NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

NICE indicator validity assessment

Indicator IND76

The proportion of patients with acute myocardial infarction who were discharged on dual antiplatelet therapy.

Importance

Considerations	Assessment
The NHS Long Term Plan identifies cardiovascular disease as a clinical priority, and the single biggest condition where lives can be saved by the NHS over the next 10 years.	The indicator reflects a specific priority area identified by NHS England.
Analysis of MINAP data by Bebb, Hall et al. (2017) found that nationally 88.1% of AMI patients received dual antiplatelet therapy (DAPT) on discharge. Hospital variation showed a median achievement of 90.5% (interquartile range [IQR] 85.4 – 94.1%). Analysis of MINAP data shows that DAPT prescription on discharge is inversely associated with 30-day mortality: odds ratio (95% CI) 0.50 (0.44, 0.56) p<0.001.	The indicator relates to an area where there is known variation in practice. The indicator addresses under-treatment.
The Acute Cardiovascular Care Association's (ACCA) position paper on quality indicators for myocardial infarction (2017) writes that the prescription of DAPT at discharge for 12 months is linked to positive outcomes for people with AMI including reduction in composite ischaemic outcomes and mortality from STEMI (Schiele et al, 2016). NICE recommends dual antiplatelet therapy as part of drug treatment for secondary prevention after myocardial infarction.	The indicator will lead to a meaningful improvement in patient outcomes.

Evidence base

Considerations	Assessment
Acute coronary syndromes. NICE guideline NG185 (2020), recommendations 1.4.1 and 1.4.13. European Society of Cardiology. ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation (2017) (class I level C). European Society of Cardiology. ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation (2020) (class I level A).	The indicator is derived from a high-quality evidence base. The indicator aligns with the evidence base.

Specification

Considerations	Assessment
Numerator: The number of patients in the denominator discharged on dual antiplatelet therapy. Denominator: The number of patients discharged from hospital following an admission with acute myocardial infarction. Exclusions: Patients with contraindication to aspirin or other antiplatelets. Patients treated with anticoagulation. Patients who died in hospital.	The indicator has defined components necessary to construct the indicator, including numerator, denominator and exclusions. The construction proposed by the ESC ACCA has been adapted for publication on the NICE menu of indicators.
Audit data is presented at hospital trust level. This is proposed to be a CCG level NICE menu indicator. NICE CCG level indicators are intended for use where there is an average of 50 patients or more per CCG. Data presented as part of the study by Bebb et al (2017) based on the MINAP database for the period 2012 to 2013 shows 101,582 eligible patients and this indicates an average number of 752 patients per CCG (135 CCGs April 2020).	The indicator does outline minimum numbers of patients needed to be confident in the assessment of variation.

Feasibility

Considerations	Assessment
Data is collected annually as part of the Myocardial Ischaemia National Audit Project.	The indicator is repeatable.
Details of the MINAP dataset, including definitions of the variables and guidance on applying options are also published by National Institute for Cardiovascular Outcomes Research (NICOR). Data fields collected include: • Discharged on aspirin (4.08) • Discharged on thienopyridine inhibitor (4.27) • Discharged on ticagrelor (4.31) • Mode of discharge (4.16)	The indicator is measuring what it is designed to measure. The indicator uses existing data fields. Contraindicated is recorded within the data fields.

Acceptability

Considerations	Assessment
There is an existing NICE menu indicator (NM79). This is a GP indicator suitable for QOF: The percentage of patients who had a myocardial infarction in the preceding 1 April to 31 March and who are currently being treated with ACE-I (or ARB if ACE-I intolerant), dual antiplatelet therapy, beta-blocker and a statin.	The indicator assesses performance that is attributable to or within the control of the audience.
Data tables are published on the NICOR website in order to compare practice and assist in quality improvement cycles.	The results of the indicator can be used to improve practice.

Risk

Considerations	Assessment
MINAP was established in 1999 and is a domain with the National Cardiac Audit Programme and under the governance of the Healthcare Quality Improvement Partnership (HQIP). Robust governance structures are in place to ensure data quality and monitor appropriateness of audit measures. There is a minimum dataset against which each participating hospital is assessed for data completeness.	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.