Acute stroke centre accreditation – secondary level

Accreditation:
Accreditation is a process where health services can demonstrate that their patients are receiving a level of care consistent with recognised standards. It generally entails a degree of external review and is overseen by a reputable body.
Stroke service accreditation has been shown to be associated with better clinical process, clinical leadership, patient safety, quality management and clinical review[i]. The European Stroke Organisation identifies the benefits of accreditation as follows[ii]:

- Aims to improve the quality of patient care by reducing variation in clinical processes
- Provides a benchmark for quality of stroke management
- Provides an objective assessment of clinical excellence
- Creates a loyal, cohesive clinical team
- Promotes a culture of excellence across the organization
- Facilitates marketing, contracting and reimbursement
- Strengthens community confidence in the quality and safety of care, treatment and services

Scope:
This document covers patient access to hyperacute and acute stroke services generally provided at secondary care centres. Accreditation of in-patient stroke rehabilitation, community stroke rehabilitation, tertiary services (including clot retrieval), primary stroke services (e.g. drip and ship) will be covered elsewhere.

Principles:
The following principle will guide all aspects of service evaluation:

- ***Consistent high quality care:*** All patients who suffer an acute stroke in New Zealand should have the opportunity to access care that meets a consistent standard of skill, timeliness and support. This includes appropriate emergency assessment and care, time sensitive interventions, acute inpatient care, multidisciplinary expertise, discharge planning and care transitions.
- ***Person centred care:*** Patients and their whanau should be at the centre of all decision-making and care. This includes:
    - Treating patients with dignity and respect
    - Sharing information about clinical conditions and treatment options
    - Support and encouragement to participate in decision-making and informed choice
    - Person centred approach to care planning and care goals
    - Appropriate education and support for care transitions and on-going care
    - Consumer input to service development and review
    - Consumer feedback
- ***Equity in outcomes:*** Equity should be a central goal in service delivery and development. This means the service will monitor care and outcomes for different groups and strive to reduce differences.

Standards:

Specific standards should include (from Acute Stroke Clinical Care Standards Australia 2015[iii]):

1. A person with suspected stroke is immediately assessed at first contact using a validated stroke screening tool, such as the F.A.S.T. (Face, Arm, Speech and Time) test.
2. A patient with ischaemic stroke for whom reperfusion treatment is clinically appropriate, and after brain imaging excludes haemorrhage, is offered a reperfusion treatment in accordance with the settings and time frames recommended in the *Clinical guidelines for stroke management*[iv].
3. A patient with stroke is offered treatment in a stroke unit as defined in the *Acute stroke services framework*[v].
4. A patient's rehabilitation needs and goals are assessed by staff trained in rehabilitation within 24–48 hours of admission to the stroke unit. Rehabilitation is started as soon as possible, depending on the patient's clinical condition and their preferences.
5. A patient with stroke, while in hospital, starts treatment and education to reduce their risk of another stroke.
6. A carer of a patient with stroke is given practical training and support to enable them to provide care, support and assistance to a person with stroke.
7. Before a patient with stroke leaves the hospital, they are involved in the development of an individualised care plan that describes the ongoing care that the patient will require after they leave hospital. The plan includes rehabilitation goals, lifestyle modifications and medicines needed to manage risk factors, any equipment they need, follow-up appointments, and contact details for ongoing support services available in the community. This plan is provided to the patient before they leave hospital, and to their general practitioner or ongoing clinical provider within 48 hours of discharge.

Specific activities covered by accreditation:

1. ***Themes/principles:***
    a. *Patients and their whanau are at the centre of what we do:* Need to demonstrate processes that involve consumers and their whanau in planning and development of services.
    b. *Respect for other cultures:* Show the work being done to ensure cultural and spiritual needs are met.
    c. *Outcomes should be equitable across and between patient groups:* How is the service improving equity in outcomes for stroke.

2. ***Pre-hospital Care:***
    a. An agreed pre-hospital assessment and screening process is in place with EMS services.
    b. An agreed and current EMS destination policy is in place and understood by the receiving service.
    c. Communication processes are in place for advance notification to the receiving services.
    d. An agreed pathway exists to guide primary care professionals.

3. ***Acute presentation:***
    a. A responsive acute stroke team or stroke process is in place at the receiving hospital 24/7.
    b. Notification protocols are in place for stroke team activation (e.g. code stroke).

c. Rapid access to imaging includes non-contrast CT, CT angiography, CT perfusion imaging.
d. A rapid assessment pathway is in place to ensure timely access to thrombolysis where indicated.
e. Agreed pathway exists for access to Stroke Clot Retrieval.

4. Thrombolysis:

a. Stroke thrombolysis is available 24 hours every day.
b. Thrombolysis should be under the supervision of physicians credentialed in thrombolysis (either on-site or via telestroke).

5. Acute Stroke Unit care:

a. A geographically discrete area of co-located beds exists for the management of acute stroke patients.
b. Care is provided by a multidisciplinary team of health professionals including; stroke physicians, acute stroke nurses, occupational therapy, physiotherapy, speech language therapy, dieticians, cultural and spiritual support teams.
c. Regular team meetings occur at least weekly with evidence of daily communication.
d. Assessment and management protocols or processes exist for; neurological monitoring, post thrombolysis monitoring, arrhythmia monitoring, swallow assessment, VTE prophylaxis.
e. Assessment protocols exist for identifying rehabilitation needs with clear pathways to inpatient or community rehabilitation.
f. Transition of care processes include written care plans, whanau education and training (includes transitions from Acute to rehabilitation, transfer to other hospitals, transition to community, and death).
g. Protocols/processes exist for secondary prevention and integration into community.

6. TIA care:

a. An agreed TIA management pathway exists to guide primary and secondary care.
b. A process is in place to ensure high risk TIA patients are seen, investigated and managed promptly.
c. Processes are in place that allow lower risk TIA patients to be seen in ambulatory care in acceptable timeframes.

7. Tertiary service access:

a. Agreed criteria are in place for access and transfer to tertiary services including Stroke Clot Retrieval, neurosurgery, vascular surgery.

8. Workforce:

a. There is a designated stroke physician lead and designated stroke nurse lead.
b. A regular education programme exists for all members of the stroke team.
c. A credentialing process is in place for physicians supervising/providing thrombolysis.

9. Audit/Quality Improvement:

a. Patient reported experience and outcomes are measured and monitored.
b. The service participates in the national registry for stroke thrombolysis.
c. Regular review of Ministry indicators occurs with evidence of quality improvement activities.
d. Regular review of thrombolysis cases occurs.
e. Stroke service staff are aware of, and participate in QI and monitoring activities.

10. Organisational management and development:

a. Stroke clinical leadership works closely with service management.
b. Consumers have input into service direction and development.
c. Stroke team has opportunity to participate in service development.
d. DHB processes include stroke care development.

11. Structural support services:

a. On-site services:
    - Designated acute stroke unit
    - On-site 24 hour CT access
        - Non-contrast CT head
        - CT Angiography
        - CT Perfusion scanning
    - Carotid imaging during business hours (Ultrasound or CTA)
    - MRI/MRA during business hours
    - Cardiac monitoring capability for at least 72 hours
    - Access to HDU/ICU
    - 24 hour laboratory
    - Cardiac investigations (transthoracic echo, trans oesophageal echo, Holter and event monitoring, etc)
b. Services by referral:
    - Vascular surgery
    - Neurosurgery (hemicraniectomy, etc)
    - Neurointerventional radiology (stroke clot retrieval, etc)

Recommended process:

Accreditation is generally a formal process overseen by a designated body. In the trial stage, it is recommended that this be seen as a service review process rather than formal accreditation. The process could look as follows:

- Review tool developed based on the structure outlined above.
- Initial services to be reviewed identified on voluntary basis.
- Self audit/review done by local service team using review tool.
- External review team identified – Stroke physician, stroke nurse, consumer to join local review team (lead physician and nurse, consumer, service manager).
- Review date agreed.
- External team joins local team for day long process.
- External review team completes review documents (using self audit material)
- Draft document with recommendations goes back to local team for comment.
- Review outcome finalised.

References:

[i] Shaw C et al. The effect of certification and accreditation on quality management in 4 clinical services in 73 European hospitals. Int J Qual Healthcare 2014; 26(S1): 100-107.

[ii] European Stroke Organisation. Certification of Stroke Units and Stroke Centres. https://eso-stroke.org/stroke-unit-stroke-centre-certification/: accessed 6 December 2018

[iii] Australian Commission on Safety and Quality in Health Care. Acute Stroke Clinical Care Standard June 2015. https://www.safetyandquality.gov.au/wp-content/uploads/2015/07/Acute-Stroke-Clinical-Care-Standard.pdf: accessed 6 December 2018

[iv] Stroke Foundation of Australia. Clinical Guidelines for Stroke Management 2017. https://informme.org.au/Guidelines/Clinical-Guidelines-for-Stroke-Management-2017: accessed 6 December 2018

[v] Stroke Foundation of Australia. National Acute Stroke Services Framework 2015. https://strokefoundation.org.au/-/media/58CC3729F33C452B85F5B408D4971C81.ashx?la=en: accessed 6 December 2018