NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

NICE indicator validity assessment

Indicator IND233

The percentage of patients with a new diagnosis of CKD stage G3a-G5 (on the register, within the preceding 12 months) who had eGFR measured on at least 2 occasions separated by at least 90 days, and the second test within 90 days before the 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.
Public Health England's chronic kidney disease prevalence model (2014) estimates that 750,000 adults with CKD have not been diagnosed and included on the CKD register. The National CKD Audit part 1 (2017) indicates that 11.1% of people with a CKD stage 3 to 5 read code were coded incorrectly.	The indicator relates to an area where there is known variation in practice. The indicator addresses under-treatment.
Chronic kidney disease (CKD) is a long-term condition characterised by abnormal kidney function or structure (or both) present for more than 3 months. Having two eGFR tests 90 days apart helps ensure appropriate advice, treatment and support can be provided and can help to preserve kidney function and reduce the risk of developing comorbidity.	The indicator will lead to a meaningful improvement in patient outcomes.

Evidence base

Considerations	Assessment
NICE's guideline on chronic kidney disease (2021), terms used in this guideline; chronic kidney disease. Abnormalities of kidney function or structure present for more than 3 months, with implications for health. This includes all people with markers of kidney damage and those with a glomerular filtration rate (GFR) of less than 60	The indicator is derived from a high-quality evidence base. The indicator aligns with the evidence base.

ml/min/1.73 m2 on at least 2 occasions separated by a period of at least 90 days (with or without markers of kidney damage). A timeframe of within 90 days before the diagnosis has been chosen for measurement purposes only.	

Specification

Considerations	Assessment
Numerator: The number of patients in the denominator who had eGFR measured on at least 2 occasions separated by at least 90 days, and the second test within 90 days before the diagnosis. 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 is not appropriate.	The indicator has defined components necessary to construct the indicator, including numerator, denominator and exclusions.
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 estimated 40 patients for an average practice with 10,000 patients.	The indicator does outline minimum numbers of patients needed to be confident in the assessment of variation.

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 EGFR_COD A similar logic is used in QOF, INLIQ, CVD Prevent, lipid management and NCD datasets.	The indicator is measuring what it is designed to measure. The indicator uses existing data fields.

Acceptability

Considerations	Assessment

Stakeholders commented that eGFR measurement may be performed in secondary care and may result in additional administrative burden e.g., chasing and inputting results from other services into GP systems. The indicator advisory committee noted that blood tests from acute episodes should not be used for diagnosis of CKD. Comments from piloting showed concern that there may be a high did not attend rate for the repeat blood test. Personalised care adjustments may be used when the patient declines or does not attend appointments for the repeat test.	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 NICE's guideline on chronic kidney disease (2021) recommends confirmation of an eGFR less than 60 ml/min/1.73^2 within 2 weeks. This is to test for acute kidney injury. Two eGFR tests at least 90 days apart are required for a diagnosis of CKD to ensure that people are not misdiagnosed or misclassified due to acute variations in creatinine. 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 and also to make sure people get the right diagnosis.	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. They advised that measurements of eGFR from an acute secondary care episode should not be used for diagnosis of chronic kidney disease in this indicator.