

# Acute Stroke Services

Stroke medicine is a specialised area of clinical practice involving the diagnosis, treatment, and rehabilitation of patients who have experienced a stroke.

The scope of this Framework recognises that:

- All people with stroke should be admitted to hospital and be treated in a stroke unit with a multidisciplinary team.
- All people with stroke should be admitted directly to a stroke unit (preferably within three hours of stroke onset).
- Smaller hospitals should consider stroke services that adhere as closely as possible to the criteria for stroke unit care. Where possible, patients should receive care on geographically discrete units.
- If people with suspected stroke present to non-stroke unit hospitals, transfer protocols should be developed and used to guide urgent transfers to the nearest stroke unit hospital.

A designated Stroke Unit requires<sup>1</sup>:

1. Co-located beds within a geographically defined unit.
2. Dedicated, interprofessional team with members who have a special interest in stroke and/or rehabilitation. The minimum team would consist of medical, nursing and allied health (including Occupational Therapist, Physio Therapist, Speech Pathologist, Social Worker and Dietitian). For Tasmania, the minimum team also consists of a neuropsychologists and pharmacist.
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. dedicated stroke inservice program and/or access to annual national or regional stroke conference).

The scope of this Framework also describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.

## Level 1 Acute Stroke Services

No Level 1 service. Refer to higher level.

## Level 2 Acute Stroke Services

No Level 2 service. Refer to higher level.

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<sup>1</sup> National Stroke Foundation, *Acute Stroke Services Framework 2011*, Figure 1.1, pg. 3

## Level 3 Acute Stroke Services

### Service description

A level 3 service provides basic hospital care for a stroke patient for which the stroke is a terminal event. This type of service is often located in a rural hospital where patients from the local community may be admitted for end of life care. This could include patients from higher level services where receiving care in a stroke unit care is not likely to influence outcome.

### Workforce requirements

- Carers
- General practitioner
- RN.

## Level 4 Acute Stroke Services

### Service description

A Level 4 services provides basic hospital care for stroke patients. Due to insufficient demand, Level 4 services do not have a dedicated stroke unit with moderate complexity patients transferred to a higher service.

### Service requirements

- Formal linkages including referral processes with Level 5 or 6 Acute Stroke Service within the network to facilitate timely transfer of stroke patients and/or provision of clinical advice via telemedicine in line with agreed guidelines
- Access to a Pharmacist.

### Workforce requirements

- General physician
- Pharmacist
- Access to designated allied health and rehabilitation services.

### Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
-	4	3	3	4

## Level 5 Acute Stroke Services

## Service description

A Level 5 service is a designated primary stroke centre. To be classified as a primary stroke centre it must receive over 100 stroke admissions each year.

A Level 5 has a focus on early rehabilitation (including strong integration and access to specialist rehabilitation services such as inpatient rehabilitation services or early supported discharge services). There must be routine involvement of carers in the rehabilitation process.

## Service requirements

- Dedicated stroke unit with clinicians who have stroke expertise
- Access to ICU/HDU for complex patients
- Written stroke protocols for emergency services, acute care and rehabilitation
- Access to thrombolytic therapy
- Protocols to transfer appropriate patients to a comprehensive stroke centre
- Ability to provide acute monitoring (telemetry and other physiological monitoring) for up to 72 hours
- Onsite neurovascular imaging (CT and Carotid)) and timely access to expert interpretation
- Rapid (within 48 hours) Transient Ischaemic Attack (TIA) assessment clinics/services
- Standardised and early assessment for neurorehabilitation
- Coordinated processes for patient transition to ongoing rehabilitation and secondary prevention services including referral back to acute services if required
- Access to an Early Supported Discharge Service
- Specialised interdisciplinary stroke (or neurorehabilitation) team with access to staff education and professional development specific to stroke
- Access to clinical neuropsychologist as part of the ongoing care after acute admission
- Regular audit and stroke-specific quality improvement activities.

## Workforce requirements

- Dedicated medical lead
- Dedicated stroke CNC
- Dedicated medical lead who has primary focus on stroke (stroke centre director)
- Clinical psychologist
- Rehabilitation team, including a physician, registrar and allied health team
- Early Supported Discharge team comprising of a physiotherapist, occupational therapist, nurse, speech pathologist, physician, social worker and administrative support person
- Access to allied health services with special expertise in stroke/rehabilitation.

## Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
-	5	5	4	5

# Level 6 Acute Stroke Services

## Service description

A Level 6 service is a designated comprehensive stroke centre, providing comprehensive care for acute stroke admissions.

To be a designated comprehensive stroke centre it must receive over 350 acute stroke admissions each year. These centres have established well organised systems to link emergency services, hyper acute care, coordinated processes for ongoing inpatient rehabilitation, secondary prevention (e.g. clinic or follow up service), and community reintegration (e.g. early supported discharge).

## Service requirements

As for Level 5 plus:

- Statewide coordination of stroke services
- Network referral role
- Dedicated stroke unit with specialised resources and personnel available 24 hours, 365 days a year
- Formal Linkages with emergency services
- Links with Level 5 rehabilitation service
- Provides 24 hour availability of thrombolysis
- Access to advanced imaging capability (MRI, advanced CT and catheter angiography)
- Access to sub-specialist neurosurgical and neuro-intensive care, interventional radiology services, cardiology and palliative care
- Provide outreach services to lower services
- Provides clinical advice, education and training to lower level services
- Has a teaching role and leads clinical research.

## Workforce requirements

As for Level 5 plus:

- Access to neurosurgeons and neuro-intensive care staff.

## Support service requirements

Anae	ICU/HDU	Path	Phar	Rad
6	6	5	5	6