National Acute Stroke Services Framework 2026

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Introduction

Delivering optimal stroke services equitably across Australia remains a challenge, with variable access to best practice stroke services, particularly in rural and regional areas. One of the most effective ways of reducing death and disability following a stroke is to provide evidence-based care in hospitals with dedicated stroke services. A framework to guide the planning, delivery and evaluation of acute stroke services is essential for the improvement of health care delivery and patient outcomes.

Stroke Foundation (with support from the Australian Government Department of Health and Ageing) developed the first Stroke Services Framework in 2002. The Framework was reviewed in 2008, 2011, 2015, 2019 and 2023 to ensure it was aligned with the current Living Clinical Guidelines for Stroke Management and international best practice recommendations.

This document, the seventh edition of the Framework, covers care delivered in the acute phase of a stroke and should be considered alongside the National Rehabilitation Stroke Services Framework. The current review process has included a:

1. Review of the Living Stroke Guidelines (to March 2026).
2. Review of the data from the Australian Stroke Clinical Registry (AuSCR).
3. Review of information from international work and systems; and
4. Consultation on the revised draft framework.

Major changes in this update include:

- Renaming of Stroke Capable Regional General Hospitals to Regional Stroke Centres
- A lower threshold of annual admissions for Regional Stroke Centres (previously no lower threshold and now 30)
- A definition of certified stroke care that incorporates descriptions of stroke management in the emergency department and on stroke units

Aims of the Framework

The aims of the Framework are to outline the criteria for the organisation of acute stroke services, to ensure equitable access to best practice stroke care, and to provide a mechanism for monitoring and targeting gaps to make improvements to the quality of Australian acute stroke services.

The intended use of the Framework is to:

1. Provide a basis for measuring the adequacy and compliance of current services and their resources for delivering best practice stroke care.
2. Identify hospitals or regions where stroke services should be developed, including services which will support future stroke care plans.
3. Make information available to be used to advocate for improved services where gaps are identified.
4. Guide decisions about resource requirements (for example, minimum stroke unit bed numbers).
5. Encourage ongoing monitoring and reporting of the quality of care**.**

This Framework has not been developed for use in hospital accreditation purposes but may be viewed as complementary to the **National Safety and Quality Health Service (NSQHS) Standards** along with the **Stroke Clinical Care Standard,** first developed and launched in 2015 by the **Australian Commission on Safety and Quality in Health Care (ACSQHC).**

Further information about these two resources can be found at:
https://www.safetyandquality.gov.au/national-standards/nsqhs-standards
https://www.safetyandquality.gov.au/clinical-care-standards/acute-stroke

Definitions

Acute care is defined as care within the first week of stroke onset or until discharged (or formally transferred to inpatient rehabilitation).

Hyperacute care is care delivered within first twenty-four hours after stroke.

Comprehensive Stroke Centres (CSC) are large, tertiary referral centres that have highly specialised services including endovascular thrombectomy and neurosurgery, with skilled personnel available 24 hours a day, seven days a week to treat acute stroke.

Primary Stroke Centres (PSC) are hospitals that offer dedicated stroke services (e.g., stroke unit and thrombolysis) and have clinicians who have stroke expertise. They do not normally offer endovascular thrombectomy and neurosurgery.

Regional Stroke Centres (RSC) are smaller, geographically isolated regional centres that manage hyperacute stroke care on-site with telestroke services. They have low rates of stroke admissions, and provide stroke unit-like care, with interdisciplinary team members.

Telestroke Thrombolysis Centres are hospitals that are supported by an organised telestroke service/network to provide urgent hyperacute assessment and management of stroke before transferring patients to a larger stroke centre (CSC, PSC or RSC).

Section 1: Recommended services and statewide systems

Timely hyperacute care can substantially reduce the risk of death and disability. Treatments such as reperfusion therapies (intravenous thrombolysis and endovascular thrombectomy), blood pressure control and reversal of anticoagulation should be administered without delay in order to best benefit patients.

Not all stroke treatments are available at every hospital. Endovascular thrombectomy for large vessel occlusions for example, is only available at a limited number of CSCs. Finely tuned coordination of multiple systems (ambulance services, medical retrieval services, emergency departments, radiology departments, stroke and neurointerventional teams) is required to improve access to stroke therapies and reduce treatment delays.

A systematic approach to resolving barriers that delay hyperacute stroke care and the implementation of geographically appropriate models of pre-hospital and emergency care should help increase access to time critical therapies, ensure faster treatment delivery and improve access to stroke unit care across Australia. This approach should include:

- Effective community education campaigns for stroke recognition
- Well-organised pre-hospital care systems (code stroke activation, stroke and large vessel occlusion screening tools, prehospital notification and ambulance bypass to stroke-capable hospitals)
- Telemedicine stroke services for rural and regional centres (where not bypassed) specifically to support decision making around reperfusion therapy, potential transfer for endovascular thrombectomy or neurosurgery, as well as early access to

stroke unit care
- Rapid assessment in the Emergency Department (including 'code stroke' input from stroke team)
- Rapid brain imaging including CT angiography and perfusion imaging
- Immediate provision of thrombolysis if indicated
- Rapid transfer to a CSC for endovascular thrombectomy or neurosurgery if indicated
- Early rehabilitation.

It is imperative that those responsible for the delivery of statewide health systems work with the relevant pre-hospital emergency services to ensure a consistent and comprehensive approach to accessing stroke-capable centres in their jurisdiction. As per the National Stroke Standard, ambulance services should use validated stroke screening tools to guide pre-hospital assessment, triage and bypass decisions in all patients with suspected stroke. Where patients are not transported via ambulance, these tools should also guide emergency departments to activate a 'Code Stroke' triage as appropriate. Stroke screening data should be collected and used for quality improvement.

Agreed systems of care should include processes for interhospital transfers for specialist treatment and subsequent repatriation for ongoing management locally. Emergency services may employ a dedicated statewide stroke coordinator to ensure appropriate policies and processes are developed and monitored in cooperation with the health system. CSCs may also be involved in leading regional or area health service level planning and coordination of stroke services (see section 4).

In regional and rural areas, the use of telestroke is strongly recommended to provide access to specialist assessment and management support to general hospitals within agreed systems of care. Telestroke support can also assist the decision-making on patient transfers and guide optimal destinations to maximise statewide resources.

Post-hyperacute telehealth support is also applicable for stroke assessments including advanced diagnosis and secondary prevention, rehabilitation, remote therapy provision, and education and support following hospital discharge, reducing the need for patients and their families to travel long distances.

Table 1: Recommendations for statewide systems of care
Organised pre-hospital services specific to stroke should be developed and coordinated between networked hospitals in each local health districts and with hospitals in other local health districts where necessary. This should include agreed mapping of stroke-capable services and hospitals to bypass; validated stroke screening protocols; and pre-hospital notification systems.
Health Departments should develop statewide service plans with associated policies governing rapid assessment and transfer between stroke services where required. Each hospital with a stroke service should be categorised using this Framework.

Telestroke services should be used in all hospitals who receive and treat patients with stroke but lack on-site stroke medical specialists, to assist with eligibility screening for acute stroke therapies and/or decisions to transfer to stroke specialist centres.
Telehealth should be used to improve ongoing management including acute medical care and assessment of rehabilitation where there is limited access to on-site acute stroke and rehabilitation expertise.

Section 2: Recommended hospital stroke services

a) Comprehensive Stroke Centre (CSC)

CSCs have highly specialised stroke resources and personnel available 24 hours a day, seven days a week. These services are located in large, tertiary referral sites which see high volumes of stroke patients (usually over 350 annual admissions) including the most complex presentations. These hospitals will generally have on-site or networked access to other specialist services, such as vascular surgery, cardiology, palliative care and rehabilitation. CSCs must be located strategically across Australia to ensure the greatest equity of access to highly specialised interventions.

The distinguishing features of a CSC include:

1. Availability of endovascular thrombectomy and neurosurgery 24/7/365
2. Stroke-specific expertise of medical and nursing leadership
3. Formal network links to support local or statewide hospitals including accepting referrals for specialist treatment, provision of clinical advice, telemedicine support and specialist education
4. Leadership in clinical research

CSCs should have sufficient dedicated stroke beds to ensure all patients are admitted directly to the stroke unit from the ED, and they remain on the stroke unit for the majority of their acute stay (excepting when the provision of other specialist services, such as intensive care takes precedence). CSCs admitting ≥ 350 patients with stroke per annum should have a minimum of eight dedicated stroke beds, which increases proportionally with admission rates (e.g. 22 stroke beds for >1000 stroke admissions). The actual capacity of a CSC stroke unit is dependent on local factors, including referral patterns, case mix, access to further rehabilitation services and the efficiency of repatriation to the health network of origin when patients have been transferred in for thrombectomy or other interventions.

NB. Recommended stroke unit bed numbers are for the provision of acute care only and are not to be combined acute/rehabilitation units.

b) Primary Stroke Centre (PSC)

PSCs offer many of the same services as CSCs, including dedicated stroke units staffed by clinicians with stroke expertise, comprehensive stroke protocols, the provision of hyperacute stroke treatments, including thrombolysis, and access to rehabilitation.

Endovascular thrombectomy and/or neurosurgery may be available on-site, but on a part-time basis only. PSCs do not meet the 24/7/365 criteria required for CSC status.

PSCs are typically smaller hospitals than CSCs and admit 100 patients or more with stroke per year.* While there is no set minimum number of recommended stroke unit beds for PSCs given the significant variability between these centres, PSCs should have enough stroke unit beds to admit all acute admissions, taking into account local factors such as demographics, bed demand, length of stay and access to rehabilitation services. As an indication, a PSC admitting more than 250 patients per annum, should have approximately five (5) beds #, which increases proportionally with admission rates. All other principles of stroke unit beds still apply, i.e. geographically defined, dedicated beds in a single ward.

** Hospitals who otherwise fit all PSC criteria but have a slightly lower admission rate may still be eligible to be certified as a PSC. This will be assessed by the Stroke Service Certification Committee.*

 # Bed calculation based on the standard 'Occupied bed Day' calculation.

PSCs should have well organised systems that:

1. Link emergency services (e.g. pre-hospital notification, code stroke alerts, direct ambulance to CT protocols)
2. Provide rapid 24/7 advanced rapid brain imaging and reporting (CT angiogram and perfusion or MRI equivalent)
3. Provide thrombolytic therapy 24/7 (via onsite specialist or supported by telemedicine)
4. Include protocols to transfer appropriate patients to a CSC as needed (e.g. for endovascular thrombectomy or neurosurgical services, including return transfers for ongoing care)
5. Include strong links with rehabilitation services to ensure early assessment and transfer (if services are not co-located)
6. Include secondary prevention protocols and services.

Depending on local factors (previous and existing services, geography etc.) PSCs may be supported by telestroke or may have some of the additional elements of comprehensive stroke services and/or responsibility for regional coordination of stroke services.

c) Regional Stroke Centres (RSC)

Previously known as Stroke Capable Regional General Hospitals

Geographically distant hospitals with low rates of stroke admissions may have insufficient demand to justify specialised, dedicated in-hospital resources to the level of a PSC, but their location may require the admission and management of patients with stroke regardless.

RSC classification therefore applies to remote, rural or regional hospitals that:

1. Admit approx. 30-100 patients with stroke per year (maximum of 150 admissions)†
2. Are located more than one hour's drive time from the closest PSC or CSC, making an initial bypass or transfer model infeasible.

† *Hospitals admitting more than 150 patients with stroke annually, regardless of location, should apply for PSC status.*

Minimum standards for a RSC include designated responsibilities for medical and nursing leads and stroke coordinators, and co-location of patients in designated stroke beds. However, RSCs should strive to implement as many features of a PSC as possible to facilitate the provision of specialised stroke care.

Additionally, RSCs should have telemedicine links to PSCs, CSCs or statewide services to facilitate patient assessment, provision of thrombolysis, and if required, subsequent transfer for specialist care or treatment.

d) Telestroke Thrombolysis Centre

Telestroke Thrombolysis Centres are smaller, usually regional, CT-capable hospitals which provide primary assessment and some hyperacute treatments such as thrombolysis, via telemedicine, but do not have a stroke unit and generally do not admit patients with stroke. These sites do not meet the criteria for an RSC or PSC but still receive patients with suspected stroke in the emergency department.

Telestroke thrombolysis centres therefore must have formal telestroke pathways to support patient assessment, treatment and transfer. Patients with stroke should only be admitted to telestroke centre if they refuse transfer, or it is not in the patient's best interests (e.g. advanced care directive/palliative care).

e) General Hospital

These are hospitals that do not meet any of the other stroke service criteria. They do not provide stroke treatment and should be bypassed by ambulance services to the nearest stroke centre unless there are special circumstances (e.g. resuscitative or palliative care). They should not admit patients with stroke, but should, have clear relationships with the nearest RSC, PSC and/or CSC (as applicable) and should have protocols to guide the management of suspected stroke (including inpatient and emergency department presentations).

Table 2. Features of hospital stroke services

Element of service	Comprehensive Stroke Centre	Primary Stroke Centre	Regional Stroke Centre	Telestroke Thrombolysis Centre	General Hospital
Receive pre-notification and prepare to rapidly accept potential stroke patients from pre-hospital services	✓	✓	✓	✓	×
Additional notes:					Bypassed by ambulance services except when extremely remote.
Coordinated emergency department systems including: ▪ code stroke activation ▪ use of validated screening tools ▪ agreed triage categories ▪ rapid imaging (ideally direct to CT on arrival) protocols for hyperacute management (Thrombolysis, endovascular thrombectomy (EVT) or transfer for EVT ▪ BP control ▪ anticoagulation reversal	✓	✓	✓	✓	×
Additional notes:			Rapid imaging wherever possible. Patient management is usually telehealth supported.	All patient management supported by telemedicine.	Procedures for transferring self-presenting or in-patient stroke cases to the nearest stroke centre.
Rapid access to onsite CT brain (24/7) CT angiogram (arch-vertex) and CT perfusion	✓	✓	✓	✓	✓/×
Additional notes:				(+/- CTP)	

Delivery of intravenous thrombolysis	✓	✓	✓	✓	×
Additional notes:	24/7	24/7	Ideally 24/7 May have telehealth support	Ideally 24/7 Telehealth supported.	
On-site endovascular thrombectomy	✓	Optional	×	×	×
Additional notes:	24/7		Telehealth supported transfer.	Telehealth supported transfer.	
On-site neurosurgical services (e.g., for hemicraniectomy due to large middle cerebral artery infarcts)	✓	Optional	×	×	×
Additional notes:	24/7	Transfer as required.	Telehealth supported transfer.	Telehealth supported transfer.	
Stroke unit	✓	✓	×*	×#	×
Additional notes:			Patients are grouped on a single ward.	Patients transferred unless they refuse or are palliated (after expert advice).	
Ability to provide **acute monitoring** (telemetry and other physiological monitoring) for at least 72 hours	✓	✓	✓	✓/×	✓/×
Acute stroke team including medical, nursing and allied health (see Table 3)	✓	✓	✓**	×	×
Additional notes:			RSCs should have a stroke team (but roles may be split)		

Dedicated stroke coordinator position	✓	✓	✓***	✗	✗
Additional notes:			There should be a stroke coordinator, with stroke expertise (fractional FTE dedicated to stroke)		
Dedicated medical lead	✓^	✓^^	✓/✗^^^	✗	✗
Additional notes:	Dedicated time, specific training and primary focus on stroke.	Sufficient time and expertise to lead the stroke service.	Dedicated and responsible for overseeing medical aspects of stroke care but may not have stroke-specific training		
Access to HDU / ICU (for complex patients)	✓	✓	✓/✗	✓/✗	✓/✗
Additional notes:	ICU	ICU or HDU	HDU	HDU	
Routine use of **carotid (<48 hrs) and brain (<24 hours) imaging** Early (<48 hrs) administration of **stroke prevention medications** (antithrombotics, cholesterol and BP lowering)	✓	✓	✓	✓/✗	✓/✗
Additional notes:				May be via transfer or telemedicine	May be via transfer or telemedicine
Standardised processes that ensure ALL stroke patients are assessed for rehabilitation. This includes use of standardised tools to determine individual rehabilitation needs and goals (ideally within 48 hours of admission).	✓	✓	✓	✗#	✗
Additional notes:				Patients transferred unless they refuse or are palliated (after expert advice).	

Coordination with rehabilitation service providers (this should include a standardised process, and/or a person, used to assess suitability for further rehabilitation).	✓	✓	✓	×#	×
Additional notes:				Patients transferred unless they refuse or are palliated (after expert advice).	
Routine involvement of patients and carers (education, goal setting, skills training, care planning)	✓	✓	✓	×#	✓
Additional notes:				Patients transferred unless they refuse or are palliated (after expert advice).	
Routine use of guidelines, care plans and protocols (e.g. swallow assessment, continence, nutrition/hydration, mobility, DVT risk, temperature, glucose, skin integrity)	✓	✓	✓	×#	×
Additional notes:				Patients transferred unless they refuse or are palliated (after expert advice).	
Regular data collection and **stroke specific quality improvement activities** (see section 6)	✓	✓	✓	×##	×
Additional notes:				Metrics for thrombolysis centres maintained centrally by a telestroke service.	

Access and collaboration with other specialist services (cardiology, palliative care, vascular)	✓	Optional onsite	✓	✓	×
Additional notes:			May be via transfer or telehealth.	Usually via transfer or telehealth.	
Stroke health professional education programs	✓	✓	✓	✓	✓/×
Participation in stroke research	✓	✓/×	✓/×	×	×

* Patients at a Regional Stroke Centre should be grouped on a single general medical ward to allow development and maintenance of stroke expertise.
** Members of the stroke team at a Regional Stroke Centre should be readily identified but may have split roles.
*** There should be a designated rural stroke coordinator or stroke nurse coordinator with stroke expertise, with fractional FTE dedicated to stroke.
# Patients should be transferred out for further specialist care including stroke unit care after acute assessment and initial treatment, unless they decline or are palliated (following expert advice). Patients may be assessed and accepted back for rehabilitation (if adequate facilities are available on site) following acute therapy at stroke centre. Patients declining acute transfer should still be offered protocol-guided care and stroke rehabilitation on-site via telerehabilitation as appropriate/feasible.
Telestroke metrics for Telestroke Thrombolysis Centres must be maintained centrally by the Telestroke service.
^ Dedicated medical lead who has dedicated time, specific training and primary focus on stroke (stroke service director).
^^ Medical lead of a primary stroke service should have sufficient time and expertise to coordinate stroke services.
^^^ Medical physician lead should be designated and responsible for overseeing medical aspects of care, but they may not have stroke-specific training or dedicated time for stroke coordination

Section 3: Stroke unit care definition

The foundation of any stroke service is the provision of SU care. To ensure SU care is consistent across Australia, it is important that each SU component be defined and measurable. SU care remains the single most important recommendation in the national stroke guidelines (accessible from https://informme.org.au/Guidelines). Recommendations state:

Stroke unit care

- All people with stroke should be admitted to hospital and be treated in a stroke unit with an interdisciplinary team. (Strong recommendation)
- All people with stroke should be admitted directly to a stroke unit (preferably within three hours of stroke onset). (Practice point)
- For patients with suspected stroke presenting to non-stroke unit hospitals, transfer protocols should be developed and used to guide urgent transfers to the nearest stroke unit hospital. (Practice point)
- Where transfer is not feasible, smaller isolated hospitals should manage stroke services in a manner that adheres as closely as possible to the criteria for stroke unit care. Where possible, stroke patients should receive care in geographically discrete units. (Practice point)
- All acute stroke services should implement standardised protocols to manage fever, glucose and swallowing difficulties in stroke patients. (Strong recommendation)

Table 3 outlines the *minimum* criteria of SU care. Other important features include routine involvement of patient and family/carers, early and active rehabilitation, routine use of guidelines and protocols (e.g., fever, swallowing, incontinence, hyperacute therapy), and routine collection of stroke data.

Table 3. Minimum Stroke Unit Criteria

1. Co-located beds within a geographically defined unit. This includes where beds are grouped together in the one room/bay OR beds are in rooms that are side-by-side, OR as a minimum, beds are within the same ward, provided the same inter-professional team manage their care.
2. Dedicated, interprofessional team with members who have expertise in stroke and/or rehabilitation. The minimum team should consist of stroke medical lead, stroke nursing lead, allied health (including occupational therapy, physiotherapy, speech pathology, social work and dietitian, aboriginal liaison officer) and a stroke coordinator, all with dedicated full time equivalent hours for these roles.
3. Interprofessional team meet at least once per week to discuss patient care.
4. Regular programs of staff education and training relating to stroke. (e.g., stroke induction program, dedicated stroke in-service program, and access to annual national or regional stroke conferences/ educational webinars)

It is strongly recommended that all hospitals with a stroke service/unit undertake formal Stroke Centre Certification which is coordinated by the Australian Stroke Coalition. https://australianstrokecoalition.org.au/projects/asc-stroke-unit-certification-program/

Section 4: Regional coordination responsibility for acute stroke

Some health services will take on responsibility for the planning and coordination of stroke services for a designated geographical area (e.g., a local health district or network) A common model is a hub and spoke approach, with the highest level of services offered at the 'hub', which supports less specialised stroke care at the 'spoke' sites. In metropolitan areas, hub hospitals tend to be CSCs, while PSCs may be a hub in regional and rural areas, they have formal links to a CSC and can access endovascular thrombectomy and neurosurgery services as needed.

Where a stroke service has regional responsibility, additional resources should be allocated to coordinate care in and from 'spoke' sites. Elements of care specific to services with responsibility for regional coordination are listed in table 4.

Table 4. Hub service features

• Responsibility for regional stroke planning and local stroke network (this may be coordination across a local health district)
• Collaboration with ambulance services to plan and monitor adherence to protocols and policies for emergency transfers along with return transfers across a local health district
• Extra capacity for specialist clinical support (outreach or via telemedicine)
• Extra capacity for educational outreach (including medical, nursing, allied health and research).
• Extra capacity to respond to/accept transfers
• Stroke nurse lead, stroke coordinator and stroke medical lead to coordinate care between sites
• Regional coordination of hyperacute therapy
• Use of telemedicine links to comprehensive stroke centres (for primary stroke centres)

Section 5: Workforce requirements

Skilled inter-professional stroke teams are an essential component of best practice stroke care. Staffing levels are expected to vary depending on local considerations such as hospital level of service and patient clinical profile. Other essential considerations for staffing levels include skill mix (i.e. adequate numbers of permanent highly skilled and experienced staff who can support less experienced or new staff), capacity within the

stroke unit and cross-cover with other non-stroke services (e.g. stroke teams asked to review outlying stroke patients not on the stroke unit), weekend cover, telestroke provision, and non-clinical time allocated to professional development, research and quality improvement activities across all disciplines, and succession planning.

As a minimum, CSC and PSC stroke services should have a dedicated allotment of hours for a stroke nurse lead, medical lead and allied health personnel. Hospitals with more than 100 stroke admissions per year, including RSCs, should also employ a stroke care coordinator (this role should be different to the nursing lead role), and an identifiable medical lead (even if stroke specific hours are not formally allocated for this role).

Section 6: Quality improvement

Acute stroke care requires the translation of research evidence into clinical practice and acute stroke services must continually strive to improve their performance. Adoption of a Learning Health System approach, which brings together stakeholders, infrastructure, and expertise is recommended. The Learning Health System (Figure 1) integrates:

1. Evidence from stakeholder engagement and priority setting
2. Evidence from knowledge generation (research) and synthesis (guidelines)
3. Evidence from data and information systems (real world data) and benchmarking (informatics)
4. Evidence from implementation science and healthcare improvement.

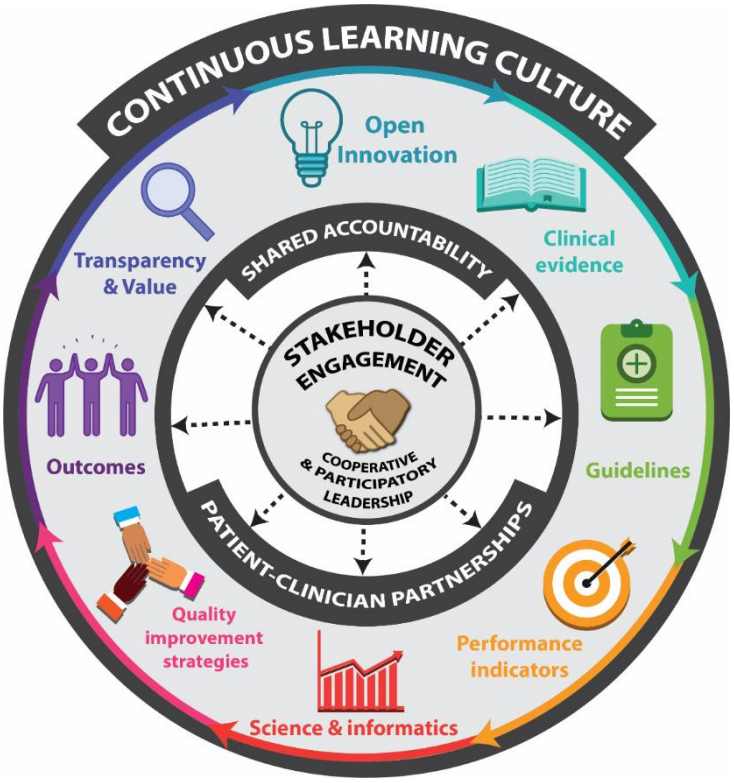

Figure 1: Elements of the Learning Health System (Source: Cadilhac et al. Stroke 2023;54(4):1148-1159)

Data collection

All hospitals providing a stroke service should collect performance metrics and stroke indicator data as outlined in the national Standards for Stroke Care (developed by the Australian Commission on Safety and Quality in Health Care (ACSQHC) and based on the Stroke Foundation Clinical Guidelines and Australian Stroke Clinical Registry (AuSCR) www.safetyandquality.gov.au/clinical-care-standards/acute-stroke.

The Australian Stroke Clinical Registry (AuSCR) is the recommended data collection tool; however, its' use is not mandated, and services may choose a tool that best suits their needs. Regardless of the type of database or tool used, it is essential that all services use nationally agreed upon data definitions to ensure standardisation across all stroke domains (as found in the National Stroke Data Dictionary).

Data Use

Data should be shared for national benchmarking and should provide real time local access for quality improvement initiatives. A minimum dataset focused on thrombolysis and interhospital transfers should be collected in Telestroke Thrombolysis Centres (usually collected centrally by the Telestroke service). All stroke services should participate in efforts to reach national targets for reperfusion and acute stroke unit access (Table 5).

Quality Improvement

Importantly, the collection and monitoring of stroke data is only useful if acted on to improve care. Evidence-based implementation strategies should be used. Stroke teams need to understand local issues that both hinder (barriers) and enhance (enablers) performance and tailor strategies to improve care.

Implementation strategies may include audit and feedback (using benchmarking data), education meetings or workshops (especially interdisciplinary workshops), peer influence (key opinion leaders), tailored interventions, and system strategies such as financial incentives or system redesign.

All CSCs and PSCs should have a documented improvement plan with regular (e.g. monthly) interdisciplinary meetings used to monitor care and improvement activities.

Table 5: National reperfusion and stroke unit access targets

By 2030

- National median endovascular thrombectomy door to puncture time <30mins for transfers
- National median endovascular thrombectomy door to puncture time <90mins for primary presenters
- National median door in door out time for endovascular thrombectomy retrieval <60mins in metro hospitals*
- National median thrombolysis door to needle time <60mins
- Certified stroke unit care provided to >90% of patients with primary stroke diagnosis.

* Where same-crew ambulance door-in and -out transfer is possible. Regional services retrieving via road should aim for a DIDO time of 75 minutes (hospitals requiring aero-retrieval service are not included in this target).

Stroke Centre Certification

Stroke Centre Certification is a voluntary national quality improvement program coordinated by the Stroke Foundation in partnership with the Australian and New Zealand Stroke Organisation under the auspices of (ANZSO) Australian Stroke Coalition (ASC). It is a formal process undertaken to assess a hospital's ability to provide evidence-based, organised care to patients during the hyperacute and acute phases of stroke.

This includes confirming the level of service provided by each hospital (comprehensive, primary or regional stroke centre).

Certified Stroke Centres have collaboration with other services (emergency medical services/paramedics, networked hospitals, virtual care settings) and multiple departments, (triage and emergency, radiology, neurology/stroke team, neurosurgery, bed management), with documented systems for providing time critical assessment & treatment and stroke units that provide specialised care for admitted patients. Care quality is recorded and guided by established protocols.

Stroke centres should maintain a 0.5 FTE stroke coordinator role as a minimum, to support coordination and achieve certification. Regional Stroke Centres with very low admission numbers (< 50 per annum) should demonstrate adequate FTE to accommodate their local needs.

Section 7: Summary

All efforts should be made to improve patient access to evidence-based acute stroke care in Australia. Capacity to evaluate the quality of acute stroke services is essential for the improvement of health care delivery and patient outcomes. This framework should be used by healthcare policy makers, hospital managers and clinicians to identify gaps in recommended evidence-based service provision for stroke or to plan for new services. It is recommended that for acute hospital stroke services:

- Hospitals that admit over 100 stroke patients each year should aim for Primary Stroke Centre capability.
- Comprehensive Stroke Centres should be established so that equitable access to highly specialised hyperacute interventions is ensured.
- There should be a system wide (regional and state) approach to map and develop stroke services to ensure equity of access for all Australians related to stroke care. This involves collaboration and coordination between prehospital and hospital systems ensuring patients with suspected stroke are delivered to stroke specialist centres, or to stroke-capable general hospitals with established telestroke systems.
- All hospitals that manage acute stroke should be collecting nationally agreed performance indicators based on the National Stroke Data Dictionary descriptors. Staff should have access to national benchmarking reports and an interdisciplinary team focused on monitoring stroke performance should meet regularly to develop and monitor a quality improvement plan for priority areas.
- Finally, this framework should be used in conjunction with the most recent Clinical Guidelines for Stroke Management to increase access to evidence-based stroke care throughout Australia.

Acknowledgements

The Stroke Foundation gratefully acknowledges the significant input from many key people over time who have helped shape this document including:

- The Stroke Foundation Clinical Council
- Members of the Australian Stroke Coalition
- Professor Timothy Kleinig (current president of the Australian and New Zealand Stroke Organisation), Neurologist, Royal Adelaide Hospital
- Professor Dominique Cadilhac (Data Custodian of the AuSCR) Co-director and Research Lead of the Stroke and Ageing group (STAR), School of Clinical Sciences at Monash Health, Monash University
- State and national representatives who have contributed to this update and previous versions of the framework.

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Suggested Citation: Stroke Foundation. National Acute Stroke Services Framework 2026. Melbourne, Australia.

How to get more involved

- **Give time** – become a volunteer.
- **Raise funds** – donate or hold a fundraising event.
- **Speak up** – join our advocacy team.
- **Leave a lasting legacy** – include a gift in your Will.
- **Know your numbers** – check your health regularly.
- **Stay informed** – keep up-to-date and share our message.

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