

# Better stroke care for all Australians

Pre-Budget submission  
2017-2018

[strokefoundation.org.au](http://strokefoundation.org.au)



Stroke is treatable and beatable but only if patients can access high quality stroke treatment fast. There is currently a huge variation in the quality of stroke care delivered in Australian hospitals and thousands of people are not getting the care that will save lives and reduce disability.

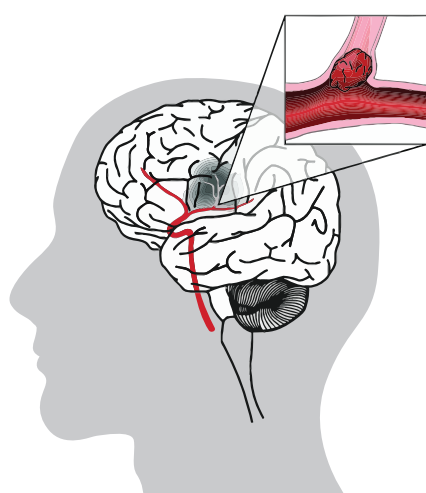
There is an opportunity to vastly improve access to stroke treatment and support across Australia so more patients survive and avoid significant disability. A concerted national approach is required to ensure that quality stroke care is provided to all parts of Australia, including often neglected regional areas.

The Stroke Foundation calls on the Australian Government to commit to action that will save and improve lives.

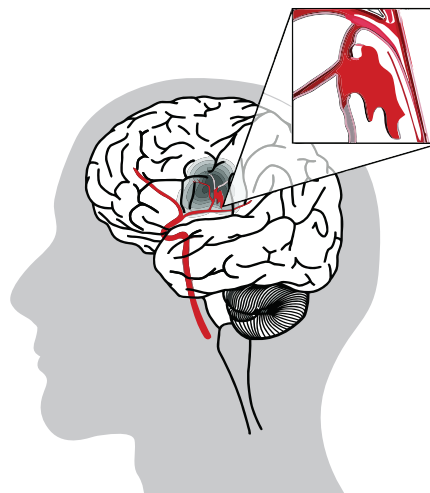
## What is a stroke?

Stroke attacks the brain – our most vital organ. A stroke occurs when blood supply to the brain is cut off because of a clot blocking an artery (ischaemic stroke) or due to a burst artery (intracerebral or haemorrhagic stroke). When blood supply to the brain is blocked brain cells begin to die at a rate of 1.9 million each minute.

Every stroke is different depending on where in the brain it strikes and how severe it is. What is common is the devastation it can cause to the survivor, their carer and family. It remains one of the leading causes of disability for Australians.



**Clot**  
(ischaemic stroke)



**Bleed**  
(intracerebral stroke)

## Five stroke facts

- › Stroke kills more women than breast cancer and more men than prostate cancer.
- › One in six people will have a stroke in their lifetime.
- › In 2017 an estimated 55,000 strokes will occur – one every 10 minutes.
- › One-third of stroke survivors are of working age.
- › Sixty-five percent of those living with stroke also suffer a disability that impedes their ability to carry out daily living activities unassisted.



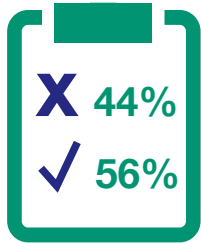
# At a glance

## The challenge

## The solution

## The result

1.



Almost half of clinicians are NOT routinely using *Clinical Guidelines for Stroke Management*

Best practice clinical support and education program for health professionals

Investment = \$2.9 million over three years



Patients receive consistent care according to best practice guidelines

2.



Regional patients are 2.5 times less likely to be able to access breakthrough thrombolysis treatment

Continue national expansion of Stroke Telemedicine into NSW

Investment = \$2.2 million over two years



Regional hospitals get access to stroke experts 24/7 using cost-effective technology

3.



New treatments are only useful if administered in the first 4.5 hours of a stroke

Ongoing community education campaign of the signs of stroke (F.A.S.T.)

Investment = \$10 million over four years



Australians of all ages know the signs of stroke and to call an ambulance

4.



44% of patients are discharged with no plan for community support to aid recovery

Deliver post-discharge follow up service nationally

Investment = \$20 million over four years



Patients supported to make their best possible recovery plus up to \$30 million in savings



## Empowering clinicians to drive better treatment and care

Queensland social worker Peta McLean is passionate about using evidence to transform the lives of her stroke patients. A senior clinician at the Maryborough Rehabilitation Unit, Peta has driven staggering improvements in the assessment and treatment of mood and psychological impairments. It was a devastating patient experience that motivated Peta's efforts. After a stroke patient committed suicide post-discharge in 2012, she realised the Unit needed to address the lack of appropriate mood disorder screening and management.

Using the Stroke Foundation's **Clinical Guidelines** to guide evidence-based practice, Peta (in front) and her colleague Rebecca Torkington developed a Post Stroke Mood Assessment Pathway to improve care and patient outcomes. This initiative drove significant improvements, with the service increasing their compliance to best practice by 14 percent and increasing patient interventions by 40 percent. The Stroke Foundation's most recent **Audit** revealed the Maryborough Rehabilitation Unit benchmarked in the excellence range after this quality improvement activity and topped the State in management of mood disorder screening. Peta and her colleagues know there is more work to be done but she is confident with the support of the Stroke Foundation the service will continue to improve patient care and outcomes.

**"I am very pleased to have the Stroke Foundation's *Clinical Guidelines* to provide guidance and recommendations around the assessment and management of mood in stroke patients."**

## Best practice clinical support and education program for health professionals

**Recommendation:** Embed newly updated stroke clinical guidelines into hospital practice through use of an innovative online clinical support tool.

**Investment required:** Initial \$2.9 million over three years to fund the living guideline pilot and clinical support program for stroke.

The recent update of the stroke clinical guidelines, funded in part by the Australian Government (\$600,000), will result in a set of recommendations for stroke clinicians that reflect the latest international evidence. Substantial improvements to health outcomes can be realised if these guidelines are embedded into daily clinical practice for stroke care.

Stroke Foundation National Audit results indicate stroke clinicians are not routinely using clinical guidelines to guide their treatment and care decisions, resulting in significant variations in treatment access and clinical outcomes for patients across the country.

The Stroke Foundation has invested \$350,000 to develop an innovative online clinical support tool (InformMe), which provides easy access to stroke clinical guideline recommendations as well as local hospital performance data against key quality indicators.

The InformMe site is optimised for mobile and tablet use ensuring it can be accessed as a decision support tool by

clinicians at the bedside. It also provides ready access to local hospital performance data so gaps in care can be identified and targeted for improvement efforts.

To capitalise on the investment in new stroke clinical guidelines, we recommend the Federal Government seeks to partner with state governments on a clinical guideline implementation program that includes:

- › Funding for a three-year, \$2.3 million program of clinical support to increase awareness and usage of InformMe, an online clinical support tool that provides ready access to clinical guidelines, tailored hospital performance data, learning modules and template quality improvement plans.
- › Funding for a three-year, \$600,000 pilot of a 'living' or 'continuously updated' stroke clinical guidelines, which will keep clinical practice recommendations up-to-date through continuous review. Learnings from this pilot could be applied to guideline developers across the health system.



## Telemedicine saves lives

Sue Mahony lives in the small Victorian town of Skipton. In June 2012, Sue was team manager for her local footy team and was about to head off for the game when she started to feel extremely unwell. Sue's husband Rob called 000 and Sue was taken to her local hospital. Upon arrival hospital staff realised Sue was having a stroke and her life was in danger.

Utilising telemedicine, the emergency doctor dialled in to The Royal Melbourne Hospital more than 100 kilometres away. The neurologist confirmed the stroke diagnosis, authorised for Sue to be administered clot-busting medication and called for her to be flown to Melbourne for ground-breaking clot retrieval surgery. If Sue had not had access to treatment she would have had a one percent chance of survival. Thanks to telemedicine, Sue was in hospital for less than a fortnight and has made a close to full recovery.

**"I am very grateful for The Royal Melbourne stroke team, St John's Hospital, and the paramedics from Ballarat... if it wasn't for them I wouldn't be here today."**

## Continue national expansion of stroke telemedicine services into New South Wales

**Recommendation:** Begin to close the regional stroke care gap by using proven telehealth technology to deliver 24/7 access to stroke clinical expertise and time-critical hyperacute therapy to regional patients.

**Investment required:** Initial \$2.2 million over two years to expand stroke telemedicine service to NSW.

Population analysis reveals those living in regional Australia are more likely to suffer stroke than those in urban centres.<sup>1</sup> In regional Victoria and northern New South Wales alone there are 5,000 new strokes each year. These strokes occur in areas where there is limited access to stroke specialists and therefore limited treatment options. However the Victorian Stroke Telemedicine (VST) project is changing this.

When someone suffers a stroke, every minute counts. The sooner treatment is provided, the better the chance of a good recovery. The VST project is proving that technology can help to close the regional care gap by linking patients arriving in regional hospitals to world-leading stroke clinicians via video-link. The VST now provides 24/7 access to rapid assessment and treatment to 16 regional hospitals in Victoria, increasing the number of patients who receive access to life-saving hyperacute therapy including clot-busting thrombolysis and endovascular clot retrieval.

The Stroke Foundation supports the expansion of stroke telemedicine services to more regional areas of Australia. We recommend an initial investment of \$2.2 million to expand the service into NSW with consideration for further expansion over time.

We share the ultimate vision of a national network of stroke telemedicine services supported by a national roster of expert treating neurologists that will take access to world-class stroke care to all corners of Australia.

A stroke telemedicine service has been established (and is working well) in Europe and North America, and with more than 1000 consultations to date the VST project is demonstrating its applicability in Australia.

All Australians deserve access to the best stroke treatment – telemedicine can bring us closer to this goal.



## Stroke Foundation campaign leads to FAST action

Queenslander Neil Collie has his wife Sharon (pictured left) to thank for saving his life. Neil went to bed early one night and woke up 30 minutes later to find half his face had drooped and half his body had gone numb. Neil tried to tell Sharon about what he was experiencing but his explanation made no sense and when he struggled to count from one to 10, she knew something wasn't right.

Thankfully Sharon had seen the Stroke Foundation FAST message on Facebook and realised Neil was suffering symptoms of stroke when he complained of numbness of the arms and legs. She took Neil straight to hospital where he received clot-busting treatment. Thanks to Sharon's knowledge of FAST and quick thinking Neil made an excellent recovery.

**"I was very lucky my wife had taken the time to look over me and that she had also seen the Facebook post."**

## Community education campaign of the signs of stroke (FAST)

**Recommendation:** The goal is for every Australian household to have someone who know the signs of stroke and to call 000.

**Investment required:** \$10 million over four years.

Every stroke is a medical emergency which requires urgent hospital treatment. Approximately 80 percent of strokes are caused by a blood clot in the brain. Clot-busting treatment has been used to treat stroke in Australia for more than a decade and has been shown to reduce disability caused by stroke but the latest [Stroke Foundation Acute Audit](#) shows access to this life enhancing treatment remains static at seven percent nationally. If more people knew the signs of stroke and dialled 000 then more people could receive this time-critical treatment.

Clot-busting drugs can only be administered within 4.5 hours of stroke 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.<sup>2</sup>

Many people in Australia don't act because they cannot recognise a stroke. Currently only one-third of people can recognise three signs of stroke.

Half of those who experience stroke symptoms delay calling an ambulance, many hoping symptoms will alleviate or will elect to call friends, family or their GP.

The FAST test is a proven community awareness raising tool that, when promoted widely, increases knowledge of stroke signs and results in more calls to 000 for stroke.

Australian Government funding supported a national rollout of the 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 FAST message in increasing community awareness.

The central feature of the FAST campaign is mass media advertising using a pre-existing 'Fire in the Brain' television commercial and associated print, radio and online promotion. Given the success of our regional pilot we propose to enhance the mass media campaign by utilising trained volunteers in regional areas to raise awareness of stroke signs and stroke risk through community talks and community engagement.

The FAST test is an easy way to remember and recognise the signs of stroke. 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.**

The Stroke Foundation is calling for an investment of \$10 million over four years to fund a comprehensive campaign to embed stroke knowledge in the community and increase access to time-critical, life-saving treatment.





## Connecting survivors to vital support

Queenslander Janette Bingham (pictured in the white shirt with her family) was 58 and considered herself healthy and well. She was leading a full life, enjoying time with her grandchildren and working full-time as a midwife at a Queensland hospital. Then she was struck down by stroke.

After an initial hospital stay, Janette was discharged. Although she had received excellent hospital care, Janette was not given a recovery plan and when she returned home she experienced difficulties adjusting to life after stroke.

Fortunately Janette was able to access the Stroke Foundation's Follow Up program. On her return home, Janette was contacted by the Stroke Foundation – a health professional called to check in, see how she was doing and if she needed help. Follow Up connected Janette to the support and ongoing rehabilitation she needed. It helped her work through the immediate difficulties of stroke recovery as well as work towards her goal of returning to work.

**“That phone call helped me. Stroke Foundation helped me to get the rehabilitation I needed and even get to the rehabilitation – I couldn't drive so they even organised cabs to and from rehab for me.”**

## Deliver post discharge Follow Up service nationally

**Recommendation:** Fund a service to follow up and support stroke patients after hospital discharge

**Investment required:** \$20 million over four years.

Many stroke survivors speak of falling into a 'black hole' once they are discharged from hospital without follow up and support in the community.

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 in order to access the support and services they need to aid and maximise their recovery.

This is made worse by inconsistent discharge planning from the hospital system. More than four-in-10 acute patients are discharged without a care plan; half of patients in rehabilitation hospitals don't get information on stroke and secondary prevention and up to one-third of patients across the stroke system are discharged without secondary prevention medication to stop stroke striking again.<sup>3</sup>

A 2012 study of stroke survivor needs found 96 percent of those surveyed reported having ongoing physical, physiological or social needs after their stroke. Of those, 84 percent had needs that were not fully met. Despite this there is no coordinated national system of patient follow up by liaison workers or community nurses, as is the case with other health conditions. As a result, those in need and without the ability to seek support are left to suffer in silence and unable to access the assistance and information needed to drive their recovery.

We recommend investment in the Stroke Foundation's patient Follow Up service which provides a trained

health professional to support every stroke survivor following their discharge from hospital to home. This service links them and their families with available support services in the community appropriate to their needs. This includes a referral to an innovative online information and stroke recovery tool the Stroke Foundation has developed for stroke survivors.

The Stroke Foundation currently delivers this follow up service to stroke patients in Queensland, with state government funding and has secured philanthropic funding to commence a small pilot follow up service for patients in New South Wales and Victoria. A recent commitment from the Australian Capital Territory government will deliver follow up services to ACT stroke survivors in 2017. National rollout based on existing program infrastructure could commence during 2017/18 with Government support.

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.

Deloitte Access Economics estimates that fully rolled out, StrokeConnect would result in nearly 1,300 survivors regaining their functional independence each year contributing to a cost savings of over \$30 million per year.<sup>4</sup>

# Stroke in Australia

**2055:**  
**1 million**  
stroke survivors

growing to  
**135,000**  
new strokes each year







**+55,000**  
new strokes each year

**2017:**  
stroke survivors =  
**470,000**

The Stroke Foundation is a national charity that partners with the community to prevent, treat and beat stroke. We stand alongside stroke survivors and their families, healthcare professionals and researchers. We build community awareness and foster new thinking. We support survivors on their journey to live the best possible life after stroke.



## 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

-  **1300 194 196**
-  **strokefoundation.org.au**
-  **/strokefoundation**
-  **@strokefdn**
-  **@strokefdn**

## References

<sup>1</sup> [http://www.ruralhealth.org.au/sites/default/files/publications/cardiovascular-disease-fact-sheet\\_0.pdf](http://www.ruralhealth.org.au/sites/default/files/publications/cardiovascular-disease-fact-sheet_0.pdf)

<sup>2</sup>(1999) Wester P, Rådberg J, Lundgren B, Peltonen M. Factors associated with delayed admission to hospital and in-hospital delays in acute stroke and TIA: a prospective, multicenter study. Seek-Medical-Attention-in-Time Study Group.  
(2015) Factors delaying hospital arrival of patients with acute stroke – V. V. Ashraf, M. Maneesh, R. Praveenkumar, K. Saifudheen, and A. S. Girija

<sup>3</sup>National Stroke Audit Acute Services Report 2015 – <https://informme.org.au/en/stroke-data/Acute-audits>

<sup>4</sup> <https://strokefoundation.org.au/what-we-do/research/economic-impact-of-stroke-in-australia>