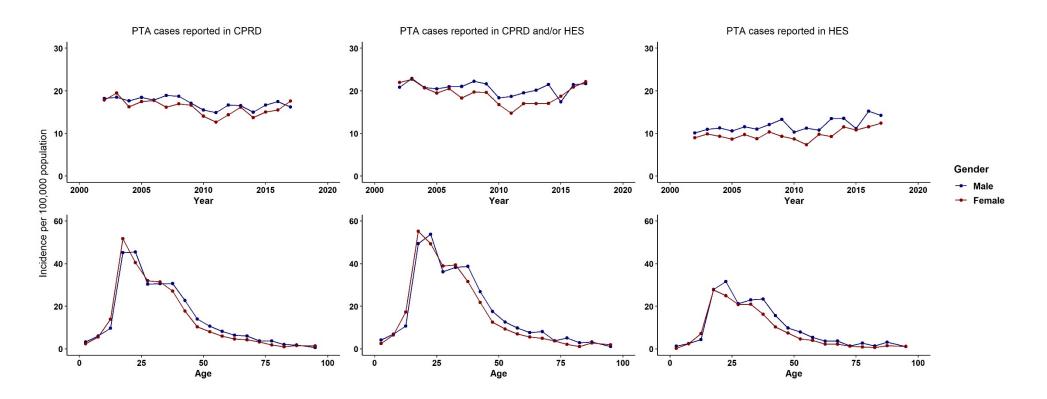
Supplemental materials for:

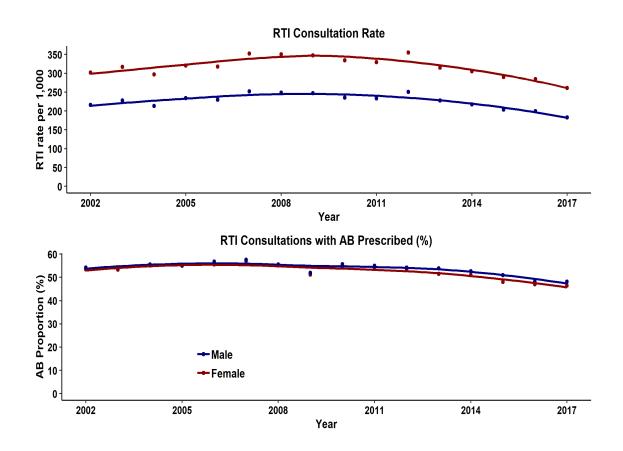
Winter JR, Charlton J, Ashworth M, Bunce C, Gulliford MC. Peritonsillar abscess and antibiotic prescribing for respiratory infection in primary care: a population-based cohort study and decision-analytic model. *Ann Fam Med*. 2020;18(5):390-396.

Supplemental Figure 1: The incidence of first cases of peritonsillar abscess reported from 2002-2017, stratified by gender.

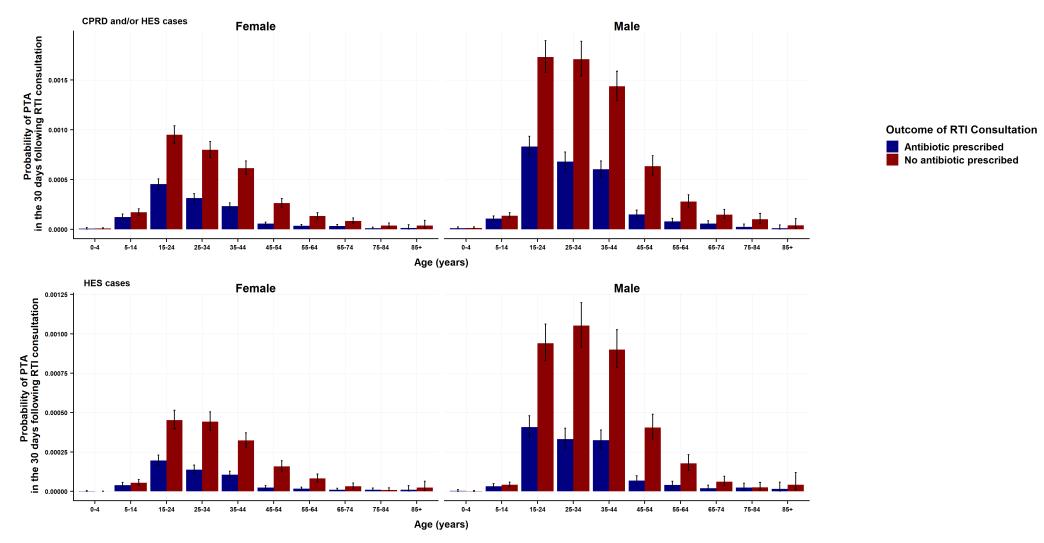
Age-standardised PTA incidence (top) by year from 2002-2017, and age-specific PTA incidence for five-year age groups (bottom) for the period 2002-2017.



Supplemental Figure 2: Consultation rate for self-limiting respiratory tract infections (RTI) per 1,000 patient years and proportion (%) of RTI consultations with antibiotics (AB) prescribed 2002 to 2017.



Supplemental Figure 3: Age- and gender-specific monthly probability of PTA in patients who consulted for RTI, with and without antibiotic prescription



Top: PTA cases reported in CPRD or HES. Bottom: PTA cases reported in HES

Supplemental Table 1: Probability of peritonsillar abscess in 30 days following a consultation for RTI, and estimated number of antibiotic prescriptions required to prevent one case of peritonsillar abscess by age group and gender. Bracketed figures are 95% uncertainty intervals.

| | MALE Probability of PTA (x100,000) | | FEMALE Probability of PTA (x100,000) | |
|----------------------|------------------------------------|-----------------|--------------------------------------|-----------------|
| Age group (years) | | | | |
| | Without antibiotic | With antibiotic | Without antibiotic | With antibiotic |
| 0 to 4 | 1.1 | 0.9 | 0.9 | 0.8 |
| | (0.6 to 1.7) | (0.4 to 1.7) | (0.4 to 1.4) | (0.3 to 1.5) |
| 5 to 14 | 14.3 | 10.3 | 16.4 | 10.8 |
| | (12.2 to 16.6) | (8.5 to 12.3) | (14.1 to 18.8) | (8.9 to 12.9) |
| 15 to 24 | 177.1 | 87.8 | 97.4 | 48.1 |
| | (165.3 to 189.6) | (80.5 to 95.7) | (90.9 to 104.4) | (44.0 to 52.5) |
| 25 to 34 | 171.7 | 63.6 | 79.5 | 29.0 |
| | (158.3 to 185.8) | (57.1 to 70.6) | (73.4 to 85.7) | (26.0 to 32.2) |
| 35 to 44 | 141.2 | 53.3 | 62.3 | 21.2 |
| | (130.2 to 152.7) | (47.7 to 59.0) | (57.3 to 67.7) | (18.9 to 23.6) |
| 45 to 54 | 65.0 | 17.4 | 27.6 | 6.8 |
| | (57.8 to 72.9) | (14.3 to 20.9) | (24.3 to 31.2) | (5.5 to 8.2) |
| 55 to 64 | 25.8 | 10.1 | 12.4 | 4.4 |
| | (21.4 to 30.6) | (7.8 to 12.6) | (10.2 to 14.9) | (3.4 to 5.6) |
| 65 to 74 | 12.7 | 4.3 | 7.7 | 2.6 |
| | (9.7 to 16.1) | (2.9 to 6.1) | (5.8 to 9.8) | (1.7 to 3.6) |
| 75 to 84 | 8.3 | 3.1 | 3.7 | 1.5 |
| | (5.3 to 12.0) | (1.6 to 5.1) | (2.2 to 5.6) | (0.7 to 2.5) |
| 85+ | 4.1 | 0.8 | 4.1 | 1.0 |
| | (1.4 to 8.9) | (0.1 to 2.6) | (1.6 to 7.9) | (0.1 to 2.8) |