Background

Audits aim to provide a snapshot of prescribing at a particular point in time. Conducting audits and action planning together enables a practice to understand current antibiotic prescribing patterns, discuss within the team and make improvements, if necessary. Use this audit template to evaluate antibiotic prescribing against current local and/or national guidelines. The tool will allow prescribers to compare their prescribing decisions with local guidance and will support identification of areas for quality improvement.

Aim

To audit antibiotic prescribing for sore throat against

1. [NICE Guidelines (NG84)](https://www.nice.org.uk/guidance/ng84/resources/visual-summary-pdf-4723226606)[1](https://www.nice.org.uk/guidance/ng84/resources/visual-summary-pdf-4723226606): Sore throat (acute): antimicrobial prescribing
2. [NICE Summary of antimicrobial prescribing guidance](https://www.bnf.org/news/2021/07/29/bnf-hosts-antimicrobial-summary-guidance-on-behalf-of-nice-and-phe/)2 - managing common infections

**Table 1.** The current NICE summary of [antimicrobial prescribing guidance](https://www.bnf.org/news/2021/07/29/bnf-hosts-antimicrobial-summary-guidance-on-behalf-of-nice-and-phe/) for acute sore throats.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Infection** | **Key Points** | **Medicine** | **Adult dose** | **Length** |
| **Acute Sore Throat**  [NICE NG84](https://www.nice.org.uk/guidance/ng84) | Advise paracetamol, or if preferred and suitable, ibuprofen for pain.  Medicated lozenges may help pain in adults.  Use [FeverPAIN](https://www.nice.org.uk/guidance/ng84/chapter/Terms-used-in-the-guideline) or [Centor](https://www.nice.org.uk/guidance/ng84/chapter/Terms-used-in-the-guideline) to assess symptoms:  **FeverPAIN 0-1 or Centor 0-2:** no antibiotic;  **FeverPAIN 2-3:** no or back-up antibiotic;  **FeverPAIN 4-5 or Centor 3-4:** immediate or  back-up antibiotic.  **Systemically very unwell or high risk of complications:** immediate antibiotic.  \*5 days of phenoxymethylpenicillin may be enough for symptomatic cure; but a 10-day course may increase the chance of microbiological cure.  For detailed information view the [visual summary](https://www.nice.org.uk/guidance/ng84/resources/visual-summary-pdf-4723226606). | **First choice delayed or immediate** **antibiotic**  phenoxymethylpenicillin | 500mg QDS  **OR**  1000mg BD | 5 – 10 days |
| **Penicillin allergy:**  clarithromycin **OR** | 250mg to 500mg BD | 5 days |
| erythromycin (preferred if  pregnant) | 250mg to 500mg QDS  **OR**  500mg to 1000 mg BD | 5 days |

How to complete this audit

This audit tool can be modified to follow local infection management guidelines.

**Step 1**: Search for 20-40 consultation records (minimum 20 consultations) relating to acute sore throat. The Read codes below are a sample of codes that can be used but consider adding codes that you or your colleagues are likely to use when you see patients with cough. Searching for just a few Read/Snomed codes may identify all the consultations you require for the audit.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Read Code | SNOMED Code | Infection | Read Code | SNOMED Code | Infection |
| **1C9** | 267102003 | Sore throat Symptom | **H02-3** | 405737000 | Throat infection: pharyngitis |
| **H03** | 17741008 | Acute tonsillitis | **H024** | 195662009 | Acute viral pharyngitis |
| **H040** | 6655004 | Acute laryngitis | **H02z** | 363746003 | Acute pharyngitis NOS |
| **1C9-1** | 162397003 | Throat soreness | **H03-1** | N/A | Throat infection - tonsillitis |
| **A340** | 43878008 | Streptococcal sore throat | **H03-2** | 90176007 | Tonsillitis |
| **H02-2** | N/A | Viral sore throat NOS | **H031** | 195667003 | Acute follicular tonsillitis |
| **H036** | 195676005 | Acute viral tonsillitis | **H03z** | 17741008 | Acute tonsillitis NOS |
| **H037** | 195677001 | Recurrent acute tonsillitis | **1C92** | 162388002 | Has a sore throat |
| **1CB3** | 162397003 | Throat pain |  |  |  |

**Step 2**: Compete the data collection table below for each selected patient.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Data Collection Sheet: ACUTE SORE Audit** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Compliance with NICE guidance for acute sore throat** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** | **24** | **25** | **26** | **27** | **28** | **29** | **30** | **31** | **32** | **33** | **34** | **35** | **36** | **37** | **38** | **39** | **40** | **% of Total with acute sore throat** | **Your target % for good practice** |
| 1. FeverPAIN(FP) or Centor(C) used |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. **FP 0-1 or C2:** No antibiotic given |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. **FP 2-3**: No antibiotic or back-up/delayed antibiotic given with advice about how to access |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. **FP4 – 5 or C3-4**Immediate antibiotic or a back-up antibiotic prescription given with advice on adherence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. **Management appropriate for clinical presentation?** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Advice given on natural history and average length of illness   *7 days* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Advice given about managing symptoms including fever   *Self-care advice* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Information about when to re-consult *Safety netting advice* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Information shared on *antibiotic use and resistance* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. [Shared the TARGET Treating Your Infection RTI leaflet](http://www.rcgp.org.uk/clinical-and-research/toolkits/~/link.aspx?_id=9FCF9DA4B4A045519593320478DFD9E7&_z=z) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **If antibiotics prescribed** (N=\_\_\_\_\_\_ ) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Antibiotic choice correct   *1st line: Phenoxymethylpenicillin*  *Penicillin allergy: clarithromycin or erythromycin*  *Penicillin allergy in pregnancy: erythromycin* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Dose/frequency correct   *Phenoxymethylpenicillin 500mg QDS OR 1000mg BD*  *Clarithromycin 250-500mg BD*  *Erythromycin 250-500mg QDS or 500mg – 1000mg BD (preferred in pregnancy)* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Course length correct   *Phenoxymethylpenicillin 5-10d*  *Clarithromycin and erythromycin 5d* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

For ease of use you can now summarise your data the Summary table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Total number of patients** | | **…………………..** | | |
| **Row in table below** | **Criteria** | **Number of patients**  **(N)** | **Total % of Patients** | **Target %[[1]](#footnote-1)** |
| **Management decision** | | | | |
| **A** | FEVERPAIN or Centor algorithm used |  |  | >80% |
| **B** | No antibiotic given |  |  | 40% - 60% |
| **C** | Back-up/delayed antibiotic given with advice about how to access |  |  | 20% - 40% |
| **D** | Immediate antibiotic given with advice on compliance |  |  | 20% - 40% |
| **E** | Management appropriate for clinical presentation? |  |  | 100% |

|  |
| --- |
| **Providing Advice** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **F** | Advice given on natural history and average length of illness – *7 days* |  |  | 100% |
| **G** | Advice given about managing symptoms (*Self-care advice*) |  |  |
| **H** | Information about when to re-consult (*Safety netting advice*) |  |  |
| **I** | Information given about antibiotic use and resistance |  |  |
| **J** | [Shared the TARGET Treating Your Infection RTI leaflet](http://www.rcgp.org.uk/clinical-and-research/toolkits/~/link.aspx?_id=9FCF9DA4B4A045519593320478DFD9E7&_z=z) |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **If antibiotics were prescribed: (N= …….. )** | | | | |
| **K** | Antibiotic choice correct – *1st line: Penicillin V*  *2nd line: Clarithromycin* OR *erythromycin* |  |  | 100% |
| **L** | Dose/frequency correct – *Penicillin V 500mg QDS or 1000mg BD*  *Clarithromycin 250 - 500mg BD*  *Erythromycin 250 - 500mg QDS;*  *500mg – 1000mg BD in pregnancy* |  |  |
| **M** | Course length correct –  *Penicillin V 5-10d*  *Clarithromycin 5d*  *Erythromycin 5d* |  |  |

**Step 3**: How did you do? Use the calculations below to check compliance with NICE guidance.

1. **Was the FEVERPAIN or Centor algorithm used?** (Total row A)
2. **On whether to prescribe an antibiotic**
3. **Overall compliance with NICE guidance to share self-help, safety netting advice and antibiotic advice (FGHI) OR if TARGET Treating Your Infection RTI leaflet shared(J)**
4. **If antibiotics were used, total number given correct antibiotic, dose/frequency and course length (KLM )**

**What can you do to improve guidance compliance?**

1. Promote use of NICE [antimicrobial / management of infection guidelines](https://www.nice.org.uk/guidance/health-protection/communicable-diseases/antimicrobial-stewardship) by all in practice
2. Encourage use of TARGET Treating Your Infection – Respiratory Tract infection (TYI-RTI) [leaflet.](https://elearning.rcgp.org.uk/mod/book/view.php?id=12647&chapterid=444)
3. Share TARGET TYI-RTI leaflet on clinical system.
4. Encourage consistent message from different staff and when patients re-attend.
5. Encourage others to perform [audit](https://elearning.rcgp.org.uk/mod/book/view.php?id=12649).
6. Re-audit in 4 months - identify a date when you will repeat the [audit](https://elearning.rcgp.org.uk/mod/book/view.php?id=12649).
7. Record actions required, especially when compliance with primary care guidance is less than 80%.
8. Make use of [TARGET toolkit](https://elearning.rcgp.org.uk/course/view.php?id=553).
9. Consider developing a target for antibiotic prescribing rate. e.g. 1 in 3 immediate, 1 in 3 delayed, 1 in 3 no antibiotic)
10. Make use of [FeverPAIN or Centor Score](https://www.nice.org.uk/guidance/ng84/chapter/Terms-used-in-the-guideline).

**Acknowledgements**

This audit was devised by Dr Imran Jawaid with advice from Dr Cliodna McNulty.

**References**

1. National Institute for Health and Care Excellence. 2022. Acute sore throat [ONLINE] Available at [Overview | Sore throat (acute): antimicrobial prescribing | Guidance | NICE](https://www.nice.org.uk/guidance/ng84) [Accessed 10th November 2022].

NICE/Public Health England. (February 2019). Summary of antimicrobial prescribing guidance – managing common infections. [ONLINE] Available at: [BNF hosts antimicrobial summary guidance on behalf of NICE and PHE - BNF Publications](https://www.bnf.org/news/2021/07/29/bnf-hosts-antimicrobial-summary-guidance-on-behalf-of-nice-and-phe/). [Accessed 10th November 2022].

Little P, Moore M, Hobbs FDR, et al PRImary care Streptococcal Management (PRISM) study: identifying clinical variables associated with Lancefield group A β-haemolytic streptococci and Lancefield non-Group A streptococcal throat infections from two cohorts of patients presenting with an acute sore throat BMJ Open 2013;3:e003943. doi: 10.1136/bmjopen-2013-003943 [ONLINE] Available at: [PRImary care Streptococcal Management (PRISM) study: identifying clinical variables associated with Lancefield group A β-haemolytic streptococci and Lancefield non-Group A streptococcal throat infections from two cohorts of patients presenting with an ac… | BMJ Open](https://bmjopen.bmj.com/content/3/10/e003943)

1. [↑](#footnote-ref-1)