About the Stroke Foundation

This year there will be more than 5,000 strokes in Western Australia. There are almost 45,000 stroke survivors living in our community, many with an ongoing disability. Unless action is taken, it is estimated that by 2050 the number of strokes experienced by Western Australians will more than double to almost 12,000 strokes annually, and there will be more than 90,000 stroke survivors living in the community.

The stroke challenge looms large in our state; however, the State Government has an opportunity to vastly improve access to stroke treatment so more patients survive, avoid disability and recover. Actions outlined in this submission will save the lives of Western Australians and in turn reduce stroke’s burden on our communities and health system.

Stroke Foundation is a national charity that partners with the community to prevent, treat and beat stroke. We do this through raising awareness, facilitating research and supporting stroke survivors. Stroke Foundation established its Western Australian presence in 2008 and its work builds on the services and support provided by WA Health, hospitals and health professionals.

As the voice of stroke in Western Australia, the Stroke Foundation welcomes the Western Australian Government’s Sustainable Health Review and its commitment to patient-centred, innovative and sustainable care.

In the context of the Sustainable Health Review Terms of Reference listed below, what is needed to develop a more sustainable, patient-centred health system in WA?

The mix of services provided across the system, including gaps in service provision, sub-acute, step-down, community and other out-of-hospital services across WA to deliver care in the most appropriate setting and to maximise health outcomes and value to the public

Post discharge Follow Up service

Survivors and their loved ones need follow up and support in order to access the resources required to not only live but live well after stroke.

Stroke is no longer a death sentence for many; however, for the almost 45,000 stroke survivors living in our community, the impact of stroke is far reaching and their recovery journey continues long after their hospital discharge. Many stroke survivors speak of falling into a ‘black hole’ once they are discharged from hospital. The often profound and prolonged brain injury resulting from stroke can severely impact a survivor’s ability to navigate an often complex health and welfare system.

This is made worse by inconsistent discharge planning from the hospital system. In Western Australia, only 43 percent of acute stroke patients are sent home from hospital (or to
rehabilitation) with a care plan to continue their recovery, while up to one-third of patients are discharged from acute settings without secondary prevention medication to stop stroke striking again.\(^1\)

A 2012 study of stroke survivor needs found 96 percent of those surveyed reported having ongoing physical, psychological or social needs after their stroke. Of those, 84 percent had needs that were not fully met. Despite this, there is no coordinated system of patient follow up by liaison workers or community nurses, as is the case with other health conditions such as diabetes. As a result, stroke survivors and their loved ones are being left without the vital services, information and support they need to enjoy good health outcomes.

The Stroke Foundation has developed a patient follow up service providing an independent, specialist health professional to support stroke survivors following their discharge from hospital to home. This service links survivors and their families with services in the community that are best placed to meet their needs. This includes a referral to an innovative online information and stroke recovery tool enableMe. enableMe is a specialist web resource and community developed by Stroke Foundation to empower stroke survivors and their loved ones to take control of their recovery.

The Stroke Foundation delivers this Follow Up service to stroke patients in Queensland with the support of the Queensland Government. Evaluation of the Follow Up service in Queensland found stroke patients who accessed the service had an increased understanding of stroke, its impact and the recovery process. They also had greater confidence in self-managing their recovery in the community. Ninety six percent of evaluation participants were satisfied with the service, while 95 percent agreed it was helpful. The service is also delivered in Victoria with the support of the Ian Rollo Currie Estate Foundation, and a recent commitment from the Australian Capital Territory government will deliver follow up services to ACT stroke survivors in 2017.

**Recommendation**

The Western Australian Government introduce the post discharge patient-centred Follow Up service, in order to help Western Australians to live well after stroke, reduce stroke’s impact on families and the community, and deliver savings to the health system by managing stroke survivors better in the community and preventing readmission to hospital.

**Ways to encourage and drive digital innovation, the use of new technology, research and data to support patient-centred care and improved performance**

**Telestroke services**

When someone suffers a stroke, every minute counts. The sooner treatment is provided, the better the chance of a good recovery. There have been significant advances in stroke treatment, including the ability to dissolve stroke clots (thrombolysis), and now a new therapy to remove clots with a mechanical device via a procedure called endovascular thrombectomy. These treatments are proven to save lives and reduce disability; however, access for Western Australians is limited in part due to their time-critical nature. Thrombolysis must be delivered

\(^1\) National Stroke Audit – Acute Services Audit (2015)
within a 4.5 hour window from symptom onset, while endovascular thrombectomy has a six hour window from symptom onset.

All Western Australians need and deserve access to best practice, time-critical stroke treatment.

Population analysis reveals those living in regional Australia are 19 percent more likely to suffer stroke than those in urban centres, partly due to an ageing population. Statistics have shown that the further people live from major Australian cities, the poorer their health and the lower their life expectancy.

Hospitals with specialist staff and stroke units are proven to deliver improved outcomes for survivors, but due to the small numbers of patients treated for stroke, many rural hospitals do not have stroke units or specialist treatment and care teams. Many stroke specialists, who play an essential role in diagnosing or treating stroke, work predominantly in metropolitan areas.

Further investment in telestroke services will improve access to high quality care and life-saving time-critical treatment across Western Australia.

A comprehensive telestroke service has been implemented in Victoria demonstrating the ability to facilitate rapid clinical decision-making and treatment of stroke by seamlessly connecting rural and regional emergency departments to a roster of metropolitan based neurologists. The Victorian Stroke Telemedicine (VST) project utilises innovative technology to break down barriers to best practice, time-critical stroke treatment.

In Western Australia, only 44 percent of stroke patients are treated in a stroke unit, compared with a national average of 67 percent. In addition, only six percent of those with a stroke caused by a clot receive life-saving but time-critical clot-busting treatment, while best Australian hospitals achieve a rate of 20 percent. The introduction of a telestroke service in Western Australia will increase access to stroke specialists in regional areas and reduce current stroke care inequity.

**Recommendation**

The Western Australian Government help lead the way nationally by implementing an innovative telestroke service – including regional trials – improving access to best practice life-saving, disability reducing stroke treatment for rural and regional Western Australians.

**Opportunities to drive partnerships across sectors and all levels of government to reduce duplication and to deliver integrated and coordinated care**

**Implementation of the Western Australian Stroke Services Plan**

Good stroke care relies on a central plan to guide resource allocation and to ensure the right services are available in the right locations. The development of a Western Australian Stroke Services Plan

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5 Ibid
Services Plan was warmly welcomed by the Stroke Foundation but appropriate resources must be allocated to continue its implementation.

**Recommendation**

The Western Australian Government implement its Stroke Services Plan to ensure best-practice stroke care is delivered to all Western Australians.

**Ways to drive improvements in safety and quality for patients, value and financial sustainability, including cost drivers, allocative and technical efficiencies**

**Community education campaign of the signs of stroke (F.A.S.T)**

Stroke can be prevented, it can be treated and it can be beaten.

Stroke places a significant, avoidable burden on the Western Australian community because not enough people know how to prevent stroke or how to recognise and act promptly at the first sign of stroke.

More than 80 percent of strokes can be prevented through lifestyle changes and managing risk factors. Stroke risk factors are highly prevalent in Western Australia, with 17 percent of the population living with high blood pressure – the biggest modifiable risk factor.\(^6\) High cholesterol affects 26 percent of the population, while 45 percent of Western Australians are physically inactive.\(^7\)

The Stroke Foundation has developed several programs to improve community awareness of the risk factors of stroke. These include My Health for Life, which aims to raise awareness of high blood pressure in the community by working in partnership with pharmacies, as well as Australia’s Biggest Blood Pressure Check, which enables opportunistic health checks in community settings, including workplaces, pharmacies, community groups and events.

Every stroke is a medical emergency which requires urgent hospital treatment.

If a stroke is caused by a clot (the majority are), with time-critical treatment the damage can be stopped. However, clot-busting drugs can only be administered within 4.5 hours and endovascular thrombectomy can only be delivered within six hours of symptom onset. Sadly too many patients arrive at hospital outside this critical time-window. Failure to act when symptoms arise is widely acknowledged as a significant factor in stroke treatment delay.\(^8\)

Many Western Australians don’t act because they cannot recognise a stroke. Currently only one-third of Australians can recognise three signs of stroke. Too often those who experience stroke symptoms delay calling an ambulance; many hoping symptoms will alleviate or calling friends, family or their GP. Every minute treatment is delayed stroke destroys up to 1.9 million brain cells.\(^9\)

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\(^7\) Ibid
The Stroke Foundation has been successful in raising awareness of stroke signs through promotion of the F.A.S.T (Face, Arms, Speech & Time) message. Australian Government funding supported a national rollout of a mass media advertising campaign in early 2014, and philanthropic funding supported a regional pilot of community-based awareness activity in Wagga Wagga and Warrnambool in that same year. Both approaches demonstrated the effectiveness of the F.A.S.T message in increasing community awareness. Specifically, an evaluation of the F.A.S.T mass media advertising campaign showed that the proportion of people who could recall one or more signs of stroke unprompted had increased to 87 percent, while the proportion of people who would call 000 if they or someone they were with was having a stroke had increased to 76 percent. These results have also been reflected internationally with an evaluation of the F.A.S.T marketing campaign in the UK showing that awareness of stroke symptoms had increased to 60 percent, while the return on marketing investment was 28:1.

There is now an opportunity to empower community volunteers, including stroke survivors and carers, to deliver this community education program across Western Australia. This will be achieved through the delivery of StrokeSafe talks aimed at educating the community about stroke risk factors and prevention, and increasing the awareness of the F.A.S.T message, ensuring that the community understand the importance of getting to hospital in the critical time window for life-saving treatment.

**Recommendation**

The Western Australian Government support a community education program to increase public awareness about how to prevent stroke and speed up treatment, by empowering volunteers to deliver StrokeSafe talks across the state. Prevention of strokes and F.A.S.T access to treatment means a greater chance for recovery and decreased costs for our health system.

**The key enablers of new efficiencies and change, including, research, productivity, teaching and training, culture, leadership development, procurement and improved performance monitoring**

**Stroke Care Coach for hospitals**

Despite significant advancements in the treatment for acute stroke and the best efforts of health professionals and hospitals, many Western Australians are missing out on best practice care. We know that the gap between the care recommended in the Clinical Guidelines for Stroke Management\(^\text{10}\) and what actually happens in our health system is resulting in increasing costs and a greater burden of death and disability associated with stroke.

The Stroke Foundation has developed a program called Stroke Care Coach for hospitals, to improve adherence to best-practice, evidence based Clinical Guidelines. This program utilises data on adherence to Clinical Guidelines and links this to quality improvement activities to drive improved quality of care. The Stroke Foundation is currently delivering this service in other states, where it has increased the capacity for stroke hospitals to support and inform stroke patients, better preparing survivors and their loved ones for life after stroke.

Stroke Care Coach could work in all Western Australian stroke hospitals by:

- Funding a Stroke Foundation health professional to work one-on-one with clinicians to improve treatment and care in line with best-practice guidelines and audit results.
- Linking stroke clinicians to InformMe, an online health professional training and information portal and EnableMe, an online patient information and recovery portal. These will be built on by other stroke information resources including My Stroke Journey.
- Adopting a ‘train the trainer’ approach to engage local stroke clinical champions to support ongoing improvements across the stroke system.
- Assisting health professionals to improve the information and support they provide to stroke patients on discharge. This includes increasing awareness of and access to StrokeLine, a telephone support service for stroke patients and their families funded and provided by the Stroke Foundation. This model can also work effectively in conjunction with the proposed follow up service as described earlier.

**Recommendation**

The Western Australian Government introduce the Stroke Foundation Stroke Care Coach program for hospitals. Stroke Care Coach will empower hospitals to improve the support they provide to stroke patients, linking hospital staff and their patients with resources, training and information. Stroke Foundation Stroke Care Coach for hospitals will ensure Western Australian stroke patients have access to best practice treatment and care, and are better prepared to manage life after stroke and drive their own recovery, which will deliver savings to the health system.