Stroke in adults

Quality standard
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Introduction

This quality standard covers diagnosis and initial management, acute-phase care, rehabilitation and long-term management of stroke in adults (aged over 16 years). For more information see the stroke topic overview.

This quality standard has been updated. This topic was identified for update following the annual review of quality standards in 2014. The review identified that there had been changes in the areas for improvement for stroke. For further information about the update, see update information. Statements from the 2010 quality standard that are no longer national priorities for improvement but are still underpinned by current accredited guidance are included after the updated statements in the list of quality statements.

Why this quality standard is needed

Stroke is defined by the World Health Organization as a clinical syndrome consisting of 'rapidly developing clinical signs of focal (at times global) disturbance of cerebral function, lasting more than 24 hours or leading to death with no apparent cause other than that of vascular origin'.

Stroke is a major health problem in the UK. The Stroke Association's report, State of the Nation, highlighted that stroke accounted for around 40,000 deaths in the UK in 2015, which represents 7% of all deaths. Each year there are approximately 152,000 cases of stroke in the UK, of which about 25–33% are recurrent strokes. Most people survive a first stroke, but often have significant morbidity. About 1.2 million people in the UK live with the effects of stroke, and over a third of these are dependent on other people.

The State of the Nation highlights that stroke is estimated to cost the UK economy around £9 billion a year. This comprises direct costs to health and social care of £4.38 billion, costs of informal care of £2.4 billion, costs because of lost productivity of £1.33 billion and benefits payments totalling £841 million.

Development of stroke services, and particularly access to acute stroke care on a stroke unit, has...
resulted in improvements in mortality and disability outcomes post stroke. However, many people who have a stroke need long-term support to help them manage any difficulties they have, participate in society and regain their independence. Stroke rehabilitation aims to help people to restore or improve their physical and mental functioning, adapt to any loss of function and work towards regaining a meaningful role for the individual. It involves many different specialists for different areas of care depending on the person's needs.

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

- mortality rates of adults who have a stroke
- long-term disability of adults who have a stroke
- patient experience of stroke services
- experience of carers looking after people who have had a stroke.

**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 – safety, experience and effectiveness of care – 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](#)
- [Public Health Outcomes Framework 2013–16](#)

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>
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</table>

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| 1 Preventing people from dying prematurely | **Overarching indicators**  
1a Potential Years of Life Lost (PYLL) from causes considered amenable to healthcare  
i Adults  
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 (PHOF4.4*) |
|---|---|
| 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 (ASCOF 1A**)  

**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 (ASCOF 1E**,PHOF 1.8*)  
Enhancing quality of life for carers  
2.4 Health-related quality of life for carers (ASCOF 1D**) |
| 3 Helping people to recover from episodes of ill health or following injury | **Overarching indicators**  
3b Emergency readmissions within 30 days of discharge from hospital (PHOF 4.11*)  
**Improve areas**  
Improving recovery from stroke  
3.4 Proportion of stroke patients reporting an improvement in activity/lifestyle on the Modified Rankin Scale at 6 months  
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 (ASCOF 2B[1]*)  
ii Proportion offered rehabilitation following discharge from acute or community hospital (ASCOF 2B[2]*) |
|---|---|
| **4 Ensuring that people have a positive experience of care** | **Overarching indicators**  
4b Patient experience of hospital care  
4c Friends and family test  
4d Patient experience characterised as poor or worse  
ii Hospital care  
**Improvement areas**  
Improving people's experience of outpatient care  
4.1 Patient experience of outpatient services  
Improving hospitals' responsiveness to personal needs  
4.2 Responsiveness to inpatients' personal needs  
Improving people's experience of accident and emergency services  
4.3 Patient experience of A&E services  
Improving the experience of care for people at the end of their lives  
4.6 Bereaved carers' views on the quality of care in the last 3 months of life  
Improving people's experience of integrated care  
4.9 People's experience of integrated care (ASCOF3E**) |
5 Treating and caring for people in a safe environment and protecting them from avoidable harm

<table>
<thead>
<tr>
<th>Overarching indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>5a Deaths attributable to problems in healthcare</td>
</tr>
<tr>
<td>5b Severe harm attributable to problems in healthcare</td>
</tr>
</tbody>
</table>

**Improvement areas**
Reducing the incidence of avoidable harm
5.1 Deaths from venous thromboembolism (VTE) related events

**Alignment with Adult Social Care Outcomes Framework and/or Public Health Outcomes Framework**
* Indicator is shared
** Indicator is complementary
Indicators in italics in development

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

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching and outcome measures</th>
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</table>

© NICE 2019. All rights reserved. Subject to Notice of rights (https://www.nice.org.uk/terms-and-conditions#notice-of-rights).
| 1 Enhancing quality of life for people with care and support needs | **Overarching measure**
1A Social care-related quality of life (NHSOF 2***)  
**Outcome measures**
People manage their own support as much as they wish, so they are in control of what, how and when support is delivered to match their needs  
1B Proportion of people who use services who have control over their daily life  
1C Proportion of people using social care who receive self-directed support, and those receiving direct payments  
Carers can balance their caring roles and maintain their desired quality of life  
1D Carer-reported quality of life (NHSOF 2.4***)  
People are able to find employment when they want, maintain a family and social life and contribute to community life, and avoid loneliness or isolation  
1I Proportion of people who use services and their carers, who reported that they had as much social contact as they would like |
### 2 Delaying and reducing the need for care and support

<table>
<thead>
<tr>
<th>Overarching measure</th>
<th>Outcome measures</th>
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<tr>
<td>2A Permanent admissions to residential and nursing care homes, per 100,000 population</td>
<td></td>
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**Everybody has the opportunity to have the best health and wellbeing throughout their life, and can access support and information to help them manage their care needs**

Earlier diagnosis, intervention and reablement means that people and their carers are less dependent on intensive services

**Proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into reablement/rehabilitation services (NHSOF 3.6 [1]*)**

**Placeholder 2E The effectiveness of reablement services**

When people develop care needs, the support they receive takes place in the most appropriate setting and enables them to regain their independence

2C Delayed transfers of care from hospital, and those which are attributable to adult social care
3 Ensuring that people have a positive experience of care and support

**Overarching measure**
People who use social care and their carers are satisfied with their experience of care and support services

3A Overall satisfaction of people who use services with their care and support
3B Overall satisfaction of carers with social services

*Placeholder 3E The effectiveness of integrated care*

**Outcome measures**

Carers feel that they are respected as equal partners throughout the care process

3C The proportion of carers who report that they have been included or consulted in discussions about the person they care for

People know what choices are available to them locally, what they are entitled to, and who to contact when they need help

3D The proportion of people who use services and carers who find it easy to find information about support

People, including those involved in making decisions on social care, respect the dignity of the individual and ensure support is sensitive to the circumstances of each individual

This information can be taken from the Adult Social Care Survey and used for analysis at the local level

### Alignment with NHS Outcomes Framework and/or Public Health Outcomes Framework

* Indicator is shared
** Indicator is complementary

Indicators in italics in development

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

<table>
<thead>
<tr>
<th>Domain</th>
<th>Objectives and indicators</th>
</tr>
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</table>
| 1 Improving the wider determinants of health | **Objective**  
Improvements against wider factors that affect health and wellbeing and health inequalities  
**Indicators**  
1.8 Employment for those with long-term health conditions including adults with a learning disability or who are in contact with secondary mental health services (NHSOF 2.2*, ASCOF 1E**) |
|---|---|
| 4 Healthcare public health and preventing premature mortality | **Objective**  
Reduced numbers of people living with preventable ill health and people dying prematurely, whilst reducing the gap between communities  
**Indicators**  
4.3 Mortality rate from causes considered preventable (NHSOF 1A**)  
4.4 Under 75 mortality rate from all cardiovascular diseases (including heart disease and stroke) (NHSOF 1.1*)  
4.11 Emergency readmissions within 30 days of discharge from hospital (NHSOF 3b*)  
4.13 Health-related quality of life for older people |

**Alignment with Adult Social Care Outcomes Framework and/or NHS Outcomes Framework**

* Indicator is shared  
** Indicator is complementary

### Safety and people’s experience of care

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 stroke in adults.

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 people using services. 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 people’s experience of using services and are specific to the topic are considered during quality statement development.

A number of NICE quality standards are relevant to the safe care of adults who have a stroke. In particular the NICE quality standard for venous thromboembolism in adults: reducing the risk in hospital covers prophylaxis for venous thromboembolism.

**Coordinated services**

The quality standard for stroke specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole stroke care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to adults who have a stroke.

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 a high-quality stroke service 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 health and social care practitioners involved in assessing, caring for and treating adults who have a stroke 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 sources 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 adults who have a stroke. If appropriate, health and social care practitioners 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 presenting at an accident and emergency (A&E) department with suspected stroke are admitted to a specialist acute stroke unit within 4 hours of arrival. [2010, updated 2016]

**Statement 2** Adults having stroke rehabilitation in hospital or in the community are offered at least 45 minutes of each relevant therapy for a minimum of 5 days a week. [2010, updated 2016]

**Statement 3** Adults who have had a stroke have access to a clinical psychologist with expertise in stroke rehabilitation who is part of the core multidisciplinary stroke rehabilitation team. [new 2016]

**Statement 4** Adults who have had a stroke are offered early supported discharge if the core multidisciplinary stroke team assess that it is suitable for them. [new 2016]

**Statement 5** Adults who have had a stroke are offered active management to return to work if they wish to do so. [new 2016]

**Statement 6** Adults who have had a stroke have their rehabilitation goals reviewed at regular intervals. [2010, updated 2016]

**Statement 7** Adults who have had a stroke have a structured health and social care review at 6 months and 1 year after the stroke, and then annually. [new 2016]

In 2016 this quality standard was updated and statements prioritised in 2010 were updated (2010, updated 2016) or replaced (new 2016). For more information, see update information.

Statements from the 2010 quality standard for stroke that may still be useful at a local level, but are no longer considered national priorities for improvement:

- People seen by ambulance staff outside hospital, who have sudden onset of neurological symptoms, are screened using a validated tool to diagnose stroke or transient ischaemic attack (TIA). Those people with persisting neurological symptoms who screen positive using a validated tool, in whom hypoglycaemia has been excluded, and who have a possible diagnosis of stroke, are transferred to a specialist acute stroke unit within 1 hour.

- Patients with acute stroke receive brain imaging within 1 hour of arrival at the hospital if they meet any of the indications for immediate imaging.
• Patients with acute stroke have their swallowing screened by a specially trained healthcare professional within 4 hours of admission to hospital, before being given any oral food, fluid or medication, and they have an ongoing management plan for the provision of adequate nutrition.

• Patients who need ongoing inpatient rehabilitation after completion of their acute diagnosis and treatment are treated in a specialist stroke rehabilitation unit.

• Patients with stroke who have continued loss of bladder control 2 weeks after diagnosis are reassessed to identify the cause of incontinence, and have an ongoing treatment plan involving both patients and carers.

• All patients after stroke are screened within 6 weeks of diagnosis, using a validated tool, to identify mood disturbance and cognitive impairment.

• All patients discharged from hospital who have residual stroke-related problems are followed up within 72 hours by specialist stroke rehabilitation services for assessment and ongoing management.

• Carers of patients with stroke are provided with a named point of contact for stroke information, written information about the patient's diagnosis and management plan, and sufficient practical training to enable them to provide care.

The 2010 quality standard for stroke is available as a pdf.
Quality statement 1: Prompt admission to specialist acute stroke units

Quality statement

Adults presenting at an accident and emergency (A&E) department with suspected stroke are admitted to a specialist acute stroke unit within 4 hours of arrival. [2010, updated 2016]

Rationale

Specialist acute stroke units are associated with improved patient safety due to better outcomes, such as reduced disability and mortality, because of the range of specialist treatments they provide. Admission to these units should be within 4 hours of arrival at A&E, so that treatment can begin as quickly as possible, and to help prevent complications. Some adults with acute stroke may need treatment in higher level units, such as high dependency or intensive care units.

Quality measures

Structure

Evidence of local arrangements and written clinical protocols to ensure that adults presenting at an A&E department with suspected stroke are admitted to a specialist acute stroke unit within 4 hours of arrival.

Data source: Local data collection.

Process

Proportion of A&E department presentations of suspected stroke in adults in which the person is admitted to a specialist acute stroke unit within 4 hours of arrival.

Numerator – the number in the denominator in which the person is admitted to a specialist acute stroke unit within 4 hours of arrival.

Denominator – the number of A&E department presentations of suspected stroke.

Data source: Local data collection. Data can be collected using the Royal College of Physicians' Sentinel Stroke National Audit Programme (SSNAP) question 1.15 and the NHS Digital CCG Outcomes Indicator Set indicator 3.5.
Outcome

a) Mortality rates of adults who have a stroke.

*Data source:* Local data collection. Data can be collected using the Royal College of Physicians' *Sentinel Stroke National Audit Programme (SSNAP)* question 7.1 and the NHS Digital *CCG Outcomes Indicator Set* indicator 1.5.

b) Change in Modified Rankin Score at 6 months after a stroke.

*Data source:* Local data collection. Data can be collected using the Royal College of Physicians' *Sentinel Stroke National Audit Programme (SSNAP)* question 7.4.

**What the quality statement means for different audiences**

Service providers (such as secondary care providers) ensure that systems are in place for adults presenting at an A&E department with suspected stroke to be admitted to a specialist acute stroke unit within 4 hours of arrival.

Healthcare professionals admit adults presenting at an A&E department with suspected stroke to a specialist acute stroke unit within 4 hours of arrival.

Commissioners (such as clinical commissioning groups) ensure that they commission services that can demonstrate that adults presenting at A&E departments with suspected stroke are admitted to a specialist acute stroke unit within 4 hours of arrival.

Adults with suspected stroke who go to A&E are admitted to an acute stroke unit within 4 hours of arriving at A&E. An acute stroke unit has special equipment and a team of doctors, nurses, physiotherapists and other healthcare professionals who provide specialist treatment as quickly as possible and help to prevent further problems.

**Source guidance**

- *Stroke and transient ischaemic attack in over 16s: diagnosis and initial management* (2019) NICE guideline NG128, recommendation 1.3.1
- The 4-hour timeframe is based on the Royal College of Physicians' *Sentinel Stroke National Audit Programme (SSNAP)* target
Definitions of terms used in this quality statement

Admission to a specialist acute stroke unit

Admission should be within 4 hours of arrival at the A&E department for adults with suspected stroke, following an initial assessment (unless their care needs should be provided elsewhere, such as an intensive care unit).

[Adapted from NICE's guideline on stroke and transient ischaemic attack in over 16s, recommendation 1.3.1 and the Royal College of Physicians' Sentinel Stroke National Audit Programme (SSNAP)]

Specialist acute stroke unit

A discrete area in the hospital designated for people with stroke. It is staffed by a specialist stroke multidisciplinary team, who have access to equipment for monitoring and rehabilitation. The Stroke Unit Trialists’ Collaboration provide 5 key characteristics of markers of a good specialist acute stroke unit:

- a consultant physician with responsibility for stroke
- formal links with patient and carer organisations
- multidisciplinary meetings at least weekly to plan patient care
- provision of information to patients about stroke
- funding for external courses and uptake.

[Adapted from NICE's guideline on stroke and transient ischaemic attack in over 16s, recommendation 1.3.1, and the Royal College of Physicians' Sentinel Stroke National Audit Programme (SSNAP)]
Quality statement 2: Intensity of stroke rehabilitation

Quality statement

Adults having stroke rehabilitation in hospital or in the community are offered at least 45 minutes of each relevant therapy for a minimum of 5 days a week. [2010, updated 2016]

Rationale

Higher intensity stroke rehabilitation therapies can improve the quality of life for adults who have had a stroke. The improvements that an adult with stroke should expect to achieve will depend on their health and abilities before and after the stroke, the severity of the stroke and the intensity of the rehabilitation therapy. The intensity of stroke rehabilitation should be suitable for the person, so that they are able to participate and make progress towards their functional goals.

Quality measures

Structure

Evidence of local arrangements and written clinical protocols to ensure that adults having stroke rehabilitation in hospital or in the community are offered at least 45 minutes of each relevant therapy for a minimum of 5 days a week.

Data source: Local data collection.

Process

a) Proportion of adults having stroke rehabilitation in hospital who receive at least 45 minutes of each relevant therapy for a minimum of 5 days a week.

Numerator – the number in the denominator who receive at least 45 minutes of each relevant therapy for a minimum of 5 days a week.

Denominator – the number of adults having stroke rehabilitation in hospital.

Data source: Local data collection. Data can be collected using the Royal College of Physicians’ Sentinel Stroke National Audit Programme (SSNAP) questions 4.5 and 4.6.

b) Proportion of adults having stroke rehabilitation in the community who receive at least
45 minutes of each relevant therapy for a minimum of 5 days a week.

Numerator – the number in the denominator who receive at least 45 minutes of each relevant therapy for a minimum of 5 days a week.

Denominator – the number of adults having stroke rehabilitation in the community.

*Data source:* Local data collection.

**Outcome**

Change in Modified Rankin Score at 6 months after a stroke.

*Data source:* Local data collection. Data can be collected using the Royal College of Physicians’ Sentinel Stroke National Audit Programme (SSNAP) question 8.4.

**What the quality statement means for different audiences**

**Service providers** (such as secondary care providers and community care providers) ensure that adults having stroke rehabilitation are offered at least 45 minutes of each relevant therapy for a minimum of 5 days a week.

**Health and social care practitioners** offer adults having stroke rehabilitation at least 45 minutes of each relevant therapy for a minimum of 5 days a week.

**Commissioners** (such as clinical commissioning groups and local authorities) ensure that they commission services in which adults having stroke rehabilitation are offered at least 45 minutes of each relevant therapy for a minimum of 5 days a week.

**Adults having rehabilitation therapy after a stroke** are offered at least 45 minutes of each type of rehabilitation therapy that they need on at least 5 days a week. Rehabilitation therapy is long-term support to help people regain their independence and cope with any remaining disabilities after a stroke. It may involve many different specialists, such as physiotherapists, speech therapists and occupational therapists. They can help people who have problems with their memory and concentration; speaking, reading and writing; emotions and feelings; sight; swallowing and eating; strength, balance and movement; and shoulder pain. They also include help to encourage physical activity and independent living.
Source guidance

Stroke rehabilitation in adults (2013) NICE guideline CG162, recommendation 1.2.16 (key priority for implementation)

Definitions of terms used in this quality statement

Relevant stroke rehabilitation

Adults who have had a stroke should be offered all rehabilitation therapies that are suitable for their needs, as long as they have the ability to participate and make progress towards their functional goals. Adults with stroke should be able to access rehabilitation at any stage of the stroke care pathway when needed.

[Adapted from NICE's guideline on stroke rehabilitation in adults, recommendation 1.2.16, and expert opinion]

Equality and diversity considerations

Some adults who have had stroke may not have the mental or physical ability to participate in 45 minutes of each rehabilitation therapy. Service providers should ensure that therapy is still offered 5 days a week but for a shorter amount of time. It should be given at an intensity that allows the person to actively participate and at a level that enables them to make progress.
Quality statement 3: Access to a clinical psychologist

Quality statement

Adults who have had a stroke have access to a clinical psychologist with expertise in stroke rehabilitation who is part of the core multidisciplinary stroke rehabilitation team. [new 2016]

Rationale

Many adults who have had a stroke experience psychological difficulties, including low mood and anxiety, as well as difficulties with cognition such as problems with memory and information processing. Psychological therapies may help people and their families or carers with these difficulties. Having a clinical psychologist as part of the core multidisciplinary stroke rehabilitation team can help to ensure that people have access to psychological therapy tailored to their needs.

Quality measures

Structure

Evidence of local arrangements and protocols to ensure that services providing stroke care have a core multidisciplinary stroke rehabilitation team that includes a clinical psychologist with expertise in stroke rehabilitation.

_data source:_ Local data collection.

Outcome

Quality of life for adults who have had a stroke.

_data source:_ Local data collection.

What the quality statement means for different audiences

Service providers (such as secondary care providers) ensure that the core multidisciplinary stroke rehabilitation team includes a clinical psychologist with expertise in stroke rehabilitation.

Health and social care practitioners are aware of the need for a clinical psychologist with expertise in stroke rehabilitation to be part of the core multidisciplinary stroke rehabilitation team.
Commissioners (such as clinical commissioning groups) ensure that they commission services that have a clinical psychologist with expertise in stroke rehabilitation as part of their core multidisciplinary stroke rehabilitation team.

Adults who have had a stroke who need help with psychological problems can see a clinical psychologist who specialises in stroke rehabilitation. The psychologist is part of the stroke rehabilitation team.

Source guidance

Stroke rehabilitation in adults (2013) NICE guideline CG162, recommendation 1.1.3 (key priority for implementation)

Definitions of terms used in this quality statement

The core multidisciplinary stroke team

The team should comprise the following professionals with expertise in stroke rehabilitation:

- consultant physicians
- nurses
- physiotherapists
- occupational therapists
- speech and language therapists
- clinical psychologists
- rehabilitation assistants
- social workers.

[NICE's guideline on stroke rehabilitation in adults, recommendation 1.1.3]
Quality statement 4: Early supported discharge

Quality statement

Adults who have had a stroke are offered early supported discharge if the core multidisciplinary stroke team assess that it is suitable for them. [new 2016]

Rationale

Early supported discharge is an intervention for adults after a stroke that allows their care to be transferred from an inpatient environment to a community setting. It enables people to continue their rehabilitation therapy at home, with the same intensity and expertise that they would receive in hospital. This may not be suitable for all adults with stroke or in all circumstances. The decision to offer early supported discharge is made by the core multidisciplinary stroke team after discussion with the person and their family or carer if applicable.

Quality measures

Structure

Evidence of local arrangements and written clinical protocols to ensure that adults who have had a stroke are offered early supported discharge if the core multidisciplinary stroke team assess that it is suitable for them.

Data source: Local data collection.

Process

a) Proportion of adults who have had a stroke and are assessed as suitable for early supported discharge by the core multidisciplinary stroke team who receive it.

Numerator – the number in the denominator who receive early supported discharge.

Denominator – the number of adults who have had a stroke and are assessed as suitable for early supported discharge by the core multidisciplinary stroke team.

Data source: Local data collection.

b) Proportion of adults who have had stroke who are treated by an early supported discharge team.
Numerator – the number in the denominator who are treated by an early supported discharge team.

Denominator – the number of adults who have had a stroke.

**Data source:** National data is collected using the Royal College of Physicians' Sentinel Stroke National Audit Programme (SSNAP), which estimates that approximately 34% of all stroke patients are considered eligible for early supported discharge.

**Outcome**

a) Length of hospital stay for adults who have had a stroke.

**Data source:** Local data collection.

b) Quality of life for adults who have had a stroke.

**Data source:** Local data collection.

**What the quality statement means for different audiences**

**Service providers** (such as secondary care providers) ensure that systems are in place to offer early supported discharge to adults who have had a stroke if it is assessed to be suitable for them by the core multidisciplinary stroke team.

**Health and social care practitioners** in the core multidisciplinary stroke team are aware of discharge pathways and offer early supported discharge to adults who have had a stroke if it is suitable for them.

**Commissioners** (clinical commissioning groups) ensure that they commission services that can provide early supported discharge services for adults who have had a stroke if it is assessed to be suitable for them by the core multidisciplinary stroke team.

**Adults who have had a stroke** are offered 'early supported discharge' if their stroke team decides that it is suitable for them. This means that they are supported to go home from hospital as early as possible and have the same rehabilitation care at home. This is only offered if the person is well enough and it can be done safely.
Source guidance

*Stroke rehabilitation in adults* (2013) NICE guideline CG162, recommendations 1.1.3 and 1.1.8 (key priorities for implementation)

**Definitions of terms used in this quality statement**

**Early supported discharge**

An intervention for people who have had a stroke that allows care to be transferred from an inpatient environment to a community setting to continue rehabilitation. The intensity of care and the expertise of those providing it is maintained.

[NICE’s guideline on *stroke rehabilitation in adults*]

**Suitable for early supported discharge**

The core multidisciplinary stroke team will assess whether early supported discharge is suitable for adults who have had a stroke. The assessment takes into account the person's functional, cognitive and social circumstances. This may include, for example, the person's ability to transfer from bed to chair independently or with assistance, and whether a safe and secure environment can be provided at home.

[NICE's guideline on *stroke rehabilitation in adults*, recommendation 1.1.8, and expert consensus]

**The core multidisciplinary stroke team**

The team should comprise the following professionals with expertise in stroke rehabilitation:

- consultant physicians
- nurses
- physiotherapists
- occupational therapists
- speech and language therapists
- clinical psychologists
- rehabilitation assistants

- social workers.

[NICE’s guideline on stroke rehabilitation in adults, recommendation 1.1.3]

Equality and diversity considerations

Early supported discharge is only suitable in a safe and secure environment. Therefore, it may not be suitable for some people because of their living arrangements, for example, if they are homeless recent refugees, asylum seekers or migrant workers. It may not be suitable for people with significant cognitive and functional impairments.
Quality statement 5: Return to work

Quality statement

Adults who have had a stroke are offered active management to return to work if they wish to do so. [new 2016]

Rationale

After a stroke, adults may have significant disabilities that prevent them from returning to work. Work can contribute to a person’s identity and perceived status, has financial benefits, and can improve their quality of life and reduce ill health. Being able to return to work is also a sign that rehabilitation has been successful.

Quality measures

Structure

Evidence of local arrangements and written clinical protocols to ensure that adults who have had a stroke are offered active management to return to work if they wish to do so.

Data source: Local data collection.

Process

Proportion of adults who have had a stroke who receive active management to return to work if they wish to do so.

Numerator – the number in the denominator who receive active management to help them return to work.

Denominator – the number of adults who have had a stroke who wish to return to work.

Data source: Local data collection.

Outcome

a) Quality of life for adults who have had a stroke.
Data source: Local data collection.

b) Quality of life for carers of adults who have had a stroke.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (such as community services) ensure that systems are in place for adults who have had a stroke to be offered active management to return to work if they wish to.

Health and social care practitioners offer adults who have had a stroke active management to return to work if they wish to.

Commissioners (such as local councils) ensure that they commission services that offer adults who have had a stroke active management to return to work if they wish to.

Adults who have had a stroke and wish to return to work are offered help and support to do this. This should include help to identify and manage any problems that might make it difficult to return to work.

Source guidance

Stroke rehabilitation in adults (2013) NICE guideline CG162, recommendation 1.10.5 (key priority for implementation)

Definitions of terms used in this quality statement

Active management to return to work

Active management to return to work should include:

- identifying the physical, cognitive, communication and psychological demands of the job (for example, multitasking by answering emails and telephone calls in a busy office)
- identifying any impairments on work performance (for example, physical limitations, anxiety, fatigue preventing attendance for a full day at work, cognitive impairments preventing multitasking, and communication deficits)
tailoring an intervention (for example, teaching strategies to support multitasking or memory difficulties, teaching the use of voice-activated software for people with difficulty typing, and delivery of work simulations)

- educating about the Equality Act 2010 and support available (for example, an access to work scheme)

- workplace visits and liaison with employers to establish reasonable accommodations, such as provision of equipment and graded return to work.

[NICE’s guideline on stroke rehabilitation in adults, recommendation 1.10.5]

**Equality and diversity considerations**

Services should make reasonable adjustments to help adults with significant cognitive impairment and stroke to stay in work or education or find new employment, volunteering and educational opportunities.

Some adults may be unable to work, so other occupational or education activities should be considered, including prevocational training.
Quality statement 6: Regular review of rehabilitation goals

Quality statement

Adults who have had a stroke have their rehabilitation goals reviewed at regular intervals. [2010, updated 2016]

Rationale

Regularly reviewing the goals of an adult who has had a stroke helps to identify their values, beliefs and preferences, which may affect the kind of rehabilitation that would be suitable for them. It may also help to encourage and motivate the person, and improve the outcomes of rehabilitation. Goals should be set within 5 days of arrival at an accident and emergency (A&E) department to ensure they are established from the start of the rehabilitation process. They should then be reviewed at regular intervals to ensure that the goals are still relevant to the person who has had a stroke.

Quality measures

Structure

Evidence of local arrangements and written clinical protocols to ensure that adults who have had a stroke have their rehabilitation goals reviewed at regular intervals.

Data source: Local data collection.

Process

a) Proportion of adults who have had a stroke who have their rehabilitation goals agreed within 5 days of arrival at A&E.

Numerator – the number in the denominator who have their rehabilitation goals agreed within 5 days of arrival at A&E.

Denominator – the number of adults who have had a stroke.

Data source: Local data collection. Data can be collected using the Royal College of Physicians' Sentinel Stroke National Audit Programme (SSNAP) question 4.7.

b) Proportion of adults who have had a stroke who have their rehabilitation goals reviewed at
regular intervals.

Numerator – the number in the denominator who have their rehabilitation goals reviewed at regular intervals.

Denominator – the number of adults who have had a stroke with agreed rehabilitation goals.

**Data source:** Local data collection.

### Outcome

a) Quality of life for adults who have had a stroke.

**Data source:** Local data collection.

b) Readmission rates of adults who have had a stroke.

**Data source:** Local data collection.

### What the quality statement means for different audiences

**Service providers** (such as primary, secondary and community care providers) ensure that systems are in place for adults who have had a stroke to have their rehabilitation goals reviewed at regular intervals.

**Healthcare professionals** review regularly the rehabilitation goals of adults who have had a stroke.

**Commissioners** (such as local councils, NHS England and clinical commissioning groups) ensure that they commission services in which adults who have had a stroke have their rehabilitation goals reviewed at regular intervals.

**Adults who have had a stroke** have the opportunity to discuss and agree goals (things they would like to achieve) for their recovery and have them reviewed regularly to ensure they are still relevant.

### Source guidance

*Stroke rehabilitation in adults* (2013) NICE guideline CG162, recommendations 1.2.8 and 1.2.12
Definitions of terms used in this quality statement

Rehabilitation goals

Goals for rehabilitation should:

- be meaningful and relevant to adults with stroke
- focus on activity and participation
- be challenging but achievable
- include both short-term and long-term elements.

[NICE's guideline on stroke rehabilitation in adults, recommendation 1.2.8]

Reviewing goals at regular intervals

Goals should be set within 5 days of arrival at A&E. Reviewing goals should take place at intervals suitable to the ability of the individual and nature of the goal, such as at 6 weeks, 3 months, 6 months and annually thereafter. Reviews should take place in goal-setting meetings that are timetabled into the working week and involve the person with stroke, and where appropriate, their family or carer.

[NICE’s guideline on stroke rehabilitation in adults, recommendations 1.2.9 and 1.2.12, and expert consensus]

Equality and diversity considerations

When setting goals for rehabilitation, healthcare professionals should be aware that adults with stroke may have cognitive or physical impairments, and at the acute stage participation for some adults may be limited until the person feels ready and more confident.

Discussion about goals should take into account any additional needs, such as physical, sensory or learning disabilities, and the needs of people who do not speak or read English. People should have access to an interpreter or advocate if needed.
Quality statement 7: Regular review of health and social care needs

Quality statement

Adults who have had a stroke have a structured health and social care review at 6 months and 1 year after the stroke, and then annually. [new 2016]

Rationale

Reviewing the health and social care needs of adults who have had a stroke enables health and social care practitioners to identify any problems or difficulties the person who had the stroke and their family or carers may be experiencing. This can help adults who have had a stroke and their family or carers to make changes to their care according to their needs.

Quality measures

Structure

Evidence of local arrangements and written protocols to ensure that adults who have had a stroke have a structured health and social care review at 6 months and 1 year after the stroke, and then annually.

Data source: Local data collection.

Process

a) Proportion of adults who have had a stroke who have a structured health and social care review at 6 months after the stroke.

Numerator – the number in the denominator who have a structured health and social care review at 6 months after the stroke.

Denominator – the number of adults who have had a stroke.

Data source: Local data collection. Data can be collected using the Royal College of Physicians' Sentinel Stroke National Audit Programme (SSNAP) question 8.1.

b) Proportion of adults who have had a stroke and had a structured health and social care review at 6 months after the stroke who have a review 1 year after the stroke.
Numerator – the number in the denominator who have a review 1 year after the stroke.

Denominator - the number of adults who have had a stroke and had a structured health and social care review at 6 months after the stroke.

*Data source:* Local data collection.

c) Proportion of adults who have had a stroke and had a structured health and social care review at 6 months and 1 year after the stroke, who have annual reviews thereafter.

Numerator – the number in the denominator who have annual reviews.

Denominator – the number of adults who have had a stroke and had a structured health and social care review at 6 months and 1 year after the stroke.

*Data source:* Local data collection.

**Outcome**

a) Quality of life for adults who have had a stroke.

*Data source:* Local data collection.

b) Readmission rates of adults who have had a stroke.

*Data source:* Local data collection.

**What the quality statement means for different audiences**

**Service providers** (such as primary, secondary and community care providers) ensure that systems are in place for adults who have had a stroke to have a structured health and social care review at 6 months and 1 year after the stroke, and then annually.

**Health and social care practitioners** ensure that adults who have had a stroke have a structured health and social care review at 6 months and 1 year after the stroke, and then annually.

**Commissioners** (such as clinical commissioning groups, NHS England and local authorities) ensure that they commission services that enable adults who have had a stroke to have a structured health
and social care review at 6 months and 1 year after the stroke, and then annually.

**Adults who have had a stroke** have a check at 6 months and 1 year after their stroke, and then once every year to make sure they are getting the care and support that they need.

**Source guidance**

*Stroke rehabilitation in adults* (2013) NICE guideline CG162, recommendation 1.11.5 (key priority for implementation)

**Definitions of terms used in this quality statement**

**Structured health and social care review**

These reviews should address the person's ability to participate in daily activities and their role in their community, as well as secondary prevention and continuing rehabilitation. An agreed local structured health and social care review tool can be used, for example the Greater Manchester Stroke Assessment Tool (GM-SAT).

[NICE's guideline on stroke rehabilitation in adults, recommendation 1.11.5, and expert opinion]

**Equality and diversity considerations**

Any review should take into account any additional needs, such as physical, sensory or learning disabilities, and the needs of people who do not speak or read English. People should have access to an interpreter or advocate if needed.
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.

See NICE’s how to use quality standards 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.

NICE’s quality standard service improvement template helps providers to make an initial assessment of their service compared with a selection of quality statements. It includes assessing current practice, recording an action plan and monitoring quality improvement. This tool is updated monthly to include new quality standards.

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.
Diversity, equality and language

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

Good communication between health, public health and social care practitioners and adults with stroke 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. Adults with stroke 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.

- Stroke and transient ischaemic attack in over 16s: diagnosis and initial management (2019) NICE guideline NG128
- Stroke rehabilitation in adults (2013) NICE guideline CG162

Policy context

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


Definitions and data sources for the quality measures

- NHS Digital (2015) CCG Outcomes Indicator Set
- Royal College of Physicians (2015) Sentinel Stroke National Audit Programme (SSNAP)
Related NICE quality standards

Published

- Medicines optimisation (2016) NICE quality standard 120
- Cardiovascular risk assessment and lipid modification (2015) NICE quality standard 100
- Atrial fibrillation (2015, updated 2018) NICE quality standard 93
- Falls in older people (2015, updated 2017) NICE quality standard 86
- Transient loss of consciousness (‘blackouts’) in over 16s (2014) NICE quality standard 71
- Faecal incontinence in adults (2014) NICE quality standard 54
- Hypertension in adults (2013, updated 2015) NICE quality standard 28
- Nutrition support in adults (2012) NICE quality standard 24
- Patient experience in adult NHS services (2012) NICE quality standard 15
- Venous thromboembolism in adults: reducing the risk in hospital (2010, updated 2018) NICE quality standard 3

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:

- Suspected neurological conditions
- Primary prevention: population- and community-based primary prevention strategies

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. Membership of this committee is as follows:

Dr Ivan Bennett
Clinical Director, Central Manchester Clinical Commissioning Group

Dr Gita Bhutani
Associate Director for Psychological Professions, Lancashire Care NHS Foundation Trust

Mrs Jennifer Bostock
Lay member

Dr Helen Bromley
Consultant in Public Health, Cheshire West and Chester Council

Ms Amanda de la Motte
Deputy Chief Nurse, South Lincolnshire Clinical Commissioning Group

Mr Phillip Dick
Psychiatric Liaison Team Manager, West London Mental Health Trust

Ms Phyllis Dunn
Clinical Lead Nurse, University Hospital of North Staffordshire

Dr Steve Hajioff
Director of Public Health, London Borough of Hillingdon

Dr Ian Manifold
Head of Measures Development, National Peer Review Programme, NHS England

Mr Gavin Maxwell
Lay member

Ms Teresa Middleton
Deputy Director of Quality, NHS Gloucestershire Clinical Commissioning Group

Mrs Juliette Millard
UK Nursing and Health Professions Adviser, Leonard Cheshire Disability

Miss Sally Oliver
Retired NHS Acute Care Manager

Hazel Trender
Senior Vascular Nurse Specialist, Sheffield Teaching Hospital Trust

Dr Hugo van Woerden
Director of Public Health, NHS Highland

Dr Bee Wee (Chair)
Consultant and Senior Clinical Lecturer in Palliative Medicine, Oxford University Hospitals NHS Trust and Oxford University

Ms Karen Whitehead
Strategic Lead Health, Families and Partnerships, Bury Council

Ms Alyson Whitmarsh
Programme Head for Clinical Audit, Health and Social Care Information Centre

Ms Jane Worsley
Chief Operating Officer, Options Group, Alcester Heath, Warwickshire

Dr Arnold Zermansky
GP, Leeds

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

Dr Paula Beech
Stroke Nurse Consultant, Salford Royal NHS Foundation Trust

Mr Robin Cant
Lay member
Dr Rory O'Connor
Associate Clinical Professor in Rehabilitation Medicine, University of Leeds

Mr Daniel Phillips
Paramedic Clinical Lead, East of England Ambulance Service NHS Trust

Dr Diane Playford
Reader in Neurological Rehabilitation, UCL Institute of Neurology

Professor Pippa Tyrrell
Professor of Stroke Medicine, University of Manchester

Dr Jacqui Winter
Clinical Lead Therapist for Stroke and Honorary Research Fellow, The Dudley Group NHS Foundation Trust and Keele University

NICE project team

Nick Baillie
Associate Director

Karen Slade
Consultant Clinical Adviser

Shaun Rowark
Technical Analyst

Stephanie Birtles
Technical Adviser

Esther Clifford
Programme Manager

Jenny Mills
Project Manager

Julia Sus
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.

This quality standard has been incorporated into the NICE Pathway on stroke.

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.
Update information

October 2016: This quality standard was updated and statements prioritised in 2010 were replaced.

Statements are marked as [new 2016] or [2010, updated 2016]:

- [new 2016] if the statement covers a new area for quality improvement
- [2010, updated 2016] if the statement covers an area for quality improvement included in the 2010 quality standard and has been updated.

Statements numbered 3, 5 and 7 in the 2010 version have been updated and included in the updated quality standard, marked as [2010, updated 2016].

Statements from the 2010 version (numbered 1, 2, 4, 6, 8, 9, 10 and 11) that are no longer considered national priorities for improvement but may still be useful at a local level are included after the updated statements in the list of quality statements section.

The 2010 quality standard for stroke is available as a pdf.

Minor changes since publication

May 2019: Changes have been made to align this quality standard with the updated NICE guideline on stroke and transient ischaemic attack in over 16s. References and source guidance sections have been updated.

June 2017: Statements from the 2010 version that are no longer national priorities but may be useful locally have been moved to the list of quality statements section.


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.

- Chartered Society of Physiotherapy
- British Association of Prosthetists and Orthotists
- Stroke Association
- Royal College of General Practitioners
- Association of British Neurologists
- Royal College of Occupational Therapists
- Royal College of Physicians