

1                   **NATIONAL INSTITUTE FOR HEALTH AND CARE**  
2                   **EXCELLENCE**

3                   **Scope for guideline update (starting 2022)**

4                   **Suspected Sepsis: recognition, diagnosis and early**  
5                   **management (update)**

6  
7 NICE is updating its guideline on [Sepsis: recognition, diagnosis and management](#)  
8 NG51. The guideline was originally published in July 2016 and last updated in  
9 September 2017. It was developed as set out in the [original scope for the NICE](#)  
10 [guideline on sepsis](#).

11 A [statement published by the Academy of Medical Royal Colleges \(AoMRC\) in May](#)  
12 [2022](#) on the use of the updated [National Early Warning Score \(NEWS2\)](#) to identify  
13 sepsis suggests that NICE's recommendations in this area may need to be updated.  
14 Full details are set out in the [March 2022 surveillance review decision](#).

15 The update will be developed using the methods and processes in [developing NICE](#)  
16 [guidelines: the manual](#).

17 **1                   Who the guideline update covers**

18 The current guideline covers children, young people and adults with suspected  
19 sepsis. The update will focus on people aged 16 or over with suspected sepsis in  
20 acute hospital settings, ambulance trusts and acute mental health facilities, except  
21 pregnant women and women who have recently been pregnant.

22 ***Equality considerations***

23 [The equality impact assessment for the guideline update](#) lists equality issues  
24 identified and how they have been addressed and explains why any populations  
25 were excluded from the scope.

26 This update will look at inequalities relating to disability and people who do not speak  
27 English or whose first language is not English. The update to this guideline will not

1 consider people under 16 years or pregnant women or women who have recently  
2 been pregnant. However, these populations are included in current  
3 recommendations and these recommendations will remain in the updated guideline.

## 4 **2 Activities, services or aspects of care covered by** 5 **the guideline update**

6 We will look at the evidence and consider making new recommendations or updating  
7 existing recommendations on:

- 8 • stratifying risk of severe illness or death from sepsis: recommendations 1.4.1 to  
9 1.4.4
- 10 • managing suspected sepsis outside acute hospital settings: recommendations  
11 1.5.1 to 1.5.3
- 12 • managing and treating suspected sepsis in acute hospital settings:  
13 recommendations 1.6.1 to 1.6.15
- 14 • antibiotic treatment in people with suspected sepsis: recommendations 1.7.1 to  
15 1.7.3

16 For all other areas of the guideline:

- 17 • There will be no evidence review.
- 18 • We will retain the existing recommendations but may revise them to ensure  
19 consistency.

## 20 **3 Draft review questions**

21 We have identified the following draft review question[s]:

- 22 1 In people aged 16 or over with suspected sepsis in acute hospital settings,  
23 ambulance trusts and acute mental health facilities, what is the association  
24 between NEWS2 risk brackets (0, 1 to 4, 5 to 6, 7 or above) and risk of severe  
25 illness or death?
- 26 2 In people aged 16 or over with suspected sepsis and in different NEWS2 risk  
27 brackets (0, 1 to 4, 5 to 6, 7 or above), what are the most clinically and cost-  
28 effective timings of antibiotic administration?

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2 Note that guideline recommendations for medicines will normally fall within licensed  
3 indications; exceptionally, and only if clearly supported by evidence, use outside a  
4 licensed indication may be recommended. The guideline will assume that prescribers  
5 will use a medicine’s summary of product characteristics to inform decisions made  
6 with individual patients.

7 **Draft PICO table for review question 1**

Population	People aged 16 or over with suspected sepsis presented to: <ul style="list-style-type: none"> <li>• acute hospital settings</li> <li>• ambulance trusts</li> <li>• acute mental health facilities</li> </ul>
Intervention / Exposure / Test	NEWS and NEWS2 risk brackets recommended in the AoMRC statement on the initial antimicrobial treatment of sepsis (0, 1 to 4, 5 to 6, 7 or above)
Measures of association	To investigate the association of the initial NEWS2 risk bracket (0, 1 to 4, 5 to 6, 7 and above) in people aged 16 or over with suspected sepsis with the critical outcomes listed below. Outcome measures: <ul style="list-style-type: none"> <li>• Adjusted relative risk (RR) or odds ratio (OR) (and ultimately risk difference) for patient outcomes listed below for those in higher risk groups relative to the lowest risk group measured at a specific time point</li> <li>• Adjusted hazard ratios (HRs) if outcomes are measured over time for those in higher risk group relative to the lowest risk group</li> </ul>
Outcome	<ul style="list-style-type: none"> <li>• Mortality</li> <li>• Escalation of care</li> <li>• Hospital readmission rates</li> <li>• Unplanned critical care admission</li> <li>• Health related quality of life</li> </ul>

8 **Draft PICO table for review question 2**

Population	People aged 16 or over with suspected sepsis and in different NEWS and NEWS2 risk brackets (0, 1 to 4, 5 to 6, 7 or above)
Intervention	Deferred antibiotic administration based on NEWS2 risk brackets (0, 1 to 4, 5 to 6, 7 or above):

	<p>within 3 hours for scores 5 to 6, within 6 hours for score 0 and 1 to 4.</p> <p>Note: The review will consider any type of antibiotics at the timing recommended in the NEWS2 tool (within 1, 3 or 6 hours). Different types of antibiotics, different modes of administration (e.g. intravenous, oral, intramuscular) and different doses of antibiotics will not be compared.</p>
Comparison	Immediate antibiotic administration (within 1 hour)
Outcome	<ul style="list-style-type: none"> <li>• Mortality</li> <li>• Health related quality of life</li> <li>• Duration of hospital stay</li> <li>• Duration of critical care stay</li> <li>• Hospital readmission rates</li> <li>• Organ failure and need for organ support</li> <li>• Antibiotic resistance</li> <li>• Adverse events</li> </ul>

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## 2 **4 Economic aspects**

3 We will take economic aspects into account when making recommendations. We will  
4 review the economic evidence and carry out economic analyses, using an NHS  
5 perspective, as appropriate.

## 6 **5 NICE guidance and quality standards that may be** 7 **affected by this guideline update**

- 8 • [Sepsis](#). NICE Quality Standard QS161
- 9 • [Pneumonia \(community-acquired\): antimicrobial prescribing](#). NICE guideline  
10 NG138
- 11 • [Pneumonia \(hospital-acquired\): antimicrobial prescribing](#). NICE guideline NG139
- 12 • [COVID-19 rapid guideline: managing COVID-19](#). NICE guideline NG191

## 1 **6 Further information**

2 NICE guidelines cover health and care in England. Decisions on how they apply in  
3 other UK countries are made by ministers in the [Welsh Government](#), [Scottish](#)  
4 [Government](#) and [Northern Ireland Executive](#).

The guideline update is expected to be published in March 2023.

You can follow the [progress of the guideline](#).

Our website has information about [how NICE guidelines are developed](#).

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