

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

3 **Scope for guideline update**

4 **Acute kidney injury: prevention, detection and**
5 **management**

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7 NICE is updating its guideline on [Acute kidney injury: prevention, detection and](#)
8 [management](#). The guideline was originally published in December 2019 and last
9 updated in September 2023. It was developed as set out in the [original scope for the](#)
10 [NICE guideline on acute kidney injury](#).

11 Topic experts suggest that recommendations on assessing risk factors for acute
12 kidney injury in adults having iodine-based contrast media may need updating. Full
13 details are set out in the [September 2023 surveillance review decision](#).

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

16 **1 What the guideline update covers**

17 The current guideline covers preventing, detecting and managing acute kidney injury
18 in children, young people and adults. The update will focus on adults who are eligible
19 for iodine-based contrast media.

20 ***Equality considerations***

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

2 Activities, services or aspects of care covered by the guideline update

We will look at the evidence and consider making new recommendations or updating existing recommendations 1.1.6 and 1.1.7 on assessing risk factors for acute kidney injury in adults having iodine-based contrast media including:

- risk factor-based screening tool/questionnaire for adults having iodine-based contrast media.
- the thresholds for estimated glomerular filtration rate (eGFR) in adults before having iodine-based contrast media.

For all other areas of the guideline:

- There will be no evidence review.
- We will retain the existing recommendations, but we may revise them to ensure consistency.

3 Draft review questions

We have identified the following draft review questions:

1.1 What is the prognostic accuracy of risk assessment tools/questionnaires to predict the occurrence of acute kidney injury in adults following the administration of iodine-based contrast media?

1.2 What is the prognostic accuracy of different eGFR thresholds for iodine-based contrast media-associated acute kidney injury?

Draft table for review question 1.1

Objective	To determine if any validated risk assessment tools/questionnaires can predict acute kidney injury in people having iodine-based contrast media
Population	Adults receiving iodine-based contrast-media
Prediction tools	Risk scores: validated risk assessment tools/questionnaires for acute kidney injury
Target condition	Iodine based contrast media-associated acute kidney injury
Outcome	Primary outcomes:

	<p>Sensitivity (%) and specificity (%), positive and negative predictive values, positive and negative likelihood ratios statistical measures of discrimination and calibration including area under the receiver operator curve.</p> <p>Secondary outcomes (include if reported in papers reporting primary outcomes, not searching for specifically):</p> <ul style="list-style-type: none"> • Mortality (odds and risk ratios) • Dialysis (odds and risk ratios)
Study design	Prognostic cohort studies
Exclusion criteria	High osmolar contrast media

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2 **Draft table for review question 1.2**

Objective	To determine the prognostic accuracy and optimal threshold of eGFR for predicting iodine-based contrast-media-associated acute kidney injury.
Population	Adults receiving iodine-based contrast-media.
Test	<p>eGFR</p> <ul style="list-style-type: none"> • Cut-offs pooled depending on stage of chronic kidney disease indicated: <ul style="list-style-type: none"> ○ 45-60 (stage 3a) ○ 44-30 (stage 3b) ○ 29-15 (stage 4) ○ <15 (stage 5)
Target condition	Iodine-based contrast-media-associated acute kidney injury
Outcome	<ul style="list-style-type: none"> • Occurrence of an event following intravenous administration of iodine-based contrast media. • Study defined AKI • Mortality • Dialysis
Study design	Prognostic cohort studies
Exclusion criteria	High osmolar contrast media

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1 **4 Economic aspects**

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

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

- 7 • [Point-of-care creatinine devices to assess kidney function before CT imaging with](#)
8 [intravenous contrast](#) (2019) NICE guideline DG37
9 • [Acute kidney injury](#) (2023) NICE quality standard 76

10 **6 Further information**

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

The guideline update is expected to be published in July 2024.

To follow the progress of the update, see the [guideline in development page](#).

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

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