Australian Commission on **Safety and Quality** in Health Care

Clinical Care Standards

Stroke Clinical Care Standard

Information for clinicians

About the *Stroke Clinical Care Standard*

The *Stroke Clinical Care Standard* aims to improve the assessment, management and transitions of care for patients with stroke to increase their likelihood of survival and recovery while reducing their risk of another stroke.

It relates to the care that adult patients should receive when they have, or are suspected of having, an ischaemic stroke or intracerebral haemorrhage. This includes patients who have a stroke while in hospital. It covers the care provided from pre-hospital emergency service contact through hospital admission, discharge to the community and follow-up review within six months.

Quality statement 1. Early assessment and urgent transport to hospital

A person with suspected stroke is assessed at first clinical contact using a validated stroke screening tool, such as the F.A.S.T. (Face, Arms, Speech and Time) test. When acute stroke is suspected, the person is transported immediately to a hospital capable of providing appropriate time-critical therapy. The hospital is pre-notified to enable rapid access to care.

Using validated screening tools at first clinical contact in the community, pre-hospital or hospital setting can quickly identify suspected stroke and enable rapid access to time-critical treatment in the hyperacute phase. A validated screening tool, such as F.A.S.T., can identify stroke with high sensitivity, and can be used by all clinicians and first responders (including those in community settings such as general practice). Note that F.A.S.T. is a useful tool for identifying stroke, particularly for non-clinicians. However, other tools may have greater accuracy in detecting acute ischaemic stroke (see Related Resources).

Once a patient is suspected of having an acute (clinical signs less than 24 hours) stroke, expedite primary emergency transport (usually by ambulance) to a hospital capable of providing time-critical stroke therapy. Features of stroke services capable of providing time-critical therapy appropriate to the patient's needs are described in the National Acute Stroke Services Framework, and include rapid assessment, access to computed tomography (CT) and hyperacute therapy such as thrombolysis.

Pre-hospital clinicians, including ambulance services, should use pre-notification systems and bypass to access hospitals capable of providing appropriate time-critical stroke therapies (including thrombolysis) when required. Further assessment of stroke severity (such as the likely presence of large vessel occlusion), and suitability for time-critical care may be necessary to identify the most appropriate destination hospital. Alert the hospital to the patient's clinical condition and provide adequate patient identifiers to facilitate timely admission and imaging. Follow local recommended protocols to help prepare the patient for rapid treatment, which may include documenting symptom discovery, last known 'well' time, time of ambulance arrival on scene and medication history, as well as insertion of an intravenous cannulation.

Hospital-based teams should prepare for patient arrival when pre-notified, by obtaining medical records and a best possible medication history, contacting next of kin for more details, activating a 'Code Stroke' alert system, and facilitating access to CT imaging for urgent assessment.

All clinicians should be aware of local stroke network and referral pathways, including how to access the telestroke service to support decision-making about where to transport or transfer the patient. Exceptions include patients for whom transfer would not be consistent with their goals of care or advanced care plan, such as palliative care patients.

Cultural safety and equity for Aboriginal and Torres Strait Islander people

Explain the rationale for assessment, tests, transport, and interventions to the patient, their family and their support people in a culturally safe way.

Recognise and address individuals' potential barriers to care by, for example, providing culturally appropriate stroke awareness and recognition information to the community and

suitable ways to access rapid care. This is especially important for people whose access to services and infrastructure is limited.

Recognise and respond to any concerns associated with diagnosis and treatment, including the potential need for hospitalisation off Country. Where clinically safe, prioritise care on Country and minimise unnecessary transfers. If transfer is required, plan early for return to Country to support wellbeing. Ask for consent to transport to hospital, which may involve consulting the patient's family and community members.

Ensure processes for ambulance and hospital intake provide an opportunity for patients to self-identify and for services to capture and act on identification data.

Related resources for clinicians

Validated stroke screening tools include (in alphabetical order):

- BE-FAST – Balance, Eyes, Face, Arms, Speech, Time
- CRESST – Canberra pREhospital Stroke Screening Tool
- F.A.S.T. – Face, Arms, Speech, Time
- MASS – Melbourne Ambulance Stroke Screen
- ROSIER – Recognition of Stroke in the Emergency Room

Other validated tools used in the assessment of stroke include (in alphabetical order):

- ACT-FAST – for identification of large vessel occlusion
- HUNTER-8 or NIHSS-8 – for quantifying the impairment caused by stroke
- Modified Rankin Scale or mRS – for measuring premorbid function
- RACE – Rapid Arterial Occlusion Evaluation (large vessel occlusion identification tool)

Quality statement 2. Time-critical therapy

A patient with acute stroke receives time-critical therapy urgently and in accordance with the Living Clinical Guidelines for Stroke Management. A patient with ischaemic stroke suitable for reperfusion therapy receives timely thrombolysis and/or endovascular thrombectomy. A patient with intracerebral haemorrhage receives urgent blood-pressure-lowering therapy and/or anticoagulation reversal where appropriate.

Urgently assess the patient and arrange vascular imaging, such as a CT scan or MRI, to determine whether the patient may benefit from time-critical therapy. Consider the patient's comorbidities, circumstances and preferences, and discuss the potential benefits and risks of treatment options with the patient and their family or carer. If time-critical therapy is not provided, document the reason in the patient's medical record.

Ischaemic stroke

Consider reperfusion treatment for all patients with ischaemic stroke. As clinically indicated, offer thrombolysis and/or endovascular thrombectomy within the time frames recommended in the current Living Clinical Guidelines for Stroke Management.

To enable appropriate reperfusion, use multimodal imaging (Non-Contrast CT [NCCT], and both CT angiogram and CT perfusion) when possible to identify candidates for endovascular thrombectomy or surgical treatments. If you refer a patient to a Comprehensive Stroke Centre for an endovascular thrombectomy, ensure a prompt and coordinated transfer of care, in consultation with the receiving team, so the patient arrives at the service without delay. As part of this transfer, ensure all imaging (including any CT angiogram) is transferred to the treating hospital rapidly to facilitate treatment on arrival.

In hospitals that do not provide 24-hour, on-site access to stroke specialists, use telestroke systems to assist with patient assessment and decision-making regarding acute thrombolytic therapy and possible transfer for endovascular thrombectomy.

Intracerebral haemorrhage

If an intracerebral haemorrhage is identified after imaging, and if clinically indicated, promptly initiate control of blood pressure and reversal of coagulopathy within the targets and timeframes recommended in the current Living Clinical Guidelines for Stroke Management.

Other neurosurgical interventions may be time-critical for some patients. Arrange urgent vascular imaging (such as CT angiography, magnetic resonance angiography or digital subtraction angiography) to identify patients who may need specific specialist treatment, such as management of bleeds secondary to vascular malformations. Refer for neurosurgical consultation using your local stroke network and referral pathway.

Cultural safety and equity for Aboriginal and Torres Strait Islander people

Provide the person with access to Aboriginal and Torres Strait Islander Liaison Officers or other relevant workers and clinicians who can discuss potential concerns about urgent treatment, such as reperfusion therapy, either in the patient's language or in a way that is culturally safe for the person.

Related resources for clinicians

- The Australian and New Zealand *Living Clinical Guidelines for Stroke Management*
- Stroke and transient ischaemic attack [published 2025 Dec]. In: Therapeutic Guidelines. Melbourne: Therapeutic Guidelines Limited; accessed Jan 2026. https://www.tg.org.au
- In palliative and end-of-life care, management may differ and should align with the *National Consensus Statement: Essential elements for safe and high-quality end-of-life care.*

Quality statement 3. Stroke unit care

A patient with stroke is promptly transferred to a stroke unit, as defined in the National Acute Stroke Services Framework. The patient receives early, protocolised care to prevent complications and maximise recovery.

Ensure that patients with stroke are promptly transferred to a stroke unit, as defined in the National Acute Stroke Services Framework. Stroke unit care is organised care within a specific ward in a hospital. It is provided by a multidisciplinary team who specialise in stroke management, coordinating diagnostic work-up and treatment, early mobilisation and rehabilitation and secondary prevention. This team works with the patient and family during the inpatient stay. Care quality is recorded and guided by established protocols. People with stroke who receive care in a dedicated stroke unit are more likely to be alive, living at home, and independently looking after themselves one year after their stroke.

Intensive care units (ICUs), high dependency units (HDUs) or similar locations are appropriate alternatives to stroke unit care for patients requiring critical care management.

If there is no stroke unit at the healthcare service, patients should receive guideline-recommended care and protocols in the nearest similar unit able to meet the requirements for stroke unit care. This may include management on the ward where the patient is located, with access to a telestroke service and allied health assessment.

Follow local protocols, in line with the recommendations in the current Living Clinical Guidelines for Stroke Management to ensure patients with stroke receive early care to minimise or prevent complications and maximise recovery. This should include:

- screening for swallowing difficulties within four hours of arrival to hospital using a validated screening tool before giving patients food, fluids or oral medications
- monitoring and prompt management of pyrexia and hyperglycaemia for the first 72 hours
- screening for communication difficulties
- ensuring appropriate venous thromboembolism (VTE) prophylaxis
- following escalation pathways within the above protocols (such as review by a speech pathologist if swallowing or communication difficulties are identified), and notifying medical officers if the patient has body temperature or glucose levels outside the recommended parameters
- other recommended protocols for care of patients after stroke as described in the National Acute Stroke Services Framework and the Living Clinical Guidelines for Stroke Management.

All clinicians should use supportive communication techniques with patients who have communication difficulties. This improves patient consent processes, patients' ability to express their needs and preferences, and patient engagement with care.

Related resources for clinicians

- FeSS (Fever, Sugar and Swallowing) clinical treatment protocols and implementation strategy (bundle of care for monitoring and managing pyrexia, hyperglycaemia and swallowing difficulties)
- Venous Thromboembolism Prevention Clinical Care Standard (for VTE prophylaxis)
- Aphasia screening tools from the Australian Aphasia Rehabilitation Pathway, including validity and reliability data to guide the choice of a screening tool for non-speech pathologists
- The Aphasia Rapid Test (used to screen for communication difficulties) and resources developed and endorsed by the Queensland Aphasia Research Centre.

Quality statement 4. Rehabilitation

A patient's initial rehabilitation needs are assessed by a multidisciplinary team as early as possible and within 48 hours of hospital admission for stroke. Individualised, guideline-recommended rehabilitation begins as soon as clinically appropriate during the admission. Rehabilitation needs are continually assessed and documented. Arrangements for ongoing rehabilitation are made before discharge.

As soon as possible and within 48 hours of admission, a multidisciplinary team should use a validated tool[†] to assess patient deficits, current impairment, activity limitations, and rehabilitation needs. Different aspects of the rehabilitation assessment may involve clinicians from different fields. These should include, but not be limited to, medical (including rehabilitation medicine), nursing, occupational therapy, physiotherapy, speech pathology, dietetics, and clinical psychology. Document the outcome of the rehabilitation needs assessment in the patient's medical record.

Review and discuss the patient's rehabilitation needs with a rehabilitation physician or other clinician with expertise in the recovery of functional independence. Discuss the results of the rehabilitation needs assessment with the patient and their family or support people, together with the multidisciplinary team, to help determine initial rehabilitation needs and begin planning.

Start individualised rehabilitation in hospital as soon as clinically appropriate and follow the recommendations in the Living Clinical Guidelines for Stroke Management. Alternative arrangements may apply if the patient is unable or unwilling to participate in rehabilitation, or rehabilitation is not consistent with their goals of care.

Note: Intensive early mobilisation within 24 hours of stroke onset is not recommended.

[†] See the Australian Stroke Coalition's Assessment for rehabilitation: Pathway and Decision-Making Tool

While the patient is in hospital, record functional status using a validated tool such as the Functional Independence Measure (FIM), modified Rankin Scale (mRS), Barthel Index, or Functional Autonomy Measurement System (SMAF).

Throughout the hospital admission, the multidisciplinary team should continually re-assess the patient's rehabilitation needs, especially before discharge. Consider changes in the patient's mood and cognition such as difficulty with concentration, memory loss, and language issues. Document these assessments in the patient's medical record and discuss ongoing care requirements (and the options for providing these) with patients, their families and support people. Use this information as part of a shared decision making approach to determine the most appropriate care setting for ongoing rehabilitation, such as inpatient rehabilitation, home-based therapy services, outpatient rehabilitation or telehealth.

Once the discharge destination is decided, ensure all necessary arrangements are in place before the patient is discharged from hospital. These should include providing a rehabilitation plan, confirming a bed in a rehabilitation unit or completing all referrals to community services for patients being discharged to a private residence or an aged care facility.

Cultural safety and equity for Aboriginal and Torres Strait Islander people

Develop streamlined referral pathways back to the community, particularly for those from regional, rural or remote communities who have received care away from home. Liaise with primary care clinics, including Aboriginal and Torres Strait Islander Community Controlled Health Organisations (ACCHOs), to ensure arrangements are in place for travel and for safe transition back to the community, including arrangements for ongoing rehabilitation as needed.

Related resources for clinicians

- The Australian Stroke Coalition's Assessment for Rehabilitation: Pathway and Decision-Making Tool is used to assess and assist with decision-making regarding patients' rehabilitation needs.
- Validated tools used to measure functional status include those listed below:
  - Functional Independence Measure (FIM)
  - Modified Rankin Scale (mRS)
  - Barthel Index
  - Functional Autonomy Measurement System (SMAF).
- The Rehabilitation Stroke Services Framework outlines the principles, essential elements, models of care and staffing recommendations for stroke services. It also provides guidance about systems for effective integration of stroke survivors into the community after they leave hospital. This Framework discusses workforce and resource requirements as well as requirements regarding data collection and quality improvement activities.
- Principles for goal setting – an Australian Government resource for developing person-centred goals.

Quality statement 5. Minimising risk of another stroke

While in hospital, a patient undergoes a comprehensive assessment to determine the probable cause of their stroke. This assessment informs their ongoing care, including individualised treatment and education to promote healthy living and reduce their risk of another stroke.

Communicate with the patient's general practice team to gather information about previous treatments and investigations undertaken, which may inform their ongoing treatment. For example, their previous response to relevant medicines and results of cardiac monitoring.

Offer testing and assessment to investigate the mechanism of the patient's stroke to enable targeted therapies that can minimise the risk of recurrence (for example, cardiac assessment and monitoring to screen for atrial fibrillation). When assessment is not appropriate during the acute admission, refer or arrange for the assessments to be completed promptly after hospital discharge.

Prescribe appropriate medicines for secondary prevention, including anticoagulants for atrial fibrillation and antiplatelet, antihypertensive and lipid-lowering medicines, where indicated and in line with current guidelines. Other measures may include time-limited surgical interventions (for example, carotid endarterectomy) or closure of a patent foramen ovale in younger patients.

Assess the patient's risk of recurrent stroke and modifiable risk factors. As part of a multidisciplinary team, provide patients with stroke and their families or support people with education and information about reducing their risk of another stroke in a way they can understand. Discuss risk factors such as uncontrolled hypertension or diabetes, smoking, poor diet, insufficient physical activity and excessive alcohol or recreational drug use, and provide written information.

Cultural safety and equity for Aboriginal and Torres Strait Islander people

Provide information in a way that reflects the literacy, language, and cultural needs of the individual patient. Information should be provided in a way that builds understanding, engagement, and empowerment to manage and reduce their ongoing risk of another stroke.

Include family, kin, community members or trusted healthcare providers in discussions, if the patient desires this. Allow time to build rapport and trust and for explanation and questions. Consider the need for multiple encounters and methods of communication, and for appropriate handover to the person's usual health service in the community.

Written and audiovisual material for Aboriginal and Torres Strait Islander people should be developed in partnership with the community and people with expertise in Aboriginal and Torres Strait Islander health.

Quality statement 6. Practical assistance for families and support people

The family and support people of a patient with stroke are provided with information and practical assistance so that they can safely and confidently support the patient to manage their daily needs.

Patients with stroke often experience changes in their ability to safely carry out their daily activities. They may need much more support from family and others than before their stroke. Offer information and practical guidance to families and support people to help them support the patient with any new care needs after discharge. Documenting all care given in the 24-hour period before discharge can help in identifying the patient's support needs when they are discharged to a private residence or a residential aged care facility.

Practical assistance includes advice, guidance and training for families and support people on how to safely support the patient with their new daily needs. Below are examples of the areas in which a patient may need support, and the types of assistance clinicians can offer to family and support people.

- Physical care: Personal care techniques, the use of new assistive equipment, modification of food and drink to ensure safe swallowing, and safe mobilisation and transfer.
- Communication and cognition: Communication partner training, and strategies to manage changes in memory, concentration, and behaviour.
- Psychosocial wellbeing: Fatigue management, emotional support, carer self-care, and strategies for both the patient and carer to return to community life.
- System navigation: Support to access respite, carer financial aid, NDIS or My Aged Care, guidance on health and financial decision-making responsibilities, and the contact details of support services.

A range of clinicians may offer assistance and advice, including social workers, occupational therapists, physiotherapists, speech pathologists, dietitians, nurses, pharmacists, psychologists, and doctors.

If a patient is assessed as able to manage independently but does not have an identified carer or support person, offer the patient information, support and advice (in a way they can understand) to help them safely and confidently manage their daily needs.

Cultural safety and equity for Aboriginal and Torres Strait Islander people

Provide culturally appropriate and co-designed information resources (in local language as appropriate) and the opportunity to have questions answered by a trusted health professional.

Related resources for clinicians

The Stroke Foundation has developed many resources to assist stroke survivors, their carers and health professionals in the process of discharge planning and transfer of care:

- My Stroke Journey – an information pack to give to stroke survivors and their carers before hospital discharge
- Aphasia Handbook – an information guide for people with aphasia and their families, carers and friends, which should accompany the resource 'My Stroke Journey' for all patients who have aphasia
- StrokeLine – a free telephone support service providing information and advice on stroke prevention, treatment and recovery, staffed by health professionals. Call 1800 787 653 or email strokeline@strokefoundation.org.au
- EnableMe – a free web-based resource providing information, a community forum and a tool to track personal goals for recovery
- Young Stroke – an initiative aimed at delivering information and resources for younger survivors of stroke aged 18 to 65 years old, their partners, families, friends and carers
- i-REBOUND After Stroke – a patient-centred education resource
- For more information, see: www.strokefoundation.org.au/What-we-do/Support-programs
- For more information, see: www.strokefoundation.org.au/what-we-do/for-survivors-and-carers

See also:

- Carer Gateway – an Australian Government program providing free services and support for carers.

Quality statement 7. Individualised care plan

Before leaving hospital, a patient with stroke and their family or support people are involved in the development of an individualised care plan that describes the ongoing care required. This care plan is given to the patient, their general practice and their ongoing rehabilitation team at the time of discharge.

While patients are in hospital, jointly develop a written individualised care plan with them and their family or support people to ensure appropriate follow-up and ongoing care when they leave hospital.

The individualised care plan should include:

- results from relevant rehabilitation assessments, ongoing rehabilitation needs and goals, and a plan to achieve these (see Quality statement 4)
- secondary prevention recommendations discussed, such as medicines and lifestyle modifications (see Quality statement 5), and, where possible, a medication list and education provided by a pharmacist

- information discussed and practical assistance for managing daily activities, advice on when the person may resume driving a vehicle, and contact details for support services available in the community (see Quality statement 6)
- details of referrals and follow-up appointments, including
    - scheduled appointments for any pending investigations and for ongoing care
    - when to go to their general practice for follow-up, which may include ongoing prescriptions for medicines or referrals for pending investigations and services
    - who to contact for follow-up, including for emerging or unmet rehabilitation needs post-discharge
    - a follow-up review appointment within six months of diagnosis (see Quality statement 8).

Give a copy of the care plan to patients and their families or support people. Ensure they understand the information provided and that they take a copy of the care plan before discharge. Also provide a copy to their general practice and, where appropriate, their ongoing rehabilitation team (such as a rehabilitation physician and allied health professionals) or aged care provider before or at the time of discharge.

Stroke Foundation's My Stroke Journey is a useful planning resource that can be given to patients before they leave hospital after a stroke. This information should be summarised and contextualised in the care plan provided to other healthcare professionals.

Cultural safety and equity for Aboriginal and Torres Strait Islander people

Provide documentation, including results, follow-up appointments and future management, to the patient's general practice, primary healthcare service or Aboriginal and Torres Strait Islander Community Controlled Health Organisation (ACCHO) in a timely fashion.

Give the patient the individualised care plan and discuss it with them and their family or support people in a culturally appropriate way. See the Stroke Foundation's Our Stroke Journey.

Related resources for clinicians

Stroke Foundation's *My Stroke Journey* covers all the essential elements of a care plan and includes pages for clinicians and patients to complete together. The Stroke Foundation resource *My Stroke Journey* is intended to be provided by hospital clinicians and discussed with patients, and their families or support people, in the first few days after their stroke, and to stay with patients in their transition from hospital to home. This resource is used by clinicians to deliver stroke education, explain treatment and care, deliver secondary prevention education, and inform the development of an individualised, comprehensive discharge care plan that can be shared with the patient and their GP. For more information, see My Stroke Journey.

Quality statement 8. Follow-up assessment and review

A patient who has had a stroke receives a follow-up assessment and review, with appropriate multidisciplinary team input, within six months of their stroke diagnosis. This is arranged before discharge.

Ensure that patients who have had a stroke receive a comprehensive follow-up assessment and review, booked before discharge from hospital. This appointment should be within six months of the person's stroke diagnosis and include relevant family members or support people. It may be face-to-face or via telehealth, and may not necessarily be the first or only follow-up with a healthcare provider.

The patient's needs at discharge should determine the appropriate clinician (or clinicians) to conduct the assessment and review, and its timing. It should be conducted by clinicians with relevant skills and expertise – which may include members of a multidisciplinary stroke team, acute stroke service outpatient clinic or rehabilitation service – who can access additional multidisciplinary input as required at the time of follow-up.

At the follow-up review, assess the patient's self-management and update the patient's individualised care plan by addressing the following domains as appropriate.

- Medical and secondary prevention: Review medication adherence and indication, patient progress with lifestyle modifications, and any pending investigation results.
- Rehabilitation: Re-assess rehabilitation needs against the patient's goals and progress. Record functional status at follow-up using a validated tool such as the Functional Independence Measure (FIM), modified Rankin Scale (mRS), Barthel Index, and Functional Autonomy Measurement System (SMAF). Review the choice of rehabilitation pathway to ensure rehabilitation continues to meet the patient's needs.
- Functional status: Assess cognition, vision, fitness to drive, continence and equipment needs.
- Psychosocial and vocational: Re-assess mood and, if appropriate, sexual dysfunction. Review or develop a return-to-work plan, which may include returning to voluntary work, community roles or ongoing carer responsibilities for partners, parents, children or grandchildren. Assess the person's engagement in community life and reintegration.
- Care coordination: Review the effectiveness of existing referrals and assess the need for further appointments with allied health, rehabilitation, or other community support services.

Give the patient, their GP and their ongoing rehabilitation team an updated care plan at the end of the appointment (see Quality statement 7).

Cultural safety and equity for Aboriginal and Torres Strait Islander people

Liaise with primary care clinics, including Aboriginal and Torres Strait Islander Community Controlled Health Organisations (ACCHOs), to ensure travel arrangements are in place to support attendance at follow-up appointments. Find alternative ways to contact patients if they do not have regular access to a phone, email or postage delivery service to receive information about follow-up appointments.

Ensure that communication and materials are culturally and linguistically appropriate for the patient to support participation in stroke management and rehabilitation.

For more information

Find out more about the *Stroke Clinical Care Standard* and other resources for consumers, clinicians and healthcare services.

Scan the QR code or see: safetyandquality.gov.au/stroke-ccs

The Australian Commission on Safety and Quality in Health Care has produced this clinical care standard to support the delivery of appropriate care for a defined condition. The clinical care standard is based on the best evidence available at the time of development. Healthcare professionals are advised to use clinical discretion and consideration of the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian, when applying information contained within the clinical care standard. Consumers should use the information in the clinical care standard as a guide to inform discussions with their healthcare professional about the applicability of the clinical care standard to their individual condition.