NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

NICE indicator validity assessment

Indicator IND234

The percentage of patients with a new diagnosis of CKD stage G3a-G5 (on the register, within the preceding 12 months) who had eGFR and ACR (urine albumin to creatinine ratio) measurements recorded within 90 days before or after diagnosis.

Importance

Considerations	Assessment
NHS England referred chronic kidney disease (CKD) as a topic for exploring possible indicators. There is a single indicator for CKD in the current 2021/2022 QOF. CKD is recognised as a risk factor for other conditions such as cardiovascular disease and identification and management of CKD has been included in data collection for the CVD Prevent audit .	The indicator reflects a specific priority area identified by NHS England.
No data identified. This area is based on the indicator advisory committee and stakeholder's knowledge.	The indicator relates to an area where there is assumed variation in practice. The indicator is proposed to address under-treatment.
Chronic kidney disease (CKD) is a long-term condition characterised by abnormal function or structure (or both). A combination of estimated glomerular filtration rate (eGFR) and urine albumin to creatinine ratio (ACR) measurement can be used to estimate the risk of complications and can guide decisions for treatment. An increased risk of adverse outcomes in CKD is seen in people with decreased eGFR or increased ACR, or both.	The indicator will lead to a meaningful improvement in patient outcomes.

Evidence base

Considerations	Assessment
NICE's guideline on chronic kidney disease (2021), recommendation 1.2.1 and terms used in this guideline; classification of CKD.	The indicator is derived from a high-quality evidence base. The indicator aligns with the evidence base.
1.2.1 Classify CKD in adults using a combination of GFR and ACR categories (as described in table 1). Be aware that:	

- increased ACR is associated with increased risk of adverse outcomes
- decreased GFR is associated with increased risk of adverse outcomes
- increased ACR and decreased GFR in combination multiply the risk of adverse outcomes.

Classification of CKD

CKD is classified according to estimated GFR (eGFR) and albumin:creatinine ratio (ACR) (see table 1), using 'G' to denote the GFR category (G1 to G5, which have the same GFR thresholds as the CKD stages 1 to 5 recommended previously) and 'A' for the ACR category (A1 to A3), for example:

- A person with an eGFR of 25 ml/min/1.73 m2 and an ACR of 15 mg/mmol has CKD G4A2.
- A person with an eGFR of 50 ml/min/1.73 m2 and an ACR of 35 mg/mmol has CKD G3aA3.
- An eGFR of less than 15 ml/min/1.73 m2 (GFR category G5) is referred to as kidney failure.

A timeframe of 90 days has been chosen for measurement purposes only.

Specification

Considerations	Assessment
Numerator: The number of patients in the denominator who had eGFR and ACR (urine albumin to creatinine ratio) measurements recorded within 90 days before or after diagnosis.	The indicator has defined components necessary to construct the indicator, including numerator, denominator and exclusions.
Denominator: The number of patients with a new diagnosis of CKD stage G3a-G5 (on the register, within the preceding 12 months).	
Exclusions: None.	
Personalised care adjustments or exception reporting should be considered to account for situations where the patient declines, does not attend or if measurement of eGFR or urine ACR is not appropriate.	
The indicator would be appropriate to assess performance at individual general practice level. To be classified as suitable for use in QOF, there should be an average minimum population of more than 20 patients per practice eligible for inclusion in the denominator prior to application of personalised care adjustments. Piloting data showed an	The indicator does outline minimum numbers of patients needed to be confident in the assessment of variation.

estimated 40 patients for an average practice with 10,000	
patients.	

Feasibility

Considerations	Assessment
Data can be collected from GP systems using SNOMED coding.	The indicator is repeatable.
NHS Digital suggest the following clusters can be used: CKD_COD	The indicator is measuring what it is designed to measure.
EGFR_COD APCR_COD	The indicator uses existing data fields.
A similar logic is used in QOF, INLIQ, CVD Prevent, lipid management and NCD datasets.	

Acceptability

Considerations	Assessment
Stakeholders noted that patient reluctance to provide urine samples could be a barrier to implementation of this indicator. Personalised care adjustments could be used in these circumstances.	The indicator assesses performance that is attributable to or within the control of the audience
Data can be extracted and used to compare practice within the GP practice or with other GP practices	The results of the indicator can be used to improve practice

Risk

Considerations	Assessment
Stakeholders noted that the indicator denominator is people who have a diagnosis of CKD on the register. They suggest a reduction in coding and diagnosis of CKD may be an unintended consequence of this indicator. The indicator advisory committee suggested this indicator would support practice efforts to increase case finding.	The indicator has an acceptable risk of unintended consequences.

NICE indicator advisory committee recommendation

The NICE indicator advisory committee approved this indicator for publication on the menu.