NICE National Institute for Health and Care Excellence

NICE quality standard

Secondary prevention after a myocardial infarction

Quality standard

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Contents

This standard is based on NG185.

This standard should be read in conjunction with QS103, QS100, QS88, QS84, QS82, QS80, QS68, QS53, QS52, QS43, QS41, QS28, QS21, QS11, QS9, QS8, QS6 and QS5.

Quality statements

Statement 1 Adults admitted to hospital with a myocardial infarction (MI) have an assessment of left ventricular function before discharge.

Statement 2 Adults admitted to hospital with an MI are referred for cardiac rehabilitation before discharge.

Statement 3 Adults admitted to hospital with an MI have the results of investigations and a plan for future treatment and monitoring shared with their GP.

Statement 4 Adults referred to a cardiac rehabilitation programme after an MI have an assessment appointment within 10 days of discharge from hospital.

Statement 5 (developmental) Adults referred to a cardiac rehabilitation programme after an MI are offered sessions during and outside working hours and the choice of undertaking the programme at home, in the community or in a hospital setting.

Quality statement 1: Assessment of left ventricular function

Quality statement

Adults admitted to hospital with a myocardial infarction (MI) have an assessment of left ventricular function before discharge.

Rationale

After an MI, some people have heart failure because of damage to heart muscle and impaired contraction of the left ventricle. This is known as left ventricular systolic dysfunction (LVSD). The effectiveness of drug treatment with angiotensin-converting enzyme (ACE) inhibitors, angiotensin receptor blockers, aldosterone antagonists and beta-blockers depends on left ventricular function. The assessment of left ventricular function after an MI informs the type, titration and duration of drug treatment and the type of cardiac rehabilitation that is appropriate. To improve the clinical effectiveness of treatment and to ensure patient safety, this assessment should be done before discharge from hospital.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that adults admitted to hospital with an MI have an assessment of left ventricular function before discharge.

Data source: Local data collection.

Process

Proportion of discharges from hospital after an MI where the patient had an assessment of left ventricular function while in hospital.

Numerator – the number in the denominator where the patient had an assessment of left ventricular function while in hospital.

Denominator – the number of discharges from hospital after an MI.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (secondary and tertiary care services) ensure that adults admitted to hospital with an MI have an assessment of left ventricular function before discharge.

Healthcare professionals assess the left ventricular function of adults admitted to hospital with an MI before discharge.

Commissioners commission services that have the capacity and expertise to assess left ventricular function before discharge in adults admitted to hospital with an MI.

Adults who are admitted to hospital with a heart attack have a scan to see how well the blood is being pumped through their heart. This helps with decisions about the type and dose of drug treatment and the recovery programme that is appropriate for them. The scan should be done before a person leaves hospital.

Source guidance

Acute coronary syndromes. NICE guideline NG185 (2020), recommendations 1.1.27 and 1.2.27

Definitions of terms used in this quality statement

Assessment of left ventricular function

Left ventricular function can be assessed using a variety of methods, including echocardiography, cardiac magnetic resonance imaging (MRI), angiography and nuclear imaging. [Expert opinion]

Quality statement 2: Referral for cardiac rehabilitation

Quality statement

Adults admitted to hospital with a myocardial infarction (MI) are referred for cardiac rehabilitation before discharge.

Rationale

Cardiac rehabilitation aims to address the underlying causes of cardiovascular disease and improve physical and mental health after a heart attack. Cardiac rehabilitation encourages a healthy lifestyle which slows the progression of heart disease. It also reduces the risk of dying prematurely, especially as a result of a heart attack or stroke. People who are referred to rehabilitation programmes before they are discharged from hospital have better rates of uptake and adherence and improved clinical outcomes.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that adults admitted to hospital with an MI are referred for cardiac rehabilitation before discharge.

Data source: Local data collection.

Process

Proportion of discharges from hospital after an MI where the patient was referred for cardiac rehabilitation while in hospital.

Numerator – the number in the denominator where the patient was referred for cardiac rehabilitation while in hospital.

Denominator – the number of discharges from hospital after an MI.

Data source: Local data collection.

Outcome

Uptake rates of cardiac rehabilitation programmes.

Data source: Local data collection. National data on the uptake of cardiac rehabilitation are available from the British Heart Foundation National Audit of Cardiac Rehabilitation (NACR).

What the quality statement means for different audiences

Service providers (secondary and tertiary care services) ensure that adults admitted to hospital with an MI are referred for cardiac rehabilitation while they are in hospital.

Healthcare professionals refer adults admitted to hospital with an MI for cardiac rehabilitation while they are in hospital.

Commissioners commission services that have the capacity and expertise to refer adults admitted to hospital with an MI for cardiac rehabilitation while they are in hospital.

Adults who are admitted to hospital with a heart attack are referred to a cardiac rehabilitation programme while they are in hospital. A cardiac rehabilitation programme includes exercise sessions, information about health and lifestyle changes and how to cope with stress. This helps to slow down or stop heart disease and to reduce the risk of a heart attack or stroke in the future.

Source guidance

Acute coronary syndromes. NICE guideline NG185 (2020), recommendations 1.8.1 and 1.8.13

Definitions of terms used in this quality statement

Cardiac rehabilitation

Cardiac rehabilitation is a coordinated and structured programme designed to remove or reduce the underlying causes of cardiovascular disease. It provides the best possible physical, mental and social conditions so that people can, by their own efforts, continue to play a full part in their community. A healthier lifestyle and slowed or reversed progression of cardiovascular disease can also be achieved. [NICE's full guideline on acute coronary syndromes]

Cardiac rehabilitation programmes should include a range of interventions with health education, lifestyle advice, stress management and physical exercise components. [NICE's guideline on acute coronary syndromes, recommendations 1.8.1 and 1.8.19]

Quality statement 3: Communication with primary care

Quality statement

Adults admitted to hospital with a myocardial infarction (MI) have the results of investigations and a plan for future treatment and monitoring shared with their GP.

Rationale

People with an MI have cardiac investigations in hospital – clear communication of these results to primary care in a discharge summary ensures that people receive the right treatment after they leave hospital. Other key information to be shared with the GP includes future treatment, including incomplete drug titrations, plans for further revascularisation procedures and plans for antiplatelet and anticoagulant treatment. A clear plan for monitoring blood pressure and renal function ensures that people are on the correct drug dose after they leave hospital. Finally, it is also important for GPs to know that people have been referred for cardiac rehabilitation to encourage them to attend.

Ensuring that this information is included in a discharge summary will improve clinical outcomes, patient experience and continuity of care between primary and secondary or tertiary care services. This is especially important for people who have had hospital treatment for an MI outside of their local area.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that adults admitted to hospital with an MI have the results of investigations and a plan for future treatment and monitoring shared with

their GP.

Data source: Local data collection.

Process

a) Proportion of discharges from hospital after an MI where the patient had the results of investigations shared with their GP.

Numerator – the number in the denominator where the patient had the results of investigations shared with their GP.

Denominator – the number of discharges from hospital after an MI.

Data source: Local data collection.

b) Proportion of discharges from hospital after an MI where the patient had plans for future treatment and monitoring shared with their GP.

Numerator – the number in the denominator where the patient had plans for future treatment and monitoring shared with their GP.

Denominator – the number of discharges from hospital after an MI.

Data source: Local data collection.

Outcome

a) Readmission rates.

Data source:NHS Digital national data on emergency readmissions within 30 days of discharge from hospital.

b) Rates of uptake and adherence to cardiac rehabilitation.

Data source: Local data collection.

c) Patient experience of GP services.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (secondary and tertiary care services) ensure that adults discharged from hospital after an MI have the results of investigations and a plan for future treatment and monitoring shared with their GP.

Healthcare professionals include the results of investigations and a plan for future treatment and monitoring in the GP discharge summary for adults discharged from hospital after an MI.

Commissioners commission services that provide GP discharge summaries for adults discharged from hospital after an MI. The GP discharge summaries should include the results of investigations and a plan for future treatment and monitoring.

Adults who are admitted to hospital with a heart attack have a letter sent to their GP, which includes the results of any tests and a plan for treatment and monitoring in the future. This helps to make sure that people get the right treatment after they leave hospital and start a programme to improve their long-term health (cardiac rehabilitation) as soon as possible.

Source guidance

Acute coronary syndromes. NICE guideline NG185 (2020), recommendations 1.4.2, 1.4.28 and 1.7.1

Definitions of terms used in this quality statement

Results of investigations

People admitted to hospital with an MI may have several investigations of cardiac function while in hospital. These may include coronary angiography and should include assessment of left ventricular function. [Expert opinion]

Plan for future treatment and monitoring

A plan for future treatment and monitoring after an MI should include details of:

- any further revascularisation procedures
- any drug titrations that need to be completed by the GP
- duration of antiplatelet treatment
- duration of any anticoagulant treatment
- blood pressure and renal function monitoring
- referral for cardiac rehabilitation.

[Expert opinion]

Quality statement 4: Cardiac rehabilitation – assessment appointment

Quality statement

Adults referred to a cardiac rehabilitation programme after a myocardial infarction (MI) have an assessment appointment within 10 days of discharge from hospital.

Rationale

Starting cardiac rehabilitation as soon as possible after a heart attack significantly improves ongoing attendance at cardiac rehabilitation programmes. Cardiac rehabilitation improves clinical outcomes and is cost saving through a reduction in unplanned re-admissions for cardiac problems. An assessment appointment within 10 days of discharge ensures that people have contact with a member of the cardiac rehabilitation team as soon as possible. Because some people may not be able to drive or may not be ready for physical assessment within 10 days of discharge, this appointment can be an outpatient appointment, a home visit or a telephone interview.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that adults referred to a cardiac rehabilitation programme after an MI have an assessment appointment within 10 days of discharge from hospital.

Data source: Local data collection.

Process

a) Proportion of referrals to a cardiac rehabilitation programme from hospital where the patient attends an assessment appointment within 10 days of discharge after an MI.

Numerator – the number in the denominator where the patient attends an assessment appointment within 10 days of discharge.

Denominator – the number of referrals to a cardiac rehabilitation programme from hospital after admission for an MI.

Data source: Local data collection. National data on adherence to cardiac rehabilitation are available from the British Heart Foundation National Audit of Cardiac Rehabilitation (NACR).

Outcome

Uptake rates of cardiac rehabilitation programmes.

Data source: Local data collection. National data on the uptake of cardiac rehabilitation are available from the British Heart Foundation National Audit of Cardiac Rehabilitation (NACR).

What the quality statement means for different audiences

Service providers (secondary and tertiary care services) ensure that adults referred to a cardiac rehabilitation programme after an MI can have an assessment appointment within 10 days of discharge.

Healthcare professionals ensure that adults referred to a cardiac rehabilitation programme after an MI have an assessment appointment within 10 days of discharge.

Commissioners commission services that have the capacity to give adults referred to a cardiac rehabilitation programme after an MI an assessment appointment within 10 days of discharge.

Adults referred to a cardiac rehabilitation programme after a heart attack have an appointment for an assessment within 10 days of leaving hospital. Starting cardiac rehabilitation as soon as possible encourages people to take part in the programme and makes it more likely that they will carry on.

Source guidance

Acute coronary syndromes. NICE guideline NG185 (2020), recommendation 1.8.13

Definitions of terms used in this quality statement

Assessment appointment

An assessment appointment is the first session of a cardiac rehabilitation programme. The session includes advice on lifestyle and risk factors and an assessment of the person's cardiac function and suitability for different components of the programme. The assessment appointment can be an outpatient appointment, a home visit or a telephone interview.

Cardiac rehabilitation

Cardiac rehabilitation is defined as a coordinated and structured programme designed to remove or reduce the underlying causes of cardiovascular disease, as well as to provide the best possible physical, mental and social conditions, so that people can, by their own efforts, continue to play a full part in their community. A healthier lifestyle and slowed or reversed progression of cardiovascular disease can also be achieved. [NICE's full guideline on acute coronary syndromes]

Cardiac rehabilitation programmes should include a range of interventions with health education, lifestyle advice, stress management and physical exercise components. [NICE's guideline on acute coronary syndromes, recommendations 1.8.1 and 1.8.19]

Quality statement 5 (developmental): Options for cardiac rehabilitation

Developmental quality statements set out an emergent area of cutting-edge service delivery or technology currently found in a minority of providers and indicating outstanding performance. They will need specific, significant changes to be put in place, such as redesign of services or new equipment.

Quality statement

Adults referred to a cardiac rehabilitation programme after a myocardial infarction (MI) are offered sessions during and outside working hours and the choice of undertaking the programme at home, in the community or in a hospital setting.

Rationale

Cardiac rehabilitation programmes improve clinical outcomes for people who have had an MI. Offering cardiac rehabilitation programmes at different times of day and at different venues is likely to increase both uptake and adherence and to improve patient experience. It is important that programmes are provided outside normal working hours, so that they are accessible to people who work and to those with other commitments during the day.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to provide cardiac rehabilitation programmes during and outside working hours and the choice of undertaking programmes at home, in the community or in a hospital setting.

Data source: Local data collection.

Process

Proportion of people referred to a cardiac rehabilitation programme who are offered sessions during and outside working hours and the choice of undertaking the programme at home, in the community or in a hospital setting.

Numerator – the number in the denominator offered sessions during and outside working hours and the choice of undertaking the programme at home, in the community or in a hospital setting.

Denominator – the number of people referred to a cardiac rehabilitation programme after an MI.

Outcome

a) Rates of uptake of and adherence to cardiac rehabilitation programmes.

b) Patient experience of cardiac rehabilitation programmes.

Data source: Local data collection. National data on the uptake of cardiac rehabilitation are available from the British Hearth Foundation National Audit of Cardiac Rehabilitation (NACR).

What the quality statement means for different audiences

Service providers (secondary and tertiary care services) offer cardiac rehabilitation programmes during and outside working hours and the choice of undertaking the programme at home, in the community or in a hospital setting.

Healthcare professionals offer adults referred to cardiac rehabilitation programmes a choice of programmes during and outside working hours, and a choice of undertaking the programme at home, in the community or in a hospital setting.

Commissioners commission cardiac rehabilitation services that have the capacity and

expertise to provide programmes during and outside working hours and the choice of undertaking the programme at home, in the community or in a hospital setting.

Adults referred to a cardiac rehabilitation programme can choose a programme in the daytime or outside working hours, at a hospital, in the local area or at home. Having a choice of time and place means that they are more likely to be able to take part in a programme.

Source guidance

Acute coronary syndromes. NICE guideline NG185 (2020), recommendations 1.8.1 and 1.8.9

Definitions of terms used in this quality statement

Cardiac rehabilitation

Cardiac rehabilitation is defined as a coordinated and structured programme designed to remove or reduce the underlying causes of cardiovascular disease, as well as to provide the best possible physical, mental and social conditions, so that people can, by their own efforts, continue to play a full part in their community. A healthier lifestyle and slowed or reversed progression of cardiovascular disease can also be achieved. [NICE's full guideline on acute coronary syndromes]

Cardiac rehabilitation programmes should include a range of interventions with health education, lifestyle advice, stress management and physical exercise components. [NICE's guideline on acute coronary syndromes, recommendations 1.8.1 and 1.8.19]

Update information

Minor changes since publication

December 2024: Source guidance references have been updated to align this quality standard with the updated NICE guideline on acute coronary symptoms.

November 2020: The source guidance references for the quality statements were changed to align this quality standard with the NICE guideline on acute coronary syndromes.

About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of 100% should be aspired to (or 0% if the quality statement states that something should not be done). However, this may not always be appropriate in practice. Taking account of safety, shared decision-making, choice and professional judgement, desired levels of achievement should be defined locally.

Information about how NICE quality standards are developed is available from the NICE website.

See our webpage on quality standards advisory committees for details about our standing committees. Information about the topic experts invited to join the standing members is available from the webpage for this quality standard.

NICE has produced a quality standard service improvement template to help providers make an initial assessment of their service compared with a selection of quality statements. This tool is updated monthly to include new quality standards.

NICE guidance and quality standards apply in England and Wales. Decisions on how they apply in Scotland and Northern Ireland are made by the Scottish government and Northern Ireland Executive. NICE quality standards may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

Resource impact

NICE quality standards should be achievable by local services. The potential resource impact is considered by the quality standards advisory committee, drawing on resource

impact work for the source guidance. Organisations are encouraged to use the resource impact products for NICE's guideline on acute coronary syndromes to help estimate local costs.

Diversity, equality and language

Equality issues were considered during development and equality assessments for this quality standard are available. Any specific issues identified during development of the quality statements are highlighted in each statement.

Commissioners and providers should aim to achieve the quality standard 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 quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

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Endorsing organisation

This quality standard has been endorsed by NHS England, as required by the Health and Social Care Act (2012)

Supporting organisations

Many organisations share NICE's commitment to quality improvement using evidence-based guidance. The following supporting organisations have recognised the benefit of the quality standard in improving care for patients, carers, service users and members of the public. They have agreed to work with NICE to ensure that those commissioning or providing services are made aware of and encouraged to use the quality standard.

- HEART UK
- Association of Chartered Physiotherapists in Cardiac Rehabilitation (ACPICR)