

# Emergency and acute medical care in over 16s

Quality standard

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[www.nice.org.uk/guidance/qs174](https://www.nice.org.uk/guidance/qs174)

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This standard is based on NG94 and CG50.

This standard should be read in conjunction with QS173, QS158, QS153, QS13, QS25, QS118, QS116 and QS119.

## Quality statements

Statement 1 Ambulance services have specialist and advanced paramedic practitioners.

Statement 2 Adults who are admitted with undifferentiated medical emergencies are assessed and initially treated in an acute medical unit.

Statement 3 Adults admitted with a medical emergency have a timely consultant assessment and review.

Statement 4 Adults admitted with a medical emergency have a structured patient handover during transitions of care.

NICE has developed guidance and a 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 these quality statements.

During development of this quality standard intermediate care was considered because it provides an important alternative to hospital care in some situations. The [NICE quality standard on intermediate care including reablement](#) should be considered alongside this quality standard.

Other quality standards that should be considered when commissioning or providing emergency and acute medical care services for over 16s include:

- [Rehabilitation after critical illness in adults. NICE quality standard 158](#)
- [Multimorbidity. NICE quality standard 153](#)
- [End of life care for adults. NICE quality standard 13](#)

A full list of NICE quality standards is available from the [quality standards topic library](#).

# Quality statement 1: Ambulance services

## Quality statement

Ambulance services have specialist and advanced paramedic practitioners.

## Rationale

Paramedics with an enhanced level of education that is consistent with [Health Education England's multi-professional framework for advanced clinical practice in England](#) can potentially reduce emergency department attendances and hospital admissions. Service delivery models for specialist and advanced paramedics need to take into account local geography, population demographics, and availability of and access to other health and social care services. There are different ways to deploy specialist and advanced paramedics so effective coordination using varied dispatch systems is needed to maximise the benefits these practitioners can provide.

## Quality measures

### Structure

a) Evidence of ambulance services supporting specialist and advanced paramedic training.

**Data source:** Local data collection, for example, personal development plans (PDPs), training plans and education and workforce strategies. [The College of Paramedics and Health Education England's Digital career framework](#) includes details on the levels of experience and education required to undertake specialist and advanced paramedic practitioner roles.

b) Evidence of ambulance services having specialist and advanced paramedic practitioners who can respond to 999 calls for suspected medical emergencies.

**Data source:** Local data collection, for example service protocols and staff rotas.

### Outcome

Proportion of incidents resolved without conveyance to an emergency department.

**Data source:** Local data collection, for example, audit of electronic case records. [The National Audit](#)

[Office report on NHS ambulance services](#) includes details on resolved incidents without conveyance to an emergency department.

## What the quality statement means for different audiences

**Service providers** (ambulance services) have specialist and advanced paramedic practitioners to assess and treat adults with suspected medical emergencies. They should have local arrangements in place to provide education and training for paramedic staff with sufficient post-qualification experience to enable these staff to undertake specialist or advanced paramedic practitioner roles. Models of service delivery for paramedic practitioners need to take into account local geography, population demographics, and availability of and access to other health and social care services. They should also have effective coordination and dispatch systems within ambulance services to maximise the benefits of specialist and advanced paramedic practitioners.

**Healthcare professionals** (specialist and advanced paramedic practitioners) assess selected adults with suspected medical emergencies who need urgent care in the community. They provide enhanced assessment and treatment to decide whether the person can be discharged or needs further treatment and, if so, where they should be taken for further treatment.

**Commissioners** (clinical commissioning groups) ensure that they commission ambulance services that have specialist and advanced paramedic practitioners to provide enhanced assessment and treatment. They also ensure that effective coordination and dispatch systems are used within ambulance services to maximise the benefits of specialist and advanced paramedic practitioners.

## Source guidance

[Emergency and acute medical care in over 16s: service delivery and organisation. NICE guideline NG94 \(2018\), recommendation 1.1.1](#)

## Definitions of terms used in this quality statement

### Specialist paramedic practitioner

A paramedic who has undertaken, or is working towards a postgraduate diploma (PGDip) in a subject relevant to their practice. They will have acquired and continue to demonstrate an enhanced knowledge base, complex decision-making skills, competence and judgement in their area of specialist practice. [[The College of Paramedics and Health Education England's Digital](#)

career framework 2017]

## **Advanced paramedic practitioner**

An experienced paramedic who has undertaken, or is working towards a master's degree in a subject relevant to their practice. They will have acquired and continue to demonstrate an expert knowledge base, complex decision-making skills, competence and judgement in their area of advanced practice. [The College of Paramedics and Health Education England's Digital career framework 2017]



# Quality statement 2: Assessment and initial treatment through acute medical units

## Quality statement

Adults who are admitted with undifferentiated medical emergencies are assessed and initially treated in an acute medical unit (AMU).

## Rationale

An AMU provides rapid assessment, investigation and treatment for medical emergencies, which are often undifferentiated and may involve multiple medical pathologies. When there is clear pathology and a clear pathway (for example, for treatment of specific conditions such as an acute heart attack or acute stroke), AMU admission may not be appropriate. Assessment in an AMU can reduce mortality rates and length of stay.

## Quality measures

### Structure

Evidence of local arrangements and written clinical protocols to ensure that adults who are admitted with undifferentiated medical emergencies have an assessment and initial treatment in an AMU.

**Data source:** Local data collection, for example clinical protocols and agreed pathways.

### Process

Proportion of hospital admissions for undifferentiated medical emergencies who were admitted to an AMU.

**Numerator** – the number in the denominator who are admitted to an AMU.

**Denominator** – the number of hospital admissions of adults for undifferentiated medical emergencies.

**Data source:** Local data collection, for example audit of electronic case records.

## Outcomes

a) Hospital mortality rates for adults admitted to hospital for undifferentiated medical emergencies.

**Data source:** Local data collection, for example audit of electronic case records.

b) Length of hospital stay for adults admitted with undifferentiated medical emergencies.

**Data source:** Local data collection, for example audit of electronic case records.

## What the quality statement means for different audiences

**Service providers** (such as emergency departments, urgent care centres, primary care and ambulance services) ensure that locally agreed referral pathways are in place for adults who are admitted with undifferentiated medical emergencies to have an assessment and initial treatment in an AMU. Service providers also ensure that staff are aware that when there is clear pathology and a clear pathway (for example, for resuscitation or treatment of specific conditions such as a heart attack), AMU admission may not be appropriate.

**Healthcare professionals** (such as acute physician-led multidisciplinary AMU teams) carry out an assessment and initial treatment in an AMU for adults who have been admitted with undifferentiated medical emergencies. The timescale of this assessment and the need for initial treatment is based on the person's condition.

**Commissioners** (clinical commissioning groups) ensure that they commission AMUs with sufficient resources and expertise to carry out assessments and initial treatment for adults who have been admitted with undifferentiated medical emergencies.

**Adults who are in hospital with a medical emergency that has no exact known cause** have an assessment and their initial treatment in an acute medical unit.

## Source guidance

[Emergency and acute medical care in over 16s: service delivery and organisation. NICE guideline](#)

## Definitions of terms used in this quality statement

### Undifferentiated medical emergencies

Acute medical conditions with no exact known cause and no clear, predetermined clinical pathway, and for which hospital assessment is deemed necessary. [Expert opinion]

### Acute medical unit

An acute medical unit (AMU; also called an acute assessment unit [AAU] or medical admissions unit [MAU]) is an area of an acute hospital where people with undifferentiated medical emergencies who need hospital admission receive rapid assessment, investigation, initial treatment and definitive management. Referral to AMUs is based on locally agreed referral pathways. [Adapted from the [evidence review on assessment through acute medical units for NICE's guideline on emergency and acute medical care in over 16s](#), and expert opinion]

# Quality statement 3: Consultant assessment and review

## Quality statement

Adults admitted with a medical emergency have a timely consultant assessment and review.

## Rationale

Having consultants available for timely assessment and review is associated with reduced length of stay for people admitted to hospital with a medical emergency. The frequency of consultant review is based on clinical need. Clinical review should be carried out at least daily, including at weekends and bank holidays.

## Quality measures

### Structure

a) Evidence of consultant availability during daytime working hours to assess adults who have a medical emergency within 6 hours of the time of admission to hospital.

**Data source:** Local data collection, for example, from staff rotas and service specifications. For measurement purposes, the first consultant review within a maximum of 6 hours from the time of admission to hospital has been included during the daytime working hours timeframe (normally at least 08.00 to 20.00) based on [NHS England \(2017\) Seven Day Services Clinical Standards](#).

b) Evidence of consultant availability to assess adults who have a medical emergency within 14 hours of the time of admission to hospital.

**Data source:** Local data collection, for example, from staff rotas and service specifications. For measurement purposes timeframes have been included based on [NHS England \(2017\) Seven Day Services Clinical Standards](#) and [Society for Acute Medicine \(2017\) Benchmarking audit](#). These align with the examples of possible considerations in NICE guideline NG94, recommendation 1.2.5.

c) Evidence of consultant availability to review adults daily who have a medical emergency after the initial consultant review is carried out.

**Data source:** Local data collection, for example, from staff rotas and service specifications. [NHS England \(2017\) Seven Day Services Clinical Standards](#) includes details of ongoing daily consultant review.

## Process

a) Proportion of hospital admissions for adults with a medical emergency during the daytime working hours in which a consultant assessment is carried out within 6 hours of the time of admission to hospital.

Numerator – the number in the denominator in which a consultant assessment is carried out within 6 hours of the time of admission to hospital.

Denominator – the number of hospital admissions of adults with a medical emergency during the daytime working hours.

For measurement purposes, the daytime working hours timeframe (normally at least 08.00 to 20.00) of first consultant review within a maximum of 6 hours from the time of admission to hospital has been included based on [NHS England \(2017\) Seven Day Services Clinical Standards](#).

**Data source:** Local data collection, for example, audit of electronic case records. [NHS Digital \(2018\) Accident and Emergency Quality Indicators](#) includes information on time to initial assessment.

b) Proportion of hospital admissions for adults with a medical emergency in which a consultant assessment is carried out within 14 hours of the time of admission to hospital.

Numerator – the number in the denominator in which a consultant assessment is carried out within 14 hours of the time of admission to hospital.

Denominator – the number of hospital admissions for adults with a medical emergency.

For measurement purposes, the timeframe of first consultant review within a maximum of 14 hours from the time of hospital admission has been included based on [NHS England \(2017\) Seven Day Services Clinical Standards](#) and [Society for Acute Medicine \(2017\) Benchmarking audit](#).

**Data source:** Local data collection, for example, audit of electronic case records. [NHS Digital \(2018\) Accident and Emergency Quality Indicators](#) includes information on time to initial assessment.

c) Proportion of hospital admissions for adults with a medical emergency in which a consultant review is carried out at least once every 24 hours after the initial consultant review.

Numerator – the number in the denominator in which a consultant review is carried out at least once every 24 hours.

Denominator – the number of hospital admissions for adults with a medical emergency in which the person has had the initial consultant review.

**Data source:** Local data collection, for example local audit of patient records, staff rotas and service specifications. [NHS England \(2017\) Seven Day Services Clinical Standards](#) includes a timeframe for consultant review of at least once every 24 hours after the initial consultant review.

## Outcome

Length of hospital stay for adults admitted with a medical emergency.

**Data source:** Local data collection, for example, local audit of patient records. [NHS Digital Hospital episode statistics](#) includes length of stay data.

## What the quality statement means for different audiences

**Service providers** (secondary care providers including emergency departments and acute medical units) ensure that consultants are available to assess adults with a medical emergency within a maximum of 14 hours from the time of hospital admission to determine the care pathway. The frequency of consultant review is based on clinical need. Current local staffing models, the case mix presenting and the severity of illness should be considered to ensure early consultant involvement. Staff rotas may need to be reconfigured to support the timing and frequency of consultant review.

**Healthcare professionals** (consultants) assess adults with a medical emergency face to face as soon as possible and always within a maximum of 14 hours of the time of hospital admission. During daytime working hours a review should normally occur within a maximum of 6 hours of the time of admission. The frequency of consultant review is based on clinical need. It should be carried out at least daily, including at weekends and bank holidays.

**Commissioners** (clinical commissioning groups) ensure that they commission services using a service specification that states that there are consultants available to assess adults with a medical

emergency within a maximum of 14 hours from the time of hospital admission and to review them daily. Commissioners monitor contracts and seek evidence that service providers have these consultants available.

**Adults who are admitted to hospital with a medical emergency** are seen by a consultant within 14 hours of admission, and at least once a day while they are in hospital.

## Source guidance

- [Emergency and acute medical care in over 16s: service delivery and organisation. NICE guideline NG94 \(2018\), recommendation 1.2.5](#)
- [Seven Day Services Clinical Standards. NHS England \(2017\)](#)
- [Benchmarking audit. Society for Acute Medicine \(2017\)](#)

## Definition of terms used in this quality statement

### Medical emergency

A life-threatening emergency, acute exacerbation of chronic illness or routine health problem that needs prompt action. A medical emergency can arise in anyone, for example in people:

- without a previously diagnosed medical condition
- with an acute exacerbation of underlying chronic illness
- after surgery
- after trauma.

[[NICE's guideline on emergency and acute medical care in over 16s: service delivery and organisation, guideline introduction \(glossary\)](#)]

# Quality statement 4: Structured patient handovers

## Quality statement

Adults admitted with a medical emergency have a structured patient handover during transitions of care.

## Rationale

Structured patient handovers between the transferring and receiving teams are associated with improvements in patient experience.

## Quality measures

### Structure

Evidence of structured (verbal and written or electronic) handover processes during transitions of care for adults who have been admitted with a medical emergency.

**Data source:** Local data collection, for example, ward transfer protocols. [NHS England \(2017\) Seven Day Services Clinical Standards](#) and the [Royal College of Physicians \(2011\) Acute care toolkit 1: handover](#) both include details on patient handover processes.

### Process

Proportion of transitions of care for adults admitted with a medical emergency in which a structured handover of care is carried out.

Numerator – the number in the denominator who have a structured handover of care.

Denominator – the number of transitions of care for adults admitted with a medical emergency.

**Data source:** Local data collection, for example, local audit of patient records.



## Outcome

Patient experience of the structured care handover during transitions of care.

Data source: Local data collection, for example local audit of patient records.

## What the quality statement means for different audiences

**Service providers** (primary, secondary and community-based intermediate care) have processes in place to ensure that during transitions of care a structured handover of care (verbal and written or electronic) is carried out for adults who have been admitted with a medical emergency. The current care provider shares complete and up-to-date care information with the new care provider, who documents and acts on this information. Roles and responsibilities between the current and new care providers are also clearly defined at transferral. Service providers ensure that healthcare professionals have training in structured patient handovers and supervision with monitoring of competency.

**Health and social care professionals** (such as doctors, nurses, advanced clinical practitioners, physiotherapists, mental health teams and pharmacists) work together to deliver a structured handover of care (verbal and written or electronic) during transitions of care for adults who have been admitted with a medical emergency. They share complete and up-to-date information so that patient safety is not compromised. Roles and responsibilities between the current and new care providers are also clearly defined at transition of care.

**Commissioners** (clinical commissioning groups and NHS England) ensure that they commission services that enable coordination and continuity of care, and sharing of information, during transitions of care for adults who have been admitted with a medical emergency.

**Adults who have been admitted to hospital with a medical emergency and whose care is being transferred to a different healthcare setting** have information about their condition and any special needs passed on to their new care provider. They are given information about their condition and encouraged to be involved in making decisions about their care.

## Source guidance

- [Emergency and acute medical care in over 16s: service delivery and organisation. NICE guideline NG94 \(2018\), recommendation 1.2.11](#)

- [Acutely ill adults in hospital: recognising and responding to deterioration. NICE guideline CG50 \(2007\), recommendation 1.15](#)

## Definitions of terms used in this quality statement

### Medical emergency

A life-threatening emergency, acute exacerbation of chronic illness or routine health problem that needs prompt action. A medical emergency can arise in anyone, for example in people:

- without a previously diagnosed medical condition
- with an acute exacerbation of underlying chronic illness
- after surgery
- after trauma.

[[NICE's guideline on emergency and acute medical care in over 16s: service delivery and organisation, guideline introduction \(glossary\)](#)]

### Structured patient handover

A handover of care that uses the approach outlined in the SBAR (situation–background–assessment–recommendation) tool to facilitate efficient handover of patients between transferring and receiving teams. It includes:

- a summary of the stay, including diagnosis and treatment
- a monitoring and investigation plan
- a plan for ongoing treatment, including drugs and therapies, nutrition plan, infection status and any agreed limitations of treatment
- a discharge plan
- physical and rehabilitation goals
- mental health, psychological and emotional needs
- specific communication or language needs

- tasks still to do.

The plan also needs to be communicated to the person or their next of kin.

[Adapted from [NICE's guideline on acutely ill adults in hospital](#), recommendation 1.15, the [NHS Institute for Innovation and Improvement's Safer care SBAR implementation and training guide](#) and expert opinion]

## Equality and diversity considerations

When adults admitted with a medical emergency are being transferred to a different healthcare setting they should be provided with handover information that they can easily read and understand themselves, or with support from their next of kin if appropriate. This can help them to communicate effectively with healthcare services. Information should be in a format that suits their needs and preferences. It should be accessible to people who do not speak or read English, and be culturally and age-appropriate. People should have access to an interpreter or advocate if needed.

For people with additional needs related to a disability, impairment or sensory loss, information should be provided as set out in [NHS England's Accessible Information Standard](#).

# Update information

## Minor changes since publication

**February 2019:** Changes were made to the wording of statement 2 to be clear about the admission settings.

## About this quality standard

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

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

Information about [how NICE quality standards are developed](#) is available from the NICE website.

See our [webpage on quality standard advisory committees](#) for details of standing committee 1 members who advised on this quality standard. Information about the topic experts invited to join the standing members is available from the [webpage for this quality standard](#).

This quality standard has been included in the [NICE Pathways on emergency and acute medical care in over 16s: service delivery and organisation](#) and [acutely ill patients in hospital](#), which bring together everything we have said on a topic in an interactive flowchart.

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

NICE 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.

## Improving outcomes

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

- health-related quality of life
- length of hospital stay
- emergency readmissions after discharge from hospital or community deaths attributable to problems in healthcare
- severe harm attributable to problems in healthcare
- patient safety incidents.

It is also expected to support delivery of the Department of Health and Social Care outcome frameworks:

- [Adult social care outcomes framework](#)
- [NHS outcomes framework](#)
- [Public health outcomes framework for England](#)
- [Quality framework for public health.](#)

## Resource impact

NICE quality standards should be achievable by local services. The potential resource impact is considered by the quality standards advisory committee, drawing on resource impact work for the source guidance. Organisations are encouraged to use the [baseline assessment and resource impact tools for the NICE guideline on emergency and acute medical care in over 16s](#) to help estimate local costs.

## Diversity, equality and language

During the development of this quality standard, equality issues were considered and [equality assessments for this quality standards](#) are available. Any specific issues identified during development of the quality statements are highlighted in each statement.

Commissioners and providers should aim to achieve the quality standard in their local context, in

light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

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## Endorsing organisation

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

## Supporting organisations

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

- [College of Paramedics](#)
- [Royal College of General Practitioners \(RCGP\)](#)
- [Society for Acute Medicine \(SAM\)](#)
- [British Association of Critical Care Nurses](#)
- [British Society for Paediatric Endocrinology and Diabetes \(BSPED\)](#)