Background information

Guideline issue date: 2008
4 year review: 2012
National Collaborating Centre: Centre for Clinical Practice at NICE

Review recommendation

- The guideline should not be updated at this time.

Factors influencing the decision

Literature search

1. Through an assessment of abstracts from a high-level randomised control trial (RCT) search, new evidence was identified relating to the following clinical areas within the guideline:
   - Antibiotic management strategies for respiratory tract infections (RTIs)
   - Identifying patients with RTIs who are likely to be at risk of developing complications
   - Patients’ preferences regarding antibiotic management strategies for RTIs (no prescribing, delayed prescribing and immediate prescribing strategies)
2. No new evidence was identified in these areas which would invalidate the current guideline recommendations.

3. No additional clinical area was identified from initial intelligence gathering, qualitative feedback from other NICE departments, and the views expressed by the Guideline Development Group that required further focused literature searches.

4. Three clinical trials (publication dates unknown) were identified focusing on assessment of delayed antibiotic prescribing strategies, antibiotics versus ultrasound for sinusitis and antibiotic compliance in children with upper and lower RTIs. However, at this time it is unclear whether the ongoing clinical trials will have any impact on the guideline recommendations in the future.

Guideline Development Group and National Collaborating Centre perspective

5. A questionnaire was distributed to GDG members and the National Collaborating Centre to consult them on the need for an update of the guideline. Six responses were received with some respondents highlighting relevant new literature relating to the use of rapid diagnostic tests for RTIs although this area is outwith the guideline scope. In addition, the GRACE collaboration was highlighted (Genomics to combat resistance against antibiotics in community-acquired LRTI in Europe) as studies published from this project at a later date may have an impact on guideline recommendations in the future.

6. Relevant evidence was highlighted by the GDG including a survey of a delayed antibiotic prescribing strategy, development of methods to reduce patient desire for antibiotics and a qualitative study and systematic review evaluating GPs’ views of antibiotic prescribing strategies. However, further research is required which evaluates the clinical effectiveness of different methods of delivering a delayed
antibiotic prescribing strategy in primary care for adults and children presenting with RTIs. As such, the identified new evidence is unlikely to change the direction of the current guideline recommendation which states that a no antibiotic prescribing strategy or a delayed antibiotic prescribing strategy should be agreed for patients with acute otitis media, acute sore throat/acute pharyngitis/acute tonsillitis, common cold, acute rhinosinusitis or acute cough/acute bronchitis.

7. The majority of respondents felt that there is insufficient variation in current practice and minimal new evidence to warrant an update of the current guideline.

Implementation and post publication feedback

8. In total 21 enquiries were received from post-publication feedback, most of which were routine.

9. No new evidence was identified through implementation feedback that would indicate a need to update the guideline.

Relationship to other NICE guidance

10. NICE guidance related to CG69 can be viewed in Appendix 1.

Summary of Stakeholder Feedback

<table>
<thead>
<tr>
<th>Review proposal put to consultees:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The guideline should not be updated at this time.</td>
</tr>
<tr>
<td>The guideline will be reviewed again according to current processes.</td>
</tr>
</tbody>
</table>

11. In total eight stakeholders commented on the review proposal recommendation during the two week consultation period. The table of stakeholder comments can be viewed in Appendix 2.

12. Five stakeholders agreed with the review proposal and three stakeholders did not state a definitive decision.
13. Stakeholders commented that:

- The review of the guideline has not considered rapid diagnostic tests for RTIs such as procalcitonin. However, this area is outwith the guideline scope.
- The immediate versus delayed antibiotic prescribing strategy requires further exploration. However, an assessment of the abstracts concluded that currently, there is inconsistent new evidence and this would not invalidate the guideline recommendations. Further research is required to determine which subgroups of adults and children with RTIs presenting in primary care settings are most likely to benefit from an immediate antibiotic prescribing strategy in terms of symptomatic management and prevention of complications. This area will be examined again in the future review of the guideline.

**Anti-discrimination and equalities considerations**

14. No evidence was identified to indicate that the guideline scope does not comply with anti-discrimination and equalities legislation. The guideline offers best practice advice on the care of adults and children (3 months and older) with RTIs, for whom immediate antibiotic prescribing is not indicated.

**Conclusion**

15. Through the process no additional areas were identified which would indicate a significant change in clinical practice. No factors described above would invalidate or change the direction of current guideline recommendations. The Respiratory Tract Infection guideline should not be updated at this time.

**Relationship to quality standards**

16. This topic has not been considered for inclusion in the scope of a quality standard.
Appendix 1

The following NICE guidance is related to CG69:

<table>
<thead>
<tr>
<th>Guidance</th>
<th>Review date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG47: Feverish illness in children, 2007.</td>
<td>An update of this guideline is currently in progress.</td>
</tr>
<tr>
<td></td>
<td>Expected date of publication: May 2013.</td>
</tr>
</tbody>
</table>
## Appendix 2

National Institute for Health and Clinical Excellence

Respiratory tract infection
Guideline Review Consultation Comments Table
2 – 18 April 2012

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Agree with proposal not to update?</th>
<th>Comments</th>
<th>Comments on areas excluded from original scope</th>
<th>Comments on equality issues</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARNS</td>
<td>Yes</td>
<td>We agree that there is no evidence to suggest that the guidelines need updating at this time</td>
<td>We agree that the original scope covers all appropriate areas</td>
<td>We agree that there is no concern regarding equality issues</td>
<td>Thank you for your comment.</td>
</tr>
<tr>
<td>British Thoracic Society</td>
<td>Yes</td>
<td>No further comments</td>
<td>No further comments</td>
<td>No further comments</td>
<td>Thank you for your comment.</td>
</tr>
<tr>
<td>Department of Health</td>
<td>Yes</td>
<td>I wish to confirm that the Department of Health has no substantive comments to make regarding this consultation.</td>
<td></td>
<td></td>
<td>Thank you for your comment.</td>
</tr>
<tr>
<td>RCGP</td>
<td>Yes</td>
<td>The Royal College of Nursing notes the proposed recommendation that the guideline should not be considered for an update at this time. The proposal to review this again according to current processes is also noted. There are no further comments to make on behalf of the RCN.</td>
<td></td>
<td></td>
<td>Thank you for your comment.</td>
</tr>
<tr>
<td>RCN</td>
<td>Yes</td>
<td>The RCP wishes to endorse the response</td>
<td></td>
<td></td>
<td>Thank you for your comment.</td>
</tr>
<tr>
<td>RCPCH</td>
<td>Yes</td>
<td>Submitted by the British Thoracic Society to the above consultation.</td>
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<td>-------</td>
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<td></td>
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<tr>
<td>RCPCH</td>
<td>Yes</td>
<td>No new evidence available.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCPCH</td>
<td>Yes</td>
<td>There has been nothing to indicate a need to change recommendations for children.</td>
<td></td>
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</tr>
<tr>
<td>RCPCH</td>
<td>Yes</td>
<td>Analysis of evidence is robust at this stage which does not warrant any change in current recommendation of NO or DELAYED antibiotic prescribing. The message in this recommendation needs to be disseminated widely to reduce inappropriate demands for antibiotics from parents and carers and prescribing by healthcare professionals.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCPCH</td>
<td>Yes</td>
<td>Clinical indicators to warrant antibiotic prescribing in children for RTI needs to be validated through appropriate studies.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>York Hospitals NHS Foundation Trust</td>
<td>Yes</td>
<td>This document seems to be quite vague and lacking in the level of detail expected. Also, the conclusions drawn from analysis of various studies are sometimes inconclusive and contradictory, highlighting the need for further analysis and exploration. When focusing on patients' preferences regarding antibiotic management strategies for RTIs, only one study was cited to be relevant to this issue. The findings of this study according to the consultation document were that patient satisfaction to antibiotic treatment was increased in some</td>
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<td></td>
</tr>
<tr>
<td>York Hospitals NHS Foundation Trust</td>
<td>Yes</td>
<td>Through the review of the guideline it was concluded that the new literature identified currently provides inconsistent evidence on predicting which children and adults with acute RTIs are likely to develop complications. This area will be examined again in the next review of the guideline.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>York Hospitals NHS Foundation Trust</td>
<td>Yes</td>
<td>In terms of process, a full systematic review of the whole guideline is not conducted when assessing whether a guideline should be updated. Intelligence from the GDG questionnaire, post-publication enquiries, initial intelligence gathering and a high-level RCT search is used to determine clinical areas within the guideline where new evidence may exist that could have an impact on current guideline recommendations, in</td>
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</table>
settings but not in others. However, this document failed to mention that this study compared patient satisfaction in Veterans Association (VA) hospitals in comparison to non-VA hospitals. It was found that mainly the patients in VA hospitals expressed satisfaction with no antibiotic treatment, whereas non-VA hospital patients were mostly satisfied when antibiotic treatment was given. Furthermore, the study states that patients in VA hospitals had fundamentally different expectations to the rest of the population and all satisfaction measures were consistently higher. There may be an indication here that non-VA hospitals are more representative of the general population, in whom antibiotic treatment lead to greater satisfaction. In light of this information, it is important to be aware of the effects of patient satisfaction, possibly ensuring further education while discussing the use of prescribing strategies. This may be an issue that requires looking into in greater detail and possible amendment to guidelines.

addition to taking consideration of any safety aspects and drug licensing. All of this intelligence informs the review proposal.

The process for a review of the guideline includes an assessment of study abstracts, and although it is noted that the full publication will contain additional results and information, only the outcomes presented in the abstract are reported.

However, the identified new evidence is unlikely to change the direction of the current guideline recommendation which states:

- Patients’ or parents’/carers’ concerns and expectations should be determined and addressed when agreeing the use of the three antibiotic prescribing strategies (no prescribing, delayed prescribing and immediate prescribing).

This area will be examined again in the next review of the
When discussing antibiotic management strategies, it was apparent that shared decision making seemed to reduce antibiotic prescribing whereas clinical decision support tools did not have much effect on antibiotic prescribing. However, the conclusions drawn around antibiotic prescribing strategy may require further exploration. According to the document, the first study\(^2\) considered in this area concluded that delayed antibiotic prescribing for RTI resulted in reduced reconsultation in this group. However, it failed to mention that this reduction in reconsultation was only seen in patients who previously had antibiotics prescribed and had the highest reconsultation rates. Coupled with the results from the meta-analysis on AOM\(^3\) showing that clinical success was more likely with antibiotics, it may be that further exploration of immediate antibiotic use is required. This is also in keeping with relevant studies such as the Cochrane report\(^4\) revealing that patients who were offered delayed prescribing had significantly more fever and malaise than those with immediate prescribing. Also, the study\(^5\) highlighted by GDG showed that delayed prescribing was not considered a helpful strategy for managing patients with self limiting RTI.

Thank you for your comment. As mentioned above, the process for a review of the guideline includes an assessment of study abstracts, and although it is noted that the full publication will contain additional results and information, only the outcomes presented in the abstract are reported.

Through an assessment of the abstracts it was concluded that currently, there is inconsistent new evidence. This would not invalidate the guideline recommendation:

- A no antibiotic prescribing strategy or a delayed antibiotic prescribing strategy should be agreed for patients with the following conditions:
  - acute otitis media
  - acute sore throat/acute pharyngitis/acute tonsilitis
  - common cold
Therefore, it may be evident that future training and guidelines should be considered to encourage alternative ways of communication empathy, addressing patient beliefs and encouraging self management. This could also be useful to GPs who have been shown to require greater support to maximise acceptability and feasibility in implementing these guidelines.


2. Moore M, Little P, Rumsby K et al.

Further research is required to determine which subgroups of adults and children with RTIs presenting in primary care settings are most likely to benefit from an immediate antibiotic prescribing strategy in terms of symptomatic management and prevention of complications. This area will be examined again in the future review of the guideline.

Thank you for providing these references. References 1-3 and 5-6 were considered through our review of the guideline.

Thank you for supplying the reference by Spurling et al., 2004. This reference does not meet the inclusion criteria. This review considers new evidence...


York Hospitals NHS Foundation Trust

No mention of procalcitonin.

Thank you for your comment. The use of rapid diagnostic tests (such as C-reactive protein and procalcitonin) are outwith the guideline scope.
York Hospitals NHS Foundation Trust | The guideline is more directed to GP work and so I think the relevance for our work is less clear. There are difficulties with delayed prescribing (e.g. otitis media tonsillitis) because we are not often in a situation to review them. Although it is possible that we could communicate this need to GPs.

Otherwise management would be covered in NICE DOCUMENT “Child with Fever under 5 years” and BTS guidelines on Community Acquired Pneumonia in Children. |
---|---
York Hospitals NHS Foundation Trust | Doesn't really seem to deal with CAP which is our major concern. |
---|---

Thank you for your comment. The guideline scope indicates that this guideline is relevant to primary care and community settings including general practices, community pharmacies, NHS walk-in centres and primary medical and nursing care provided in emergency departments.

Thank you for your comment. The review process identified 17 studies relevant to the guideline scope, with one study focusing on community-acquired pneumonia. However, the results of this study are unlikely to change the direction of the current guideline recommendation:

- An immediate antibiotic prescription and/or further appropriate investigation and management should only be offered to patients (both adults and children) in the following situations:
If the patient has symptoms and signs suggestive of serious illness and/or complications (particularly pneumonia, mastoiditis, peritonsillar abscess, peritonsillar cellulitis, intraorbital and intracranial complications)...

York Hospitals NHS Foundation Trust

The document seems quite brief for such a key area with many types of infections.

Thank you for your comment. In terms of process, a full systematic review of the whole guideline is not conducted when assessing whether a guideline should be updated. Intelligence from the GDG questionnaire, post-publication enquiries, initial intelligence gathering and a high-level RCT search is used to determine clinical areas within the guideline where new evidence may exist that could have an impact on current guideline recommendations, in addition to taking consideration of any safety aspects and drug licensing. All of this intelligence...
York Hospitals NHS Foundation Trust  

This appears to address only a narrow range of respiratory infections; I can see no data concerning pneumonia or infective exacerbation of COPD, which together account for around 15% of all acute medical admissions to hospital. The methods include a review of published abstracts rather than original papers, and this is reflected by the lack of detail in the report.

The data concerning immediate versus delayed therapy is relevant, but too few data are presented to allow any firm conclusions. Moreover, we might also welcome comparative outcome data (including adverse effects) associated with different antimicrobial regimens and treatment durations but there are no data presented; this is something that NICE should perhaps consider exploring in greater depth?

Thank you for your comment.

In terms of process, a full systematic review of the whole guideline is not conducted when assessing whether a guideline should be updated. Intelligence from the GDG questionnaire, post-publication enquiries, initial intelligence gathering and a high-level RCT search is used to determine clinical areas within the guideline where new evidence may exist that could have an impact on current guideline recommendations, in addition to taking consideration of any safety aspects and drug licensing. All of this intelligence informs the review proposal.

The process includes an assessment of study abstracts, and although it is noted that the full publication will contain additional results and information, only the outcomes presented in the abstract are reported.

Studies that looked only at the efficacy of antibiotic regimens compared with placebo or...
studies based on specific subgroup populations with specific comorbidities (i.e. COPD, asthma, etc.) were excluded as this was the methodology used in the development of the guideline. Studies were included if they compared the effectiveness of delayed and/or no antibiotic prescribing strategies with immediate prescribing strategy in primary care settings.