



Myocardial infarction: PCI in less than 60 minutes

NICE indicator

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Indicator

The proportion of patients with ST-segment elevation myocardial infarction (STEMI) who had balloon inflation for primary percutaneous coronary intervention (PCI) in less than 60 minutes from time of admission at a centre with primary PCI facilities.

Indicator type

Network / system level indicator.

The indicator would be appropriate to understand and report on the performance of networks or systems of providers.

This document does not represent formal NICE guidance. For a full list of NICE indicators, see our [menu of indicators](#).

To find out how to use indicators and how we develop them, see our [NICE indicator process guide](#).

Rationale

All patients with ST-segment elevation myocardial infarction (STEMI) presenting 12 hours or less after onset of symptoms should undergo coronary reperfusion therapy. Heart muscle starts to be lost once a coronary artery is blocked and the sooner reperfusion therapy is delivered the better the outcome for the patient. Coronary angiography with follow-on primary PCI is the preferred reperfusion strategy for people with STEMI if it can be delivered within 120 minutes of the time when fibrinolysis could have been given. The [National Audit of Percutaneous Coronary Intervention](#) (2020) references the British Cardiovascular Intervention Society position statement that at least 75% of all patients should have a door to balloon time of less than 60 minutes.

Source guidance

- [Acute coronary syndromes. NICE guideline NG185 \(2020\), recommendation 1.1.3](#)
- [Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation. European Society of Cardiology \(2017\)](#)

Specification

Numerator: The number of patients in the denominator who had balloon inflation for primary PCI in less than 60 minutes from admission at a centre with primary PCI facilities.

Denominator: The number of patients with STEMI treated with primary PCI.

Calculation: $(\text{Numerator}/\text{denominator}) \times 100$

Exclusions:

- Patients who do not proceed to balloon inflation.

The Percutaneous coronary interventions (PCI) dataset details the following exclusions:

- Patients presenting in cardiogenic shock.
- Patients requiring pre-PCI ventilation.

Data source: Percutaneous coronary interventions (PCI) dataset.

Minimum population: The indicator would be appropriate to understand and report on the performance of networks or systems of providers.

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