

### Published evidence from systematic reviews – three quantitative and two qualitative

#### 1 Interventions to influence consulting and antibiotic use

- Interventions should engage children, occur prior to an illness episode, employ delayed prescribing, and provide guidance on specific symptoms.

**Andrews T, Thompson M,** Buckley DI, Heneghan C, Deyo R, Redmond N, et al. Interventions to influence consulting and antibiotic use for acute respiratory tract infections in children: A systematic review and meta-analysis. PLoS ONE. 2012; 7(1): e30334

#### 2 Interventions to reduce antibiotic prescribing

- Interventions aimed towards clinicians and parents can reduce prescribing.
- Target both clinicians and parents during consultations, provide automatic prescribing prompts and promote clinician leadership in design of interventions.
- Passive intervention approaches don't work to reduce antibiotic prescribing.

**Vodicka TA, Thompson M,** Lucas P, Heneghan C, Blair PS, Buckley DI, et al. Reducing antibiotic prescribing for children with respiratory tract infections in primary care: a systematic review. The British Journal of General Practice. 2013; 63(612): e445-54.

#### 3 RTI symptom trajectories

- Durations of earache and common colds are considerably longer than UK and US guidelines currently suggest.
- Updating guidelines will support parents and clinicians to make decisions around respiratory tract infections (RTIs).

**Thompson M,** Vodicka TA, Blair PS, Buckley DI, Heneghan C, Hay AD, et al. Duration of symptoms of respiratory tract infections in children: systematic review. BMJ. 2013; 347: f7027.

#### 4 Parent-clinician communication affects prescribing decisions

- Clinicians and parents talk at cross purposes with regard to 'seriousness' of illness.
- Communication skills training may improve primary care clinicians' understanding of parents' concerns.

**Cabral C,** Horwood J, Hay AD, Lucas PJ. How communication affects prescription decisions in consultations for acute illness in children: a systematic review and meta-ethnography. BMC Family Practice. 2014; 15: 63.

#### 5 Parent/clinician views and perceptions influencing prescribing decisions

- Clinicians prescribe when they believed antibiotics are clinically indicated, when they perceive pressure and "just in case" when they feel uncertain about outcomes.
- The medical examination in itself is reassuring to parents and they generally have a "no treatment" preference, although some do want prescriptions when they believe they will improve the current illness.
- Clinicians want satisfied parents and shorter consultations.

**Lucas PJ,** Cabral C, Hay AD, Horwood J. A systematic review of parent and clinician views and perceptions that influence prescribing decisions in relation to acute childhood infections in primary care. Scand J Prim Health Care. 2015: 1-10.

