



National Acute Stroke Services Framework 2023

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Introduction

Delivering optimal stroke services equitably across Australia remains a challenge with access to best practice stroke services variable, 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, dedicated hospital services. Capacity to plan, deliver and evaluate acute stroke services is essential for improvement of health care delivery and patient outcomes.

A framework to guide the establishment and evaluation of stroke services to support equitable delivery of best practice care was first developed by the Stroke Foundation (with support from the Australian Government Department of Health and Ageing) in 2002. This Framework was reviewed in 2008, 2011, 2015, and 2019 to ensure it was aligned with the current Australian Clinical Stroke Management Guidelines and international best practice recommendations.

This document outlines the fifth iterative update of the Acute Stroke Services Framework. It should be considered alongside the National Rehabilitation Stroke Services Framework. The current review process has included a:

- a) review of the living stroke guidelines (to June 2023);
- b) review of the data from the National Stroke Audit Acute Services and the Australian Stroke Clinical Registry (AuSCR);
- c) review of information from international work and systems; and
- d) consultation on the revised draft framework.

Major changes in this update include inclusion of new categories for Stroke Capable Regional Hospital and Telestroke Thrombolysis Centres, update to annual admission thresholds for primary Stroke Centres (75 to 100), further advice on stroke unit co-location and staffing, greater focus on a Stroke Learning Health System model, and inclusion of nationally agreed targets for reperfusion and stroke unit care.

Aims of the framework

The aims of the framework are to outline criteria for the organisation of acute hospital services for stroke to ensure equitable access to best practice stroke care and provide a mechanism for monitoring and then targeting 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 of current services and their resources for delivering best practice stroke care.
2. Identify where stroke services should be developed including the services that should be provided to support future planning.
3. Make information available to be used to advocate for improved services where gaps are identified.
4. Guide decisions about resource requirements (including minimum stroke unit bed numbers in comprehensive stroke services).
5. Encourage ongoing monitoring of the quality of acute care provision.

The 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 **Acute 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:

www.safetyandquality.gov.au/our-work/assessment-to-the-nsqhs-standards/

https://www.safetyandquality.gov.au/our-work/clinical-care-standards/acute-stroke-clinical-care-standard_care-standard/

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 and personnel available (24 hours a day, seven days a week) to treat acute stroke.

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

Stroke Capable Regional General Hospitals (SCRGH) are smaller, geographically isolated regional centres that are not bypassed by emergency services, and from which routine transfer to a PSC or CSC is infeasible in most cases. Such hospitals offer thrombolytic therapy (with telestroke support) and acute stroke unit-like care, recognising that team members may play multiple roles within a smaller hospital.

Telestroke Thrombolysis Centres are small hospitals that are supported by state telestroke services to provide urgent hyperacute assessment and management before transferring the patient to a larger stroke centre (CSC, PSC or SCRGH).

Stroke Unit (SU) care is organised care within a specific ward in a hospital provided by a multidisciplinary team who specialise in stroke management, coordinating diagnostic work-up and treatment, early mobilisation and rehabilitation and secondary prevention, working with the patient and family during the inpatient stay. Care quality is recorded and guided by established protocols.

Section 1: Recommended pre-hospital services and statewide systems

Hyperacute care can substantially reduce the risk of death and disability. Reperfusion therapies (intravenous thrombolysis and endovascular thrombectomy) are extremely time critical and reducing the delay from stroke onset to treatment directly benefits patients. Furthermore, endovascular thrombectomy for large vessel occlusion is one of the most potent therapies in modern medicine but this intervention is only available at a limited number of CSCs. Finely tuned coordination of multiple systems (the ambulance service, medical retrieval service, emergency department, radiology department, stroke and neurointervention teams) is therefore required to improve access to reperfusion therapy and reduce treatment delays.

A systematic approach to resolving barriers that delay hyperacute stroke care and the implementation of geographically appropriate models of emergency care should help achieve increased access to reperfusion therapies, ensure faster treatment delivery and improved access to SU care across Australia. These include:

- effective community education campaigns for stroke recognition
- well-organised pre-hospital care systems (activation, stroke and large vessel occlusion screening tools, pre-notification and 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 retrieval for endovascular thrombectomy as well as early access to SU care
- rapid assessment in the Emergency Department (including 'code stroke' input from stroke team)
- rapid brain imaging including access to CT angiography and perfusion
- the provision of thrombolysis and access to comprehensive centres for endovascular thrombectomy, and
- early rehabilitation.

It is imperative that those responsible for statewide health system delivery 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, use of validated stroke screening tools in all patients with suspected stroke should be used by Ambulance services and to guide pre-hospital bypass and triage (and where not transported via ambulance, emergency departments to guide 'Code Stroke' triage). Stroke screening tool data (as per Stroke Standard definitions) should be collected and used for quality improvement. Agreed systems should include secondary transfers for additional treatment and subsequent repatriation transfers for further acute, rehabilitation or palliative care services. 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 specialist assessment and management support to general hospitals within agreed systems of care. Telestroke support can also assist in the decisions on whether to transfer the patient for a higher level of care for interventions such as endovascular thrombectomy, and guide optimal destination 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 across and (where appropriate) between each jurisdiction. This should include agreed mapping of stroke-capable services and hospitals to bypass, validated stroke screening protocols and pre-notification systems.
Health Departments should develop agreed statewide service plans and associated policies governing rapid assessment and transfers. Each hospital should be categorised using this Framework.
Where no on-site stroke medical specialists are available and there is agreement not to bypass the hospital, telestroke consultation should be used to assess eligibility for acute stroke therapies and/or 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 resources and personnel available (24 hours a day, seven days a week). These services are located in large, tertiary referral services which see high volumes of stroke patients (usually over 350 annual admissions) including the most complex presentations. In addition to all PSC capabilities, CSCs offer endovascular thrombectomy and neurosurgery (24/7/365), along with links to other specialist services such as cardiology, palliative care and rehabilitation. CSCs have a leadership role in establishing partnerships with other local hospitals for supporting stroke care services (e.g., formal networks, specialist education and clinical advice including outreach visits or telemedicine links) and leading clinical research.

CSCs must be located strategically across Australia to ensure the greatest equity of access to highly specialised interventions. CSCs should have sufficient dedicated SU bed numbers to ensure stroke patients access a SU early and remain for the majority of their acute stay. CSCs will normally have a minimum of eight dedicated stroke beds in their stroke unit for centres admitting 350 stroke patients annually, increasing proportionally to around 22 stroke beds for services that see >1000 stroke admissions. Recommended bed numbers are for acute SUs only (not combined acute/rehabilitation units). The actual capacity of a CSC SU being 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. CSCs should take a lead in coordinating stroke care across their local health district and may also support referral sites from outside their district or state.

b) Primary Stroke Centre (PSC)

Services with 100 or more patients with stroke per year should have PSC capability.

These services have a dedicated SU with clinicians who have stroke expertise. No recommended SU bed numbers have been included due to the significant differences between health services that provide SU care. Local factors including demographics, demand, length of stay and access to rehabilitation services should all be considered when determining optimal bed numbers. PSCs have written stroke protocols for emergency services and provide hyperacute stroke treatments and rehabilitation. PSCs should have well organised systems to link emergency services (e.g. pre-notification and code stroke alert systems with direct transport to CT scanner on ambulance stretcher); rapid brain imaging and reporting including advanced imaging; ability to offer thrombolytic therapy 24/7; protocols to transfer appropriate patients to a CSC as needed (e.g. for endovascular thrombectomy or neurosurgical services, including transfers back for ongoing care); strong links with rehabilitation services to ensure early assessment and transfer (if not co-located) and secondary prevention services. Depending on local factors (previous and existing services, geography etc.) these services 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. Endovascular thrombectomy may be performed, but is not a pre-requisite.

c) Stroke Capable Regional General Hospital (SCRGH)

Hospitals admitting less than 100 (exceptionally up to 150) stroke patients per year may have insufficient demand to justify specialised, dedicated in-hospital resources such as a SU or a full team of stroke specialist clinicians, but their location distant to CSCs and PSCs may make it impractical to routinely transfer patients.

This type of hospital will usually be located at least an hour via road from a PCS or CSC but usually more. These hospitals should have capacity to deliver quality stroke unit-like care with the support of telestroke to facilitate initial assessment, thrombolysis and, if on-site provision is infeasible, transfer for further treatment (e.g. endovascular thrombectomy) and complex SU care. SCRGHs should embed as many of the recommended elements of PSCs as possible where a SU is not possible, including treating patients within a single ward and employing a stroke coordinator (refer to Table 2 for recommended elements).

d) Telestroke Thrombolysis Centre

Smaller (usually regional) CT-capable hospitals which do not fit any other category but which are not bypassed by ambulance services, should have formal support from state telestroke services to provide urgent assessment, telethrombolysis, and further advice on optimal transfer and other hyperacute management before being transferred to a CSC, PSC or SCRGH, unless the patient specifically declines transfer or it is decided that transfer is not in the best interest of the patient (e.g. palliative care).

e) General Hospital

Hospitals that do not meet any of the other criteria. These hospitals should not admit patients with acute stroke and should be bypassed by pre-hospital services to the nearest stroke capable centre unless there are special circumstances (e.g. palliative care).

Table 2. Features of hospital stroke services

Element of service	Comprehensive Stroke Centre	Primary Stroke Centre	Stroke Capable Regional General Hospital	Telestroke Thrombolysis Centre	General Hospital
Receive pre-notification and prepare to rapidly accept potential stroke patient from pre-hospital services	✓	✓	✓	✓	* (should be bypassed by ambulance services except when extremely remote)
Coordinated emergency department systems (includes use of validated screening tools; agreed triage categories; rapid imaging; rapid referral and involvement of stroke team, protocols for IV thrombolysis and ECR intervention/transfer)	✓ including code stroke activation and possible direct transport to CT brain imaging	✓ including code stroke activation and possible direct transport to CT brain imaging	✓ including code stroke activation and direct transport to CT brain imaging (wherever possible) – code stroke team will usually involve Telehealth support	✓ including code stroke activation and direct transport to CT brain imaging (wherever possible) – code stroke team will usually involve Telestroke support	* (should have established procedures for transferring patients out to the nearest stroke-capable centre)
Stroke unit	✓	✓	*#	*#	*
Rapid access to onsite CT brain (24/7) including CT perfusion and aortic arch to cerebral vertex angiography	✓	✓	✓	✓ (+/- CTP)	✓/*
Delivery of intravenous thrombolysis	✓ 24/7	✓ 24/7	✓ ideally 24/7 (Telehealth support)	✓ (ideally 24/7)	*
On-site endovascular stroke therapy	✓ 24/7	Optional	*(telehealth supported transfer)	*(telehealth supported transfer)	*
On-site neurosurgical services (e.g. for hemicraniectomy due to large middle cerebral artery infarcts)	✓	Optional (transfer as required)	*(telehealth supported transfer)	*(telehealth supported transfer)	*
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)	✓	✓	✓**	*	*
Dedicated stroke coordinator position	✓	✓	✓***	*	*
Dedicated medical lead	✓^	✓^^	✓/*^^	*	*
Access to HDU / ICU (for complex patients)	✓ (ICU)	✓ (ICU or HDU)	✓/* (HDU)	✓/* (HDU)	✓/*
Routine use of carotid (<48 hrs) and brain (<24 hours) imaging and early (<48 hrs) administration of stroke prevention medications (antithrombotics, cholesterol and BP lowering)	✓	✓	✓	✓/* (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).	✓	✓	✓	x#	x
Coordination with rehabilitation service providers (this should include a standardised process, and/or a person, used to assess suitability for further rehabilitation).	✓	✓	✓	x#	x
Routine involvement of patients and carers (education, goal setting, skills training, care planning)	✓	✓	✓	x#	✓
Routine use of guidelines, care plans and protocols (e.g. swallow assessment, continence, nutrition/hydration, mobility, DVT risk, temperature, glucose, skin integrity)	✓	✓	✓	x#	x
Regular data collection and stroke specific quality improvement activities (see section 6)	✓	✓	✓	x##	x
Access and collaboration with other specialist services (cardiology, palliative care, vascular)	✓	Optional onsite	✓ (may be via transfer or telehealth)	✓ (usually via transfer or telehealth)	x
Stroke health professional education programs	✓	✓	✓	✓	✓/x
Participate in stroke research	✓	✓/x	✓/x	x	x

* Patients at a stroke capable regional centre should be grouped on a single general medical ward to allow development and maintenance of stroke nursing and allied health expertise.

** Members of the stroke team at a stroke capable regional hospital 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. Stroke Unit Care definition

Minimum 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 would consist of medical (stroke) lead, nursing and allied health (including occupational therapy, physiotherapy, speech pathology, social work and dietitian) and 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 inservice 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 Unit 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 planning and coordination of stroke services for a designated geographical area (e.g., health district) and provide a 'hub' for less specialised stroke care at other hospitals. In metropolitan areas these services are usually CSCs as described above. However, in regional and rural areas, sites with regional responsibility may be a PSC but only if they have formal links to a CSC and access to endovascular thrombectomy and neurosurgery.

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. Regional or hub service features

<ul style="list-style-type: none">• Responsibility for regional stroke planning and local stroke network (this may be coordination across a local health district)
<ul style="list-style-type: none">• Collaboration with ambulance services to plan and monitor adherence to protocols and policies for emergency transfers along with back transfers across a local health district
<ul style="list-style-type: none">• Extra capacity for specialist clinical support (outreach or via telemedicine)
<ul style="list-style-type: none">• Extra capacity for educational outreach (including medical, nursing [educator or consultant], allied health and research).
<ul style="list-style-type: none">• Extra capacity to respond to/accept additional transfers
<ul style="list-style-type: none">• Stroke coordinator position and stroke medical lead to coordinate care between sites
<ul style="list-style-type: none">• Regional coordination of hyperacute therapy
<ul style="list-style-type: none">• 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 service and clinical profile (based on all suspected strokes and TIAs). It is important to note that other essential considerations in determining the most appropriate stroke service 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 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 additional time allocated to professional development, research and quality improvement activities.

As a minimum, CSC and PSC stroke services should have dedicated FTE for stroke nursing, allied health and medical involvement. A stroke care coordinator role should also exist in all hospital services with more than 100 stroke admissions per year. In SCRGHs, there should be a stroke coordinator with stroke expertise, with FTE dedicated to stroke, and an identifiable medical lead (even if FTE is not specifically 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:

- i) evidence from stakeholder engagement and priority setting;
- ii) evidence from knowledge generation (research) and synthesis (guidelines);
- iii) evidence from data and information systems (real world data) and benchmarking (informatics); and
- iv) evidence from implementation science and healthcare improvement.

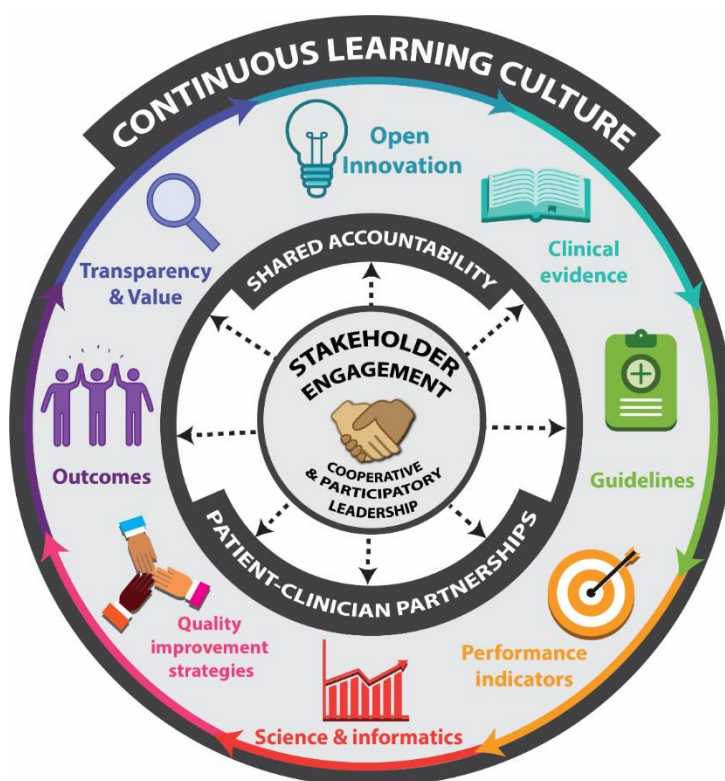


Figure 1: Elements of the Learning Health System (Source: Cadilhac et al. Stroke 2023;54(4):1148-1159)

Performance metrics should be used in all acute stroke services. The Australian Stroke Coalition has overseen efforts to improve stroke performance and oversees the Australian Stroke Data Tool (AuSDaT), an integrated technological solution for collecting stroke data. The AuSDaT is used by the Australian Stroke Clinical Registry (AuSCR) (prospective, minimum dataset; auscr.com.au) and the National Stroke Audit (retrospective, large dataset; informme.org.au/stroke-data) and uses the National Stroke Data Dictionary (available from <https://australianstrokecoalition.org.au/projects/ausdat/>) for the basis of their variables that provides data definitions for ensuring standardised data collection for stroke across a large range of domains. Where centres do not use AuSCR for data collection, these nationally agreed data definitions should still be consistently adhered to.

The Australian Commission on Safety and Quality in Health Care (ACSQHC) has developed national Standards for Acute Stroke Care and related indicators based on the Stroke Clinical Guidelines and the Australian Stroke Clinical Registry (AuSCR) and the National Stroke Audit. See: www.safetyandquality.gov.au/our-work/clinical-care-standards/acute-stroke-clinical-care-standard/.

CSCs, PSCs and SCRGHs should collect data for all acute stroke admission to their service, addressing all relevant acute stroke indicators outlined in the Acute Stroke Care Standard,

share data for national benchmarking and provide real time local access for quality improvement initiatives. A minimum dataset focused on thrombolysis and transfer should be collected in Telestroke centres (usually 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).

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), reminders, 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 <u>same-crew</u> 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).	

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 improvement of health care delivery and patient outcomes. The proposed policy 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.

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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.

Contact us

-  **StrokeLine 1800 STROKE (1800 787 653)**
-  **strokefoundation.org.au**
-  **[/strokefoundation](https://www.facebook.com/strokefoundation)**
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