

Chronic kidney disease overview

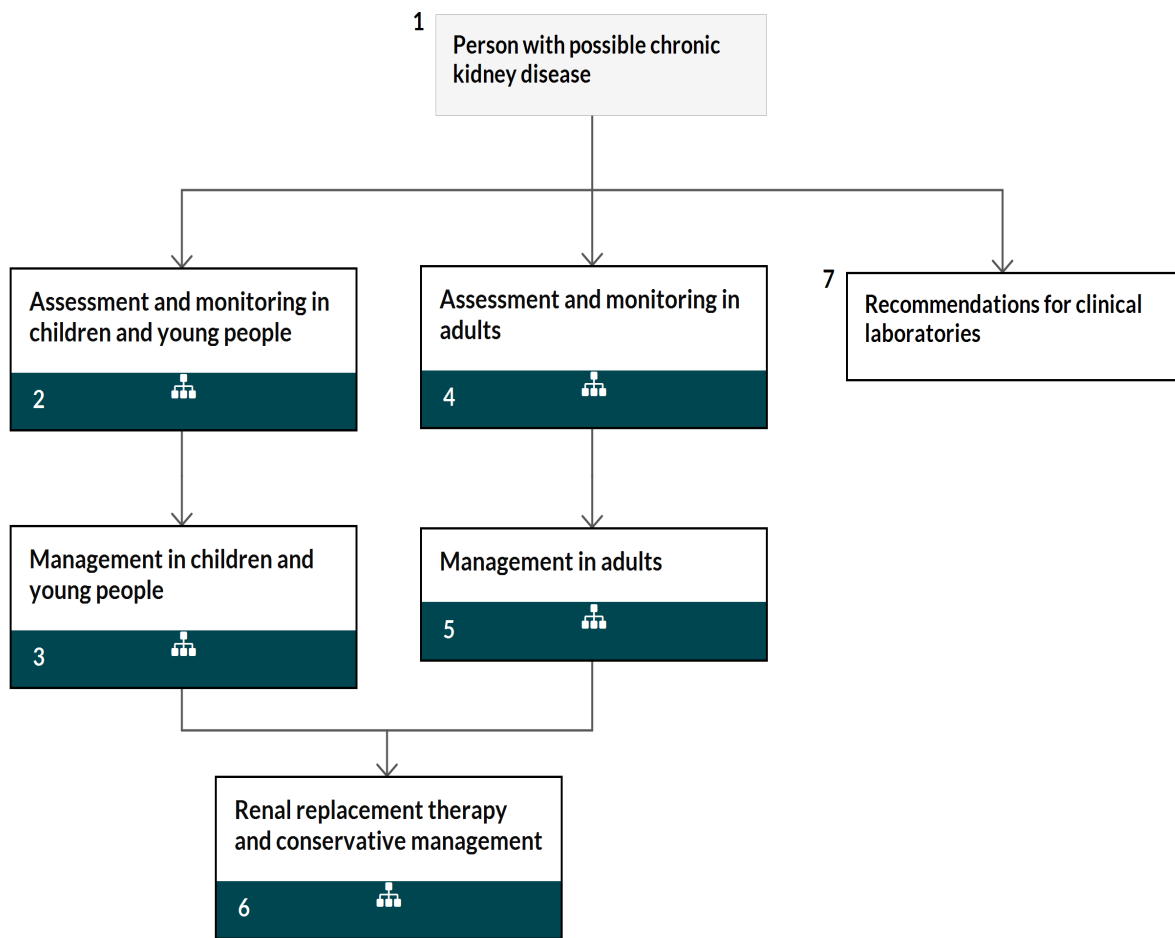
NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

<http://pathways.nice.org.uk/pathways/chronic-kidney-disease>

NICE Pathway last updated: 24 November 2021

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



1 Person with possible chronic kidney disease

No additional information

2 Assessment and monitoring in children and young people

[See Chronic kidney disease / Assessing and monitoring chronic kidney disease in children and young people](#)

3 Management in children and young people

[See Chronic kidney disease / Managing chronic kidney disease in children and young people](#)

4 Assessment and monitoring in adults

[See Chronic kidney disease / Assessing and monitoring chronic kidney disease in adults](#)

5 Management in adults

[See Chronic kidney disease / Managing chronic kidney disease in adults](#)

6 Renal replacement therapy and conservative management

[See Chronic kidney disease / Renal replacement therapy and conservative management for people with chronic kidney disease](#)

7 Recommendations for clinical laboratories

Creatinine-based estimate of GFR

Whenever a request for serum creatinine measurement is made, clinical laboratories should report an eGFR_{creatinine} using a prediction equation in addition to reporting the serum creatinine result.

eGFRcreatinine may be less reliable in certain situations (for example, acute kidney injury, pregnancy, oedematous states, muscle wasting disorders, and in adults who are malnourished, who have higher muscle mass or use protein supplements, or who have had an amputation) and has not been well validated in certain ethnic groups (for example, black, Asian and other minority ethnic groups with CKD living in the UK).

Clinical laboratories should:

- use the CKD-EPI creatinine equation to estimate GFRcreatinine for adults, using creatinine assays with calibration traceable to standardised reference material
- use creatinine assays that are specific (for example, enzymatic assays) and zero-biased compared with IDMS
- participate in a UK national external quality assessment scheme for creatinine.

See the NICE guideline to find out [why we did not make new recommendations on creatinine-based estimation of GFR](#).

Reporting GFR values

Clinical laboratories should report eGFR either as a whole number if it is 90 ml/min/1.73 m² or less, or as 'greater than 90 ml/min/1.73 m²'.

Glossary

CKD-EPI

Chronic Kidney Disease Epidemiology Collaboration

eGFR_{creatinine}

an estimation of glomerular filtration rate using serum creatinine

IDMS

isotope dilution mass spectrometry

Sources

[Chronic kidney disease](#) (2021, updated 2021) NICE guideline NG203

Your responsibility

Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in

their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.