NICE National Institute for Health and Care Excellence

2018 surveillance of pneumonia in adults: diagnosis and management (NICE guideline CG191)

Surveillance report

Published: 31 October 2018

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Contents

Surveillance decision

We will not update the guideline on pneumonia in adults.

Reasons for the decision

New evidence was found on severity assessment tools for use in secondary care that was in line with that considered during guideline development.

Evidence was found for the following areas within the guideline scope but outside current recommendations, which was considered insufficient to update the guideline: lung ultrasound, adjunctive treatment with coenzyme Q10.

Evidence from a Cochrane review was found that was not in line with the guideline. The findings indicate that glucocorticoids may be effective as an adjunctive treatment of community-acquired pneumonia (CAP). After a detailed review of the results, it became clear that the majority of studies included in the review had already been considered during guideline development and judged not applicable to a UK setting. However, 2 UK-based ongoing trials in this area are being monitored and will be assessed for any impact on the guideline upon publication.

For further details and a summary of all evidence identified in surveillance, see appendix A.

Overview of 2018 surveillance methods

NICE's surveillance team checked whether recommendations in pneumonia in adults (NICE guideline CG191) remain up to date.

The surveillance process consisted of:

- Feedback from topic experts via a questionnaire.
- Literature searches to identify relevant evidence.
- Assessing the new evidence against current recommendations and deciding whether or not to update sections of the guideline, or the whole guideline.
- Consulting on the decision with stakeholders.
- Considering comments received during consultation and making any necessary changes to the decision.

For further details about the process and the possible update decisions that are available, see ensuring that published guidelines are current and accurate in developing NICE guidelines: the manual.

Evidence considered in surveillance

Search and selection strategy

We searched for new evidence related to specific parts of the guideline. Studies that focussed on the use of antibiotics for the treatment of pneumonia were not considered in this surveillance review. NICE are currently developing guidance in this area as part of the 'Management of Common Infections' guidelines on CAP and hospital-acquired pneumonia.

We found 8 studies in a search for randomised controlled trials, systematic reviews and non-randomised studies (for diagnostic/prognostic review questions) published between 17 March 2014 and 10 May 2018.

See appendix A: summary of evidence from surveillance for details of all evidence

considered, and references.

Selecting relevant studies

The inclusion and exclusion criteria from the original guideline were applied during study collection.

Ongoing research

We checked for relevant ongoing research; of the ongoing studies identified, 4 studies were assessed as having the potential to change recommendations; therefore we plan to check the publication status regularly, and evaluate the impact of the results on current recommendations as quickly as possible. These studies are:

- Effects of Low-dose Corticosteroids on Survival of Severe Community-acquired Pneumonia
- Santeon-CAP; Dexamethasone in Community-acquired Pneumonia
- HOME FIRST (Home Followed-up by the Infection Respiratory Support Team)
- A controlled clinical trial investigating the impact of point of care testing for 'atypical' pneumonia, bordetella pertussis and viral pathogens on patient pathways, antimicrobial consumption and cost-efficiency.

Intelligence gathered during surveillance

Views of topic experts

We considered the views of topic experts, including those who helped to develop the guideline. For this surveillance review, topic experts completed a questionnaire about developments in evidence, policy and services related to NICE guideline CG191. We sent questionnaires to 13 topic experts and received 8 responses. The topic experts either:

- participated in the guideline committee who developed the guideline
- were recruited to the NICE Centre for Guidelines Expert Advisers Panel to represent their specialty.

All of the topic experts felt that the guideline needs updating. The main area that they highlighted for update was the use of glucocorticoids as an adjunctive therapy for CAP, which the guideline does not currently recommend. However, after further consideration of the new evidence identified through surveillance, it was agreed that the evidence has not substantially moved on and that the area should be reviewed again once the results from 2 ongoing trials have been published.

There was also a call for further guidance on the diagnosis of pneumonia in older patients with comorbidities where symptoms may differ, as well as guidance on treating moderate CAP in ambulatory units rather than hospitals. We did not identify any evidence to suggest the performance of the recommended tools vary for different subpopulations. However, during guideline development the committee noted that age and comorbidities could skew the predictive ability of severity assessment tools. In light of this, they emphasised that the role of severity assessment tools is to help guide management, not to replace or overrule clinical judgement. It is therefore unlikely that the recommendations will be impacted. To address the option of ambulatory care for moderate CAP, we asked for further advice from stakeholders to gain a better understanding of current practice (see views of stakeholders).

Views of stakeholders

Stakeholders are consulted on all surveillance decisions except if the whole guideline will be updated and replaced. Because this surveillance decision was to not update the guideline, we consulted on the decision.

Overall, 14 stakeholders commented: 1 represented a charity organisation, 1 represented a Trust, 1 was a commercial organisation, 2 were government organisations, 4 were Royal Colleges and 5 were professional bodies. Nine stakeholders agreed with the decision to not update the guideline, 3 disagreed and 2 did not state a response.

One stakeholder queried the lack of guidance on recommending the pneumococcal vaccination and an annual influenza vaccination in people diagnosed with pneumonia. However, prevention strategies are excluded from the scope of CG191, which focuses on ensuring pneumonia is accurately diagnosed to guide antibiotic prescribing and ensure people receive the right treatment. NICE has recently published a guideline that describes ways to increase awareness of influenza vaccination and how to use all opportunities in primary and secondary care to identify people who should be encouraged to have the vaccination. This includes recommendations on increasing uptake among eligible groups in

primary care. Additionally, eligibility for the pneumococcal vaccination in the UK is covered by chapter 25 of the Green book.

One stakeholder suggested that dysphagia and aspiration pneumonia were omissions from the guideline. We recognise that dysphagia could increase a person's risk of respiratory infections including pneumonia. However, there are likely to be other factors that also increase a person's risk of developing pneumonia, such as age. The guideline recommendations cover any adult with suspected or confirmed diagnosis and allow for severity assessment of infection based on presenting factors. We also appreciate that aspiration pneumonia is a clinical concern. However, the scope of CG191 covers CAP or hospital-acquired pneumonia. Although aspiration can play a role in causing pneumonia, there is still debate about the definition of aspiration pneumonia. If future evidence clarifies the definition of aspiration pneumonia, it may be possible to consider this further in future surveillance reviews.

Additionally, smoking cessation was highlighted as an important issue in people diagnosed with pneumonia. We agree that smoking cessation is important but feel that this issue is already covered in NICE's guideline on stop smoking interventions and services, which aims to ensure that everyone who smokes is advised and encouraged to stop and is given the support they need. This could include people presenting to primary care with suspected pneumonia.

Based on topic expert feedback, we consulted with stakeholders on whether they had experienced any difficulties in implementing recommendation 1.1.1 of the guideline, which advises clinicians in primary care to consider using the C-reactive protein test if after clinical assessment a diagnosis of pneumonia has not been made and it is not clear whether antibiotics should be prescribed. Generally, stakeholders were supportive of the recommendation but highlighted barriers of point of care testing including time and availability of the tests. NICE has published 2 Medtech innovation briefings (MIB81 and MIB78) on C-reactive protein testing in primary care that include a description of the medical technology, including its likely place in therapy and the costs of using the technology. These provide objective information on C-reactive protein testing technologies to aid local decision-making by clinicians, managers and procurement professionals.

Finally, we asked stakeholders if they were aware of the use of ambulatory units, community outreach and/or homecare teams for the treatment of moderate CAP. This was because of feedback from topic experts who indicated that guidance in this area would be

valued. Based on the information provided by stakeholders, it appears that the use of ambulatory units, community outreach and/or homecare teams for the treatment of moderate CAP is variable across the country. At present, there is insufficient evidence on the most appropriate set-up of services, who would benefit the most and details of cost-effectiveness to inform recommendations in this area. However, this is an area we will monitor and consider again at the next surveillance review of the guideline.

See appendix B for full details of stakeholders' comments and our responses.

See ensuring that published guidelines are current and accurate in developing NICE guidelines: the manual for more details on our consultation processes.

Equalities

No equalities issues were identified during the surveillance process.

Editorial amendments

During surveillance of the guideline we identified the following point in the guideline that should be amended:

- The term "glucocorticosteroids" should be amended to "glucocorticoids", which is now the preferred term used by the British National Formulary. This amendment affects the section heading on "Glucocorticoid treatment" and recommendation 1.2.18.

Overall decision

After considering all evidence and other intelligence and the impact on current recommendations, we decided that no update is necessary.

ISBN: 978-1-4731-3142-2