



strokefoundation

Level 7  
461 Bourke Street  
Melbourne  
VIC 3000 Australia

T +61 3 9670 1000  
F +61 3 9670 9300

Call StrokeLine  
1800 STROKE (787 653)

E [admin@strokefoundation.com.au](mailto:admin@strokefoundation.com.au)  
[www.strokefoundation.com.au](http://www.strokefoundation.com.au)

ABN  
42 006 173 379

By email: [onehealthsystem@dhhs.tas.gov.au](mailto:onehealthsystem@dhhs.tas.gov.au)

To whom it may concern

**Re: Delivering Safe and Sustainable Clinical Services – Green Paper — Rebuilding Tasmania's Health System**

I am pleased to provide this response to the above Inquiry on behalf of the National Stroke Foundation (NSF). For any queries on this submission please contact Connie Digolis on [cdigolis@strokefoundation.com.au](mailto:cdigolis@strokefoundation.com.au).

As the voice for stroke in Australia the NSF welcomes the opportunity to provide a submission in response to the Green Paper.

**Background to stroke in Australia**

Stroke is a chronic condition that requires ongoing support and management. In Australia there are over 50,000 strokes a year. There are now over 437,000 people living in Australia after a stroke. Two-thirds of these people sustained a disability that impeded their ability to carry out activities of daily living unassisted. This population is projected to grow to almost 1 million people living with the effects of stroke by 2050.<sup>1</sup>

Stroke is a time-critical illness and faster diagnosis and treatment saves lives and quality of life. At present, not enough people recognize a stroke when it occurs and too few know how vital it is to call an ambulance.

It is critical stroke is diagnosed and treated quickly as the effectiveness of many treatments is dependent upon the time between the onset of symptoms and intervention to minimise brain damage. The sooner stroke patients get to hospital the lower the likelihood death or permanent disability will result.

Time dependent treatments that reduce death and disability include:

<sup>1</sup> Deloitte Access Economics 2014. *Impacts of stroke across Australia*.

- Access to stroke unit care in a hospital;
- Aspirin as soon as possible after ischaemic stroke; and
- Use of tissue plasminogen activator (tPA), a thrombolytic or clot-busting drug, which is most effective when given very early but cannot be administered more than 4.5 hours after a stroke.

Stroke costs the economy around \$5 billion each year including \$3 billion in lost productivity<sup>2</sup>. Approximately one third of survivors are of working age.

### **Specific issues identified by the National Stroke Foundation in relation to the Green paper consultation questions**

This submission should be read in conjunction with the submission from the Tasmanian Chronic Disease Prevention Alliance (TCDPA) and the Neurology and Stroke Clinical Advisory Group – both of which the NSF is a member. The NSF therefore supports the contributions of each of these submissions to the Green Paper.

The NSF agrees in principle to the move towards one health system in Tasmania and access to better care. The NSF also agrees with the focus to ensure resources are used in the most efficient way as long as it also delivers high quality care.

### **Is the Tasmanian health system all it should be, or should we be open to change in order to improve outcomes for all Tasmanians regardless of where they live?**

The NSF supports the TCDPA position that all Tasmanians, regardless of where they live and what their social demographic is, should be able to have equitable access to health services in Tasmania.

As highlighted in the Fair and Healthy Tasmania Report 2011 health inequity is a particular concern for Tasmania given that its citizens fall behind other Australians on key health and lifestyle measures. Tasmanians are at a greater risk of chronic disease for a range of reasons and have identified low health literacy.

There is a real need to identify health solutions that can address this inequity over the longer term. These solutions need to ensure broad access to programs and systems of support that assist Tasmanians to identify and manage their chronic disease risk.

With regards to the need to determine how to more effectively, efficiently and safely deliver health services, the NSF has a few comments.

### **If it improves the quality and safety of care, do you agree we should limit the number of sites at which some services are provided?**

The NSF agrees with this principle when it comes to stroke and we advocate for specialist services to be located where there is appropriate demand. According to the Acute Stroke Services Framework developed by the NSF, all hospitals admitting more than 100 stroke patients annually should have a specialised stroke unit. This ensures that patients are treated by multi-disciplinary teams specialised in stroke and who treat patients according to the NHMRC approved national stroke clinical guidelines.

In Tasmania, two hospitals have over 100 stroke patients per year - Royal Hobart Hospital (RHH) and Launceston General Hospital (LGH) – both of which have stroke units. However,

<sup>2</sup> Deloitte Access Economics, The economic impact of stroke in Australia, National Stroke Foundation 2013. <http://strokefoundation.com.au/site/media/Final-Deloitte-Stroke-Report-14-Mar-13.pdf>

Tasmania's northwest region has two hospitals, Mersey Hospital (MH) and North West Regional hospital (NWRH) that collectively receive approximately 140 stroke patients annually. Based on the current stroke framework, a better standard of care can be achieved if either MH or NWRH became a Level 5 hospital and had a stroke unit, while the other could utilise appropriate state-wide stroke transfer protocols to ensure stroke patients are transferred to a hospital where they can receive specialised stroke care.

#### Current stroke care in Tasmania

The quality of stroke care in Tasmania is variable. Approximately 78% of stroke patients have access to a stroke unit. This is amongst the highest level of stroke unit access nationally. However data shows that almost a quarter of stroke unit beds are used by non-stroke patients, leading to some stroke patients receiving care outside the stroke unit in another part of the hospital. This is not only inefficient due to specialist stroke teams treating non-stroke patients in a stroke unit but it also jeopardises patient outcomes for those treated outside the stroke unit.

While access to stroke unit care is comparatively high in Tasmania, unfortunately the use of clot-busting thrombolysis treatment is very low. Thrombolysis is a time critical treatment used to dissolve dangerous clots in blood vessels, improve blood flow, and prevent damage to tissues and organs. It has been shown to significantly improve outcomes in many eligible patients however it can only be administered within the first 4.5 hours following onset of a stroke. Tasmania's geography and regional access to specialist hospitals should suggest an ability to deliver high rates of thrombolysis treatment however this is not the case.

Part of the reason that Tasmanian's thrombolysis level is so low is because of the lack of health literacy around stroke which delays transportation to hospital. NSF's FAST<sup>3</sup> campaign has proven effective elsewhere in Australia by educating people about the signs of stroke and the need to call an ambulance immediately upon noticing the signs. Investment in a campaign to promote FAST messaging in Tasmania would be very beneficial in educating Tasmanians about the importance of calling an ambulance for stroke to ensure that they get to the right hospital as early as possible and maximise their chances of receiving life-saving treatment.

According to Public Health England, a similar FAST campaign launched in 2009 has resulted in an extra 38,600 people reaching hospital within the necessary time window to receive the immediate medical treatment they needed. This in turn has helped their chances of recovery and meant fewer people were left disabled by a stroke.

#### **If it improves the quality and safety of care, what should we consider in deciding where a service is located and what support needs to be considered to ensure patients have equitable access?**

As described above the NSF believes that optimal stroke service in Tasmania would be for RHH and LGH to continue providing stroke services in their specialised stroke units. In addition a new stroke unit should be established at one of MH or NWRH to cater for the known stroke numbers that occur in that region.

The move to one health system provides a great opportunity to improve stroke care standards in Tasmania through introduction of state-wide agreements on ambulance and patient transfer protocols, as well as defining a new system for the follow-up process for stroke survivors after discharge from hospital.

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<sup>3</sup> FAST stands for Face, Arms, Speech and Time to act. Using the FAST test involves asking these simple questions: Face – Check their face. Has their mouth drooped. Arms – Can they lift both arms? Speech – Is their speech slurred? Do they understand you? Time – Is critical. If you see any of these signs call 000 straight away.

Regarding ambulance and patient transfer protocols, the NSF recommends the Tasmanian government look at protocols established in New South Wales. The current protocols there are effective and worth considering when designing protocols for Tasmania.

The pre-hospital stroke triage protocol developed by the John Hunter Hospital in Newcastle has been successfully adopted for use in other hospitals to help alert and prepare a stroke team and improve “door to needle” times, according to a study in the Journal of Clinical Neuroscience.

The “in the field” stroke screening tool used by ambulance staff is estimated to boost thrombolysis rates from the typical 3% to around 50% of patients with ischaemic stroke, an NSW program has shown.

The NSW Stroke Reperfusion Service follows an identified pathway for treatment. This includes:

- Stroke patients are identified by paramedics using an internationally recognised and validated tool - Face, Arm, Speech, Time (FAST).
- Once identified as a FAST positive patient within three (3) hours of symptom onset, where appropriate the patient is transported to the closest Acute Stroke Thrombolysis Centre.
- Ambulance control will notify the receiving hospital of the incoming patient and provide an Estimate Time of Arrival (ETA).
- The hospital will notify the Stroke team (hospital specific) and upon arrival the patient will receive rapid early medical assessment including brain imaging, neurology review and early decision on definitive treatment (thrombolysis).

In addition to state-wide agreements, what is also needed is an effective system-wide data collection system for stroke so that care across stroke hospitals can be monitored, gaps identified and quality improvement processes initiated to bring care in line with clinical guidelines and new national stroke standards being developed by the Commission for Safety and Quality in Healthcare.

The NSF is working with the Australian Stroke Coalition to develop a national data collection tool called AuSDaT, which is an interface for easy collection of data to feed into hospital audits, research projects and clinical registries. The NSF would recommend a small investment by the Tasmanian government to implement a data collection strategy for Tasmania which incorporates the data collection tool as well as the Australian Stroke Clinical Registry and the annual National Stroke Audit.

### **Recommendations**

- Delivering a quality stroke service in Tasmania by ensuring adequate resourcing in line with recommendations from the Neurology and Stroke Clinical Advisory Group (of which the NSF is a member)
- Stroke units be maintained at RHH, LGH and a new one established at NWRH
- A state-wide ambulance protocol to be developed and implemented to guide emergency response for stroke including training for paramedics on where and when to transport stroke patients.
- Stroke patient transfer protocols be established to ensure that hospitals are aware of their role to treat and where appropriate to transfer stroke patients to a specialist stroke hospital.

- Develop a state-wide approach to data collection for stroke with dedicated resourcing to ensure that data is disseminated and analysed for the purposes of continuous quality improvement of stroke care.

The NSF welcomes the move to one health system for Tasmania as it reflects our guidelines and provides the opportunity to establish standards of care that can meet the current numbers of Tasmanian stroke patients. With the projected numbers of stroke cases and Tasmanians living with stroke set to triple over the next twenty years, this will also provide a framework that is better placed to meet the demands that will inevitably be placed on health services