Secondary prevention after a myocardial infarction

Quality standard
Published: 4 September 2015
nice.org.uk/guidance/qs99
Introduction ........................................................................................................................................................................ 5
   Why this quality standard is needed ................................................................................................................................. 5
   How this quality standard supports delivery of outcome frameworks ................................................................. 6
   Patient experience and safety issues ............................................................................................................................... 9
   Coordinated services ........................................................................................................................................................... 10

List of quality statements .................................................................................................................................................. 11

Quality statement 1: Assessment of left ventricular function ......................................................................................... 12
   Quality statement ............................................................................................................................................................... 12
   Rationale .............................................................................................................................................................................. 12
   Quality measures ............................................................................................................................................................... 12
   What the quality statement means for service providers, healthcare professionals and commissioners .... 13
   What the quality statement means for patients, service users and carers ............................................................. 13
   Source guidance ............................................................................................................................................................... 13
   Definitions of terms used in this quality statement ........................................................................................................ 13

Quality statement 2: Referral for cardiac rehabilitation ................................................................................................. 14
   Quality statement ............................................................................................................................................................... 14
   Rationale .............................................................................................................................................................................. 14
   Quality measures ............................................................................................................................................................... 14
   What the quality statement means for service providers, healthcare professionals and commissioners ... 15
   What the quality statement means for patients, service users and carers ............................................................. 15
   Source guidance ............................................................................................................................................................... 15
   Definitions of terms used in this quality statement ........................................................................................................ 15

Quality statement 3: Communication with primary care ................................................................................................. 17
   Quality statement ............................................................................................................................................................... 17
   Rationale .............................................................................................................................................................................. 17
   Quality measures ............................................................................................................................................................... 17
   What the quality statement means for service providers, healthcare professionals and commissioners ... 18
This standard is based on CG172.

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.

Introduction

This quality standard covers secondary prevention after a myocardial infarction (MI), including cardiac rehabilitation, in adults (aged 18 years and over). It does not cover the diagnosis and management of myocardial infarction, which is covered by the quality standard on acute coronary syndromes (including myocardial infarction). For more information see the secondary prevention after a myocardial infarction topic overview.

In addition to the areas covered by this quality standard, the Quality Standards Advisory Committee identified the prescribing of high-dose high-intensity statins for secondary prevention as an area for quality improvement. The quality standard on cardiovascular risk assessment and lipid modification has a statement about this, which should be referred to for full details. Coronary revascularisation was also identified as an area for quality improvement; this area is covered in the quality standard on acute coronary syndromes (including myocardial infarction).

Why this quality standard is needed

MI is one of the most severe presentations of coronary heart disease (CHD). It is usually caused by blockage of a coronary artery that results in tissue death and is commonly referred to as a heart attack. People who have had an MI benefit from treatment to reduce the risk of another MI and to slow the progression of CHD; this is known as secondary prevention. Examples of secondary prevention for people who have had an MI include the following:

- Drug treatment such as anti-platelet drugs, beta-blockers, angiotensin-converting enzyme (ACE) inhibitors and statins.
- Changes in lifestyle such as healthy eating, regular exercise and stopping smoking, which are key components of cardiac rehabilitation programmes.

MI is a preventable complication of CHD. The death rate from CHD has been falling since the early 1970s; for people under 75, the death rate fell by almost 25% between 1996 and 2004. The death rate from CHD varies with age, gender, socioeconomic status, ethnicity and UK geographic
location. Death rates in men under 75 are 3 times higher than in women, and death rates in affluent areas in the UK are half of those in deprived areas. People of South Asian origin have almost a 50% higher death rate than the general UK population.

In England and Wales in 2013/14, more than 80,000 hospital admissions were because of MI, according to the Myocardial Ischaemia National Audit Project (MINAP). Twice as many men had MIs as women. The data also showed that 30-day mortality decreased between 2003/04 and 2013/14 through improved treatment.

The quality standard is expected to contribute to improvements in the following outcomes:

- life expectancy
- mortality
- incidence of cardiovascular disease (CVD) events
- health-related quality of life for people with long-term conditions
- readmissions
- functional ability after MI
- return to employment
- patient experience
- psychological wellbeing.

How this quality standard supports delivery of outcome frameworks

NICE quality standards are a concise set of prioritised statements designed to drive measurable improvements in the 3 dimensions of quality – patient safety, patient experience and clinical effectiveness – for a particular area of health or care. They are derived from high-quality guidance, such as that from NICE or other sources accredited by NICE. This quality standard, in conjunction with the guidance on which it is based, should contribute to the improvements outlined in the following 3 outcomes frameworks published by the Department of Health:

- **NHS Outcomes Framework 2015–16**
- **Adult Social Care Outcomes Framework 2015–16**

Tables 1–3 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

### Table 1 NHS Outcomes Framework 2015–16

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching indicators and improvement areas</th>
</tr>
</thead>
</table>
| 1 Preventing people from dying prematurely                             | **Overarching indicator**  
|                                                                        | 1b Life expectancy at 75 i Males ii Females  
|                                                                        | **Improvement areas**  
|                                                                        | Reducing premature mortality from the major causes of death  
|                                                                        | 1.1 Under 75 mortality rate from cardiovascular disease*                                                   |
| 2 Enhancing quality of life for people with long-term conditions       | **Overarching indicator**  
|                                                                        | 2 Health-related quality of life for people with long-term conditions**                                     |
|                                                                        | **Improvement areas**  
|                                                                        | Ensuring people feel supported to manage their condition  
|                                                                        | 2.1 Proportion of people feeling supported to manage their condition  
|                                                                        | Improving functional ability in people with long-term conditions  
|                                                                        | 2.2 Employment of people with long-term conditions**                                                      |
|                                                                        | Reducing time spent in hospital by people with long-term conditions  
|                                                                        | 2.3i Unplanned hospitalisation for chronic ambulatory care sensitive conditions (adults)                  |
### 3 Helping people to recover from episodes of ill health or following injury

**Overarching indicator**

3b Emergency readmissions within 30 days of discharge from hospital*

**Improvement areas**

Helping older people to recover their independence after illness or injury

3.6 i Proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into reablement/rehabilitation service***

ii Proportion offered rehabilitation following discharge from acute or community hospital

### 4 Ensuring that people have a positive experience of care

**Overarching indicator**

4b Patient experience of hospital care

### Alignment across the health and social care system

* Indicator shared with Public Health Outcomes Framework (PHOF)

** Indicator complementary with Adult Social Care Outcomes Framework (ASCOF)

*** Indicator shared with Adult Social Care Outcomes Framework (ASCOF)

---

**Table 2 The Adult Social Care Outcomes Framework 2015–16**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching and outcome measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Delaying and reducing the need for care and support</td>
<td><strong>Outcome measures</strong></td>
</tr>
<tr>
<td></td>
<td>Everybody has the opportunity to have the best health and wellbeing throughout their life, and can access support and information to help manage their care needs.</td>
</tr>
<tr>
<td></td>
<td>2b Proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into reablement/rehabilitation services**</td>
</tr>
</tbody>
</table>

**Aligning across the health and care system**

** Indicator shared
### Table 3 Public health outcomes framework for England, 2013–16

<table>
<thead>
<tr>
<th>Domain</th>
<th>Objectives and indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Health improvement</td>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td></td>
<td>People are helped to live healthy lifestyles, make healthy choices and reduce health inequalities</td>
</tr>
<tr>
<td>4 Healthcare public health and preventing premature mortality</td>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td></td>
<td>Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities</td>
</tr>
<tr>
<td></td>
<td><strong>Indicators</strong></td>
</tr>
<tr>
<td></td>
<td>4.4 Under 75 mortality rate from cardiovascular diseases (including heart disease and stroke)</td>
</tr>
<tr>
<td></td>
<td>4.11 Emergency readmissions within 30 days of discharge from hospital*</td>
</tr>
</tbody>
</table>

**Aligning across the health and care system**

* Indicator complementary

---

**Patient experience and safety issues**

Ensuring that care is safe and that people have a positive experience of care is vital in a high-quality service. It is important to consider these factors when planning and delivering services relevant to secondary prevention after an MI.

NICE has developed guidance and an associated quality standard on patient experience in adult NHS services (see the NICE pathway on patient experience in adult NHS services), which should be considered alongside this quality standard. They specify that people receiving care should be treated with dignity, have opportunities to discuss their preferences, and be supported to understand their options and make fully informed decisions. They also cover the provision of information to patients and service users. Quality statements on these aspects of patient experience are not usually included in topic-specific quality standards. However, recommendations in the development sources for quality standards that affect patient experience and are specific to the topic are considered during quality statement development.
Coordinated services

The quality standard for secondary prevention after an MI specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole secondary prevention pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to people after an MI.

The Health and Social Care Act 2012 sets out a clear expectation that the care system should consider NICE quality standards in planning and delivering services, as part of a general duty to secure continuous improvement in quality. Commissioners and providers of health and social care should refer to the library of NICE quality standards when designing high-quality services. Other quality standards that should also be considered when choosing, commissioning or providing high-quality interventions for MI are listed in related quality standards.

Training and competencies

The quality standard should be read in the context of national and local guidelines on training and competencies. All healthcare professionals involved in assessing, caring for and treating people with MI should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard. Quality statements on staff training and competency are not usually included in quality standards. However, recommendations in the development source(s) on specific types of training for the topic that exceed standard professional training are considered during quality statement development.

Role of families and carers

Quality standards recognise the important role families and carers have in supporting people with MI. If appropriate, healthcare professionals should ensure that family members and carers are involved in the decision-making process about investigations, treatment and care.
List of 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

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 service providers, healthcare professionals and commissioners

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 (clinical commissioning groups) commission services that have the capacity and expertise to assess left ventricular function before discharge in adults admitted to hospital with an MI.

What the quality statement means for patients, service users and carers

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

- MI – secondary prevention (2013) NICE guideline CG172, recommendation 1.3.4 (key priority for implementation)

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

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 National Audit of Cardiac Rehabilitation (NACR).

*What the quality statement means for service providers, healthcare professionals and commissioners*

*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* (clinical commissioning groups) 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.

*What the quality statement means for patients, service users and carers*

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*

- [MI – secondary prevention](2013) NICE guideline CG172, recommendations 1.1.1 and 1.1.13

*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. [MI – secondary prevention (NICE guideline CG172): full guideline]

Cardiac rehabilitation programmes should include a range of interventions with health education, lifestyle advice, stress management and physical exercise components. [MI – secondary prevention (NICE guideline CG172): recommendations 1.1.1 and 1.1.19]
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

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.

b) Rates of uptake and adherence to cardiac rehabilitation.

c) Patient experience of GP services.

_Data source:_ National data on emergency readmissions within 30 days of discharge from hospital are available from the Health and Social Care Information Centre.

**What the quality statement means for service providers, healthcare professionals and commissioners**

_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_ (clinical commissioning groups) 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.
What the quality statement means for patients, service users and carers

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

- MI – secondary prevention (2013) NICE guideline CG172, recommendations 1.3.2, 1.3.31 (key priority for implementation) and 1.6.1 (key priority for implementation)

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

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 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 National Audit of Cardiac Rehabilitation (NACR).

What the quality statement means for service providers, healthcare professionals and commissioners

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 (clinical commissioning groups) 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.

What the quality statement means for patients, service users and carers

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

- MI – secondary prevention (2013) NICE guideline CG172, recommendation 1.1.13. (key priority for implementation)

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. [MI – secondary prevention (NICE guideline CG172): full guideline]

Cardiac rehabilitation programmes should include a range of interventions with health education, lifestyle advice, stress management and physical exercise components. [MI – secondary prevention (NICE guideline CG172): recommendations 1.1.1 and 1.1.19]
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

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 National Audit of Cardiac Rehabilitation (NACR).

What the quality statement means for service providers, healthcare professionals and commissioners

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 (clinical commissioning groups) 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.

What the quality statement means for patients, service users and carers

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

- MI – secondary prevention (2013) NICE guideline CG172, recommendations 1.1.1 and 1.1.9
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. [MI – secondary prevention (NICE guideline CG172): full guideline]

Cardiac rehabilitation programmes should include a range of interventions with health education, lifestyle advice, stress management and physical exercise components. [MI – secondary prevention (NICE guideline CG172): recommendations 1.1.1 and 1.1.19]
Using the quality standard

Quality measures

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of care in areas identified as needing quality improvement. They are not a new set of targets or mandatory indicators for performance management.

We have indicated if current national indicators exist that could be used to measure the quality statements. These include indicators developed by the Health and Social Care Information Centre through its Indicators for Quality Improvement Programme. If there is no national indicator that could be used to measure a quality statement, the quality measure should form the basis for audit criteria developed and used locally.

See NICE's what makes up a NICE quality standard? for further information, including advice on using quality measures.

Levels of achievement

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, NICE recognises that this may not always be appropriate in practice, taking account of safety, choice and professional judgement, and therefore desired levels of achievement should be defined locally.

Using other national guidance and policy documents

Other national guidance and current policy documents have been referenced during the development of this quality standard. It is important that the quality standard is considered alongside the documents listed in development sources.

Information for the public

NICE has produced information for the public about this quality standard. Patients, service users and carers can use it to find out about the quality of care they should expect to receive; as a basis for asking questions about their care, and to help make choices between providers of social care services.
Diversity, equality and language

During the development of this quality standard, equality issues have been considered and equality assessments are available.

Good communication between healthcare professionals and people with myocardial infarction (MI) is essential. Treatment, care and support, and the information given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. People with MI should have access to an interpreter or advocate if needed.

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.
Development sources

Further explanation of the methodology used can be found in the quality standards process guide.

Evidence sources

The documents below contain recommendations from NICE guidance or other NICE-accredited recommendations that were used by the Quality Standards Advisory Committee to develop the quality standard statements and measures.

- MI – secondary prevention (2013) NICE guideline CG172

Policy context

It is important that the quality standard is considered alongside current policy documents, including:

- British Heart Foundation (2013) The national audit of cardiac rehabilitation 2013
- Department of Health (2013) Cardiovascular disease outcomes strategy: improving outcomes for people with or at risk of cardiovascular disease
- Department of Health (2013) Designing and planning cardiac facilities (Health Building Note 01-01)
- Department of Health (2011) A review of emerging cardiac technologies: their potential impact on cardiac services over the next 10 years
- Chartered Society of Physiotherapy (2011) Physiotherapy works: cardiac rehab

Definitions and data sources for the quality measures

- National Audit of Cardiac Rehabilitation (2013) NACR
Related NICE quality standards

Published

- Cardiovascular risk assessment and lipid modification (2015) NICE quality standard 100
- Atrial fibrillation: treatment and management (2015) NICE quality standard 93
- Personality disorders (borderline and antisocial) (2015) NICE quality standard 88
- Physical activity: encouraging activity in all people in contact with the NHS (2015) NICE quality standard 84
- Smoking: reducing tobacco use (2015) NICE quality standard 82
- Psychosis and schizophrenia in adults (2015) NICE quality standard 80
- Acute coronary syndromes (including myocardial infarction) (2014) NICE quality standard 68
- Anxiety disorders (2014) NICE quality standard 53
- Peripheral arterial disease (2014) NICE quality standard 52
- Smoking cessation: supporting people to stop smoking (2013) NICE quality standard 43
- Familial hypercholesterolaemia (2013) NICE quality standard 41
- Hypertension (2013) NICE quality standard 28
- Stable angina (2012) NICE quality standard 21
- Alcohol dependence and harmful alcohol use (2011) NICE quality standard 11
- Chronic heart failure (2011) NICE quality standard 9
- Depression in adults (2011) NICE quality standard 8
- Diabetes in adults (2011) NICE quality standard 6
- Chronic kidney disease (2011) NICE quality standard 5
- Stroke (2010) NICE quality standard 2
In development

- Acute heart failure. Publication expected December 2015

Future quality standards

This quality standard has been developed in the context of all quality standards referred to NICE, including the following topics scheduled for future development:

- Obesity (adults)
- Obesity – prevention and management in adults
- Physical activity: encouraging activity within the general population

The full list of quality standard topics referred to NICE is available from the quality standards topic library on the NICE website.
Quality Standards Advisory Committee and NICE project team

Quality Standards Advisory Committee

This quality standard has been developed by Quality Standards Advisory Committee 2. Membership of this committee is as follows:

Mr Ben Anderson
Consultant in Public Health, Public Health England, East Midlands

Mr Barry Attwood
Lay member

Professor Gillian Baird
Consultant Developmental Paediatrician, Guy's and St Thomas' NHS Foundation Trust, London

Mrs Belinda Black
Chief Executive Officer, Sheffcare, Sheffield

Dr Ashok Bohra
Consultant Surgeon, Dudley Group of Hospitals NHS Foundation Trust

Dr Guy Bradley-Smith
Freelance GP and Clinical Commissioning Lead for Learning Disability, North, East and West (NEW) Devon Clinical Commissioning Group

Mrs Julie Clatworthy
Governing Body Nurse, Gloucester Clinical Commissioning Group

Mr Derek Cruickshank
Consultant Gynaecological Oncologist/Chief of Service, South Tees NHS Foundation Trust

Miss Parul Desai
Consultant in Public Health and Ophthalmology, Moorfields Eye Hospital NHS Foundation Trust, London

Mrs Jean Gaffin
Lay member
Dr Anjan Ghosh  

Mr Jim Greer  
Principal Lecturer, Teesside University

Dr Ulrike Harrower  
Consultant in Public Health Medicine, NHS Somerset

Professor Richard Langford  
Consultant in Anaesthesia and Pain Medicine, Barts Health NHS Trust, London

Mr Gavin Lavery  
Clinical Director, Public Health Agency

Dr Tessa Lewis  
GP and Medical Adviser in Therapeutics, Carreg Wen Surgery

Ms Robyn Noonan  
Lead Commissioner Adults, Oxfordshire County Council

Dr Michael Rudolf (Chair)  
Consultant Physician, Ealing Hospital NHS Trust

Mr David Minto  
Adult Social Care Operations Manager, Northumbria Healthcare Foundation Trust

Dr Lindsay Smith  
GP, West Coker, Somerset

The following specialist members joined the committee to develop this quality standard:

Dr Rajai Ahmad  
Consultant Cardiologist, Sandwell and West Birmingham Hospitals NHS Trust

Ms Louise Batey  
CHD Nurse Clinical Lead/Cardiac Rehabilitation Coordinator, University Hospital South Manchester
Dr Ivan Benett  
GP and Clinical Director, NHS Central Manchester Clinical Commissioning Group

Mr Sanjay Ramdany  
Community Matron with Special Interest in CVD, Isle of Wight NHS Trust

Dr Alan Rees  
Consultant Physician in Diabetes, Endocrinology and Clinical Lipidology, University Hospital of Wales Cardiff

Mr John Walsh  
Lay member

Professor Anthony Wierzbicki  
Consultant in Metabolic Medicine/Chemical Pathology, Guy’s and St Thomas’ NHS Foundation Trust, London

Dr Robert Wright  
Consultant Cardiologist, James Cook University Hospital, Middlesbrough

NICE project team

Nick Baillie  
Associate Director

Karen Slade  
Consultant Clinical Adviser

Rachel Neary-Jones and Esther Clifford  
Programme Managers

Craig Grime  
Technical Adviser

Justine Karpusheff and Abigail Stevenson  
Technical Analysts

© NICE 2015. All rights reserved.
Natalie Boileau and Jenny Mills
Project Managers

Nicola Cunliffe
Coordinator
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.

The methods and processes for developing NICE quality standards are described in the quality standards process guide.

NICE produces guidance, standards and information on commissioning and providing high-quality healthcare, social care, and public health services. We have agreements to provide certain NICE services to Wales, Scotland and Northern Ireland. Decisions on how NICE guidance and other products apply in those countries are made by ministers in the Welsh government, Scottish government, and Northern Ireland Executive. NICE guidance or other products may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

Copyright

© National Institute for Health and Care Excellence 2015. All rights reserved. NICE copyright material can be downloaded for private research and study, and may be reproduced for educational and not-for-profit purposes. No reproduction by or for commercial organisations, or for commercial purposes, is allowed without the written permission of NICE.

ISBN: 978-1-4731-1423-4

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.

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