



2022 exceptional surveillance of pneumonia in adults (NICE guideline CG191)

Surveillance report

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Surveillance decision

We will reinstate the [NICE guideline on pneumonia in adults](#) and plan to update it.

The update will focus on amending recommendations in light of the COVID-19 pandemic, and ensuring the guideline aligns with other NICE guidance on COVID and non-COVID pneumonia. This update may also affect 3 other related NICE guidelines:

- [NG138 pneumonia \(community-acquired\): antimicrobial prescribing](#)
- [NG139 pneumonia \(hospital-acquired\): antimicrobial prescribing](#)
- [NG191 COVID-19 rapid guideline: managing COVID-19](#)

Reason for the exceptional review

NICE guideline CG191 pneumonia in adults was withdrawn in May 2020 during the COVID-19 pandemic. At that time, COVID-19 pneumonia was the prevalent form of pneumonia in the UK and there were concerns that CG191 was diverting healthcare professionals away from NICE's COVID-19 rapid guideline on pneumonia in adults in the community (now replaced by [COVID-19 rapid guideline: managing COVID-19](#)). There was also potential for confusion among guideline users by having 2 NICE guidelines on pneumonia in adults that covered similar topic areas but had different recommendations. Additionally, some recommendations in NICE guideline CG191 were not suitable in the context of the pandemic.

Because the pandemic situation has evolved, NICE guideline CG191 needs to be reinstated now to address non-COVID pneumonia. However, the guidance will need to be updated to reflect changes in pneumonia management brought about by COVID-19, and to address overlaps and inconsistencies with other relevant NICE guidelines on COVID and non-COVID pneumonia. This exceptional review examined the issues that need to be addressed in the planned update of NICE guideline CG191.

Methods

The exceptional surveillance process consisted of:

- A mapping exercise to examine recommendations from relevant NICE guidelines on COVID and non-COVID pneumonia, and to consider any overlaps, inconsistencies or gaps.
- Considering changes to pneumonia management brought about by the COVID-19 pandemic.
- Assessing the information against current recommendations to determine whether or not to update sections of the guideline, or the whole guideline (and whether updates to other related NICE guidance may be needed).

We decided that literature searches were not needed because the information we had from the mapping exercise was enough to establish whether an update to the guideline was needed.

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](#).

Information considered in this exceptional surveillance review

Mapping exercise

A mapping exercise was performed to examine recommendations in NICE guideline CG191 alongside 3 other related NICE guidelines:

- [NG138 pneumonia \(community-acquired\): antimicrobial prescribing](#)
- [NG139 pneumonia \(hospital-acquired\): antimicrobial prescribing](#)
- [NG191 COVID-19 rapid guideline: managing COVID-19](#)

The exercise identified several issues that may need to be addressed in an update to the 4 guidelines involved in the mapping, for example:

- Differences in scope across the guidelines. CG191 excludes under 18s whereas NG138, NG139 and NG191 include under 18s. CG191 includes diagnosis whereas NG191 excludes it. CG191 excludes post-discharge follow up and palliative care whereas NG191 includes it.
- NG191 has recommendations to ensure that secondary bacterial pneumonia is managed appropriately in people with COVID-19. Likewise, CG191 will need to make reference to COVID pneumonia.
- All recommendations on antibiotic treatment in CG191 have been replaced by 2 antimicrobial prescribing guidelines on pneumonia (NG138 and NG139), which currently necessitates switching between separate guidelines.
- Both CG191, and the section of NG191 about identifying secondary bacterial pneumonia, make recommendations about C-reactive protein testing but use different wording.
- Recommendations on microbiological testing are inconsistent across the guidelines, for example the section of NG191 about identifying secondary bacterial pneumonia recommends more extensive testing than in CG191 to identify non-SARS-CoV-2 viral, fungal or bacterial pneumonia.
- Many of the recommendations in NG191 for managing COVID-19 in the community (cough, fever, breathlessness, anxiety, delirium and agitation, and managing medicines) and in hospital (escalating treatment, critical care, and respiratory support) could equally be relevant to non-COVID pneumonia, but these issues are not discussed in CG191.
- There may be opportunities in CG191 to signpost other relevant antimicrobial prescribing guidance.

Issues resulting from the COVID-19 pandemic

The pandemic raised issues with pneumonia management that may need reflecting in an update to the guideline, for example:

- Differential diagnosis between pneumonia caused by SARS-CoV-2, and other viruses and bacteria, is essential in order to make appropriate recommendations on assessment and diagnosis and ensure our guidance provides appropriate management for all people with pneumonia depending on the cause.

- Recommendations across all relevant guidelines need to be very clear about the COVID versus non-COVID pneumonia treatment pathway, and allow for any overlaps of or moving between these pathways.
- The [NHS guidance for people who have any of the main symptoms of COVID-19](#) ('a high temperature; a new, continuous cough; or a loss or change to your sense of smell or taste') that previously stated 'Get a PCR test' and 'Do not go to places like a GP surgery, hospital or pharmacy' has been updated. CG191 may need additional recommendations at the point of presentation to stratify patients to the correct pathway, including the role of PCR, microbiological and point-of-care testing.
- Various new scenarios and pathways have arisen since the pandemic which will need consideration in CG191, such as patients who:
 - have bacterial pneumonia alongside a COVID-19 infection
 - have viral but non-COVID pneumonia
 - present with bacterial pneumonia but later contract COVID.
- Remote consultations have become increasingly common and may affect current recommendations in CG191, for example diagnostic assessments or scoring systems that rely on in-person tests.
- CG191 was withdrawn because some of its recommendations (particularly on C-reactive protein testing, CURB65/CRB65 scores, microbiological tests, safe discharge from hospital, and expected time course for improvement of pneumonia symptoms) were deemed unsuitable in the context of COVID-19. Although the COVID-19 context has now changed, these recommendations will need to be checked for relevance as part of the planned guideline update.

Other relevant NICE guidance

The reinstatement and updating of NICE guideline CG191 will have an impact on the other 3 NICE guidelines considered during the mapping exercise NG1398, NG139 and NG191).

Additionally, the following guidelines either currently cross-refer to NICE guideline CG191, or did so before it was withdrawn, and may need to be considered as part of the update:

- [NG15 antimicrobial stewardship: systems and processes for effective antimicrobial medicine use](#)
- [NG120 cough \(acute\): antimicrobial prescribing](#)

Other relevant external guidance

An informal search was conducted to investigate how other UK guidance on non-COVID pneumonia has been amended to accommodate COVID-19. The search identified the following:

- [BMJ Best Practice Community-acquired pneumonia \(non COVID-19\)](#)

The amendments to the guidance include:

- Changing the topic title to make it clear it does not refer to COVID-19.
- A warning box headed 'COVID-19 pandemic' on several pages of the guidance, which states that during the pandemic, any patient with cough, fever, or any other suggestive symptoms should be considered to have COVID-19 until proven otherwise. It also states that this BMJ Best Practice topic does not cover pneumonia due to COVID-19, and directs users to [BMJ Best Practice Coronavirus disease 2019 \(COVID-19\)](#).
- The diagnosis section recommends a PCR test for SARS-CoV-2 in any patient with suspected infection whenever possible. It also notes that differentiating community-acquired bacterial pneumonia from COVID-19 is not usually possible from signs and symptoms, but patients with bacterial pneumonia are more likely to have rapid development of symptoms and purulent sputum, and less likely to have myalgia, anosmia, or pleuritic pain.
- The section on differential diagnosis has a dedicated section on COVID-19. It refers to, for example: residence or travel in an area with ongoing transmission; recent close contact with a suspected or confirmed case of COVID-19; signs and symptoms that are more and less likely with bacterial pneumonia; and that it is not possible to differentiate COVID-19 from other causes of pneumonia on chest imaging.

Equalities

No equalities issues were identified during the surveillance process.

Overall decision

The NICE guideline on pneumonia in adults was withdrawn during the COVID-19 pandemic. The pandemic situation has evolved and the guideline now needs to be reinstated. However, an update to the guideline is also needed to reflect changes in pneumonia management brought about by COVID-19, and to address the potential impact of this update on 3 other related NICE guidelines, to ensure NICE has cohesive guidelines on COVID and non-COVID pneumonia.

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