

## NSW Telestroke Service

# The Reperfusion Times

An internal newsletter for staff at NSW Telestroke Service Referring Sites

October 2022

## Medical Director's Foreword

In late July, the 11 Neurologists on the NSW TSS gathered in Sydney for our first annual NSW TSS VMO day. It was a great opportunity to get together in person, review where the service is up to and how we as a consultant group can continue to improve it.

One of the aspects that differentiates the NSW TSS from other virtual stroke services is our triage tool. Having the ability to screen and identify which patients will be eligible for reperfusion therapy, using the Acute Stroke Assessment Protocol (ASAP) is an important part of sustainable service delivery. Since the first sites went live on the NSW TSS, over 8000 patients have been assessed via the ASAP tool.

Of those patients, about half are identified as candidates for hyperacute stroke assessment and contact is made with the NSW TSS. Almost 2700 consults have resulted from this process and last month we reached the milestone of 500 patients recommended for reperfusion therapies. As reperfusion interventions can limit the harm caused by acute ischaemic strokes, the sooner the intervention is made, the greater the potential to salvage brain function. These treatment rates reassure us that we are heading in the right direction, as we work to improve access to reperfusion therapies for stroke in Regional and Remote NSW. Although perhaps less 'sexy' than the number of patients treated, the number screened is equally important. A large number of FAST positive patients in the pre-telestroke era may have undergone complete stroke workups, including unnecessary scans. These scans increase risks to individual patients and costs to the healthcare system. These are important numbers that help us understand the true impact of the service, so once again thank you to all who help us collect them.

Face-to-face multidisciplinary team patient care is another important aspect of stroke care. The roster of NSW TSS Neurologists celebrates with the many and varied MDTs they work with across the state in Emergency Departments and inpatient settings, to reach this important milestone of therapy delivered.

All the best, Ken

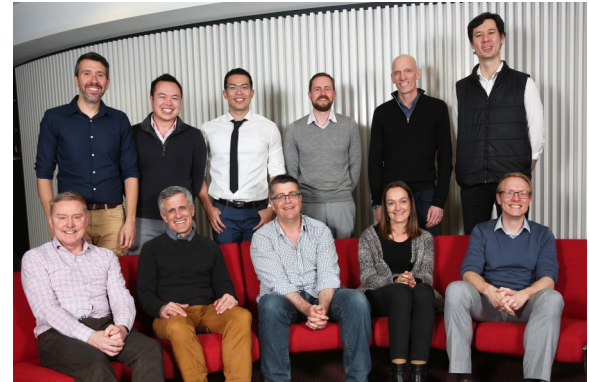


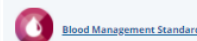
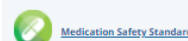
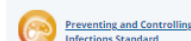
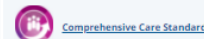
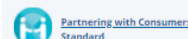
Photo: NSW TSS Neurologists

## NSW TSS Recognition and Milestones

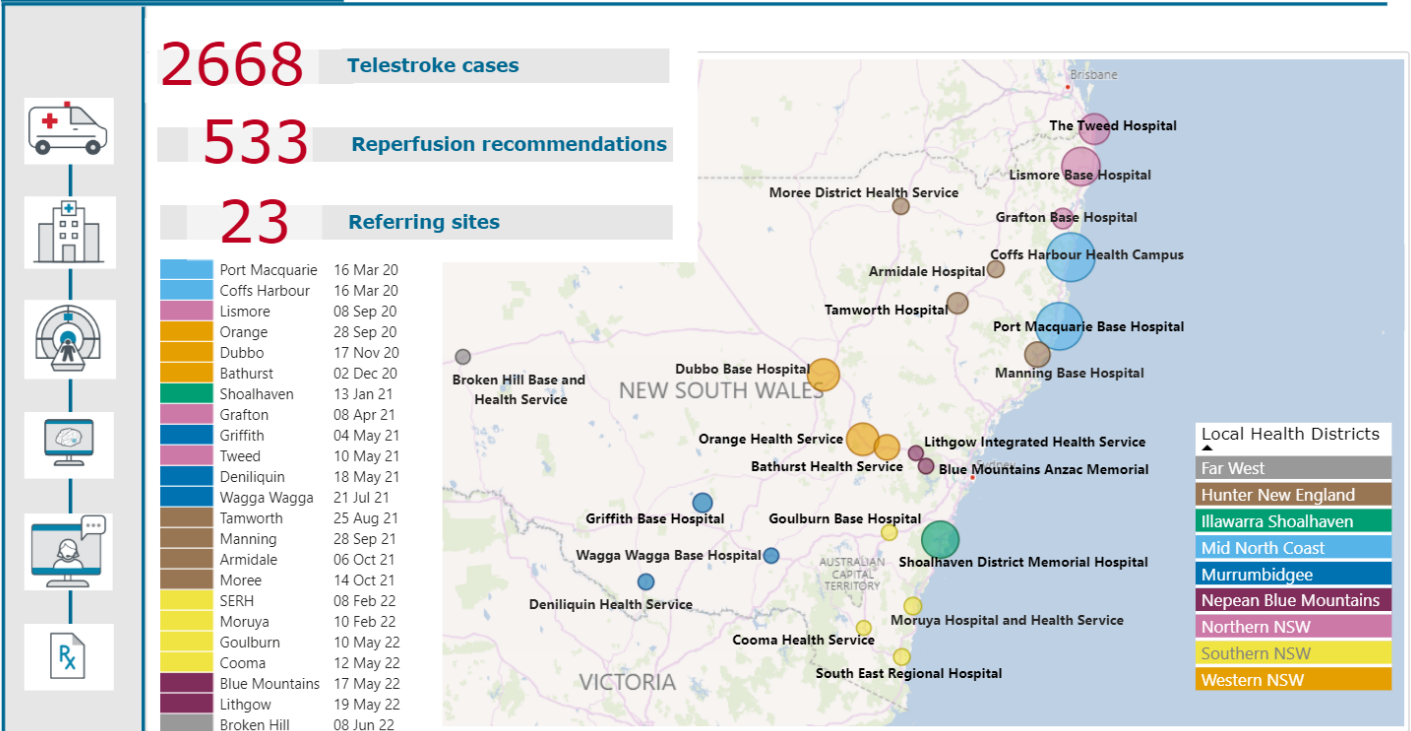
- **Stroke Recovery Association** hosted the "Creating Connections Forum". The focus of the event was on ECR with a panel of clinicians including Fiona Ryan (SCC) and a patient from Orange, who had received ECR. It was a wonderful opportunity to hear his experience during the treatment process
- Congratulations to Lismore Base Hospital for receiving recognition in 2022 Q2 **World Stroke Organisation Angels Awards**
- Congratulations to the NSW TSS Working Group for their successful presentation in August at the **2022 Stroke Society of Australasia** in New Zealand
- The NSW TSS has been selected as a finalist for the 2022 **SESLHD Healthcare Awards** in the Integrated Value Based Care category, to be announced in October

To share news of any updates or achievements at NSW TSS Referring Sites, please contact the editors of The Reperfusion Times [SESLHD-NSWTelestrokeService@health.nsw.gov.au](mailto:SESLHD-NSWTelestrokeService@health.nsw.gov.au) for feature in the next edition

National Safety and Quality Health Service Standards tagged throughout this newsletter



<https://www.safetyandquality.gov.au/standards/nsqhs-standards>



## Spotlight on 90 day follow up data

NSW TSS appreciates the efforts that everyone in the statewide team makes to collect 90 day follow up data for stroke and TIA patients. NSW TSS uses the EQ-5D questionnaire to measure health outcomes for our patient population. The continuing collection of EQ-5D data centres the patient experience in the design and improvement of Telestroke in NSW. The EQ-5D measures health related quality of life across five dimensions: mobility; self-care; usual activities; pain/discomfort and anxiety/depression.

The Euroqol website has a short overview video of the tool: <https://euroqol.org/eq-5d-instruments/>. EQ-5D is not stroke specific but is probably the most widely used health status questionnaire for stroke patients. A large body of research literature has validated and developed the use of EQ-5D data. The EQ-5D questionnaire is used in clinical trials, observational studies, population health surveys and for routine outcome monitoring. It facilitates the comparison of health across different types of patients, diseases and treatments. As NSW TSS moves out of its implementation phase to business as usual, routine collection of EQ-5D data will allow us to compare the experience of patients at NSW TSS Referring Sites:

- metropolitan stroke patients,
- stroke patients in other states and internationally,
- other telestroke models,
- patients with other health conditions, and
- the general population

Stroke is a leading cause of mortality and disability and stroke care involves significant resources. Your efforts continue to help build an evidence base that will help us target our efforts at reducing the disability burden of stroke.

## NSW TSS Education Update

The next **Introduction to Telestroke** webinar will take place on the 31st of October and be presented by Dr Timothy Ang.

The NSW TSS hosts these webinars quarterly and recordings of previous webinars are available as resource for sites should they wish to use them. These interactive webinars are designed to assist doctors in becoming familiar with the NSW TSS model of care and current evidence in hyperacute stroke care prior to them commencing their rotation at a NSW TSS Referring Sites. Invitations will be sent to all BPTs in the network due to rotate to a NSW TSS site on November 7th. For further details please contact [SESLHD-NSWTelestrokeService@health.nsw.gov.au](mailto:SESLHD-NSWTelestrokeService@health.nsw.gov.au)



# NSW Telestroke Service: LHD Spotlight

## Illawarra Shoalhaven LHD



This issue we visit the Illawarra Shoalhaven Local Health District and its referring site Shoalhaven Hospital.

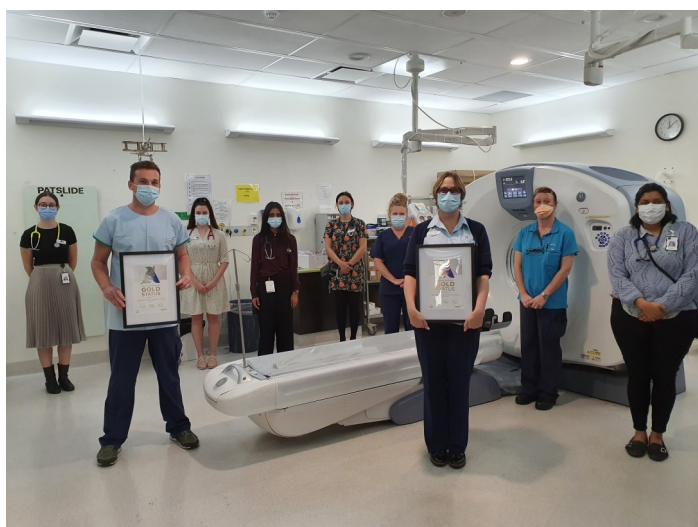


Photo: Shoalhaven Stroke Team

### Shoalhaven

With the support of the NSW TSS, Shoalhaven has now provided thrombolytic therapy to 57 patients since the service commenced in January 2021. Previously, these patients would have had to transfer outside of their Local Health District and risk missing the tight timeframe for reperfusion therapies.

Shoalhaven is expected to increase its Stroke Unit bed capacity from 4 to 9 beds following a hospital rebuild. A model of care restructure will also ensure patients who have received thrombolysis, will be managed in the dedicated stroke unit. Continuing education for medical and nursing staff in ED, ASU and ICU, help ensure the site maintains consistent delivery of the NSW TSS model of care.

A reflection of this hard work is the WSO Angels Platinum Award that Shoalhaven received in Q1 2022.

## NSW TSS Neurologist Spotlight ISLHD

### Prof Ken Butcher | Shoalhaven NSW TSS Site Neurologist

Shoalhaven Hospital was another of the greenfield sites implemented to the NSW TSS. As a site who had previously never thrombolysed patients and were on ambulance bypass, Shoalhaven are a credit not only to the implementation of the service, but to the hard working and dedicated local team who worked to embed the service locally. It is a testament to Donna Jay (CNC) and the local clinicians, the consistent patient assessment and treatment metrics and the provision of high quality acute stroke care.

**FUN FACT:** Like any good Canadian I have been known to let off steam by carving up the ice in a fiery game of Ice Hockey. I also get a lot of enjoyment out of carpentry and much to my wife's displeasure, I have tasked myself with being the main carpenter for our current house renovations.



## ACI Stroke Network Update

The **NSW Stroke Peer Mentorship Program** is up and running with 7 participants from NSW TSS Referring Sites attending RPA, RNSH and POWH since July. For further details please contact [aci-stroke@health.nsw.gov.au](mailto:aci-stroke@health.nsw.gov.au)

The ACI Stroke Network are developing a **Clinical Practice Guide** for thrombolysis in acute ischaemic stroke. An EOI to join the working group on this document will be circulated shortly

The TACTICS Virtual Reality Platform will soon launch a **Stroke Nursing Application** on the headsets

Statewide consultation regarding **stroke incentive funding** is underway. If you would like further details, please contact [aci-stroke@health.nsw.gov.au](mailto:aci-stroke@health.nsw.gov.au)

The extended time window of "last known well" project with **NSW Ambulance** is planning the next phase of the roll out across NSW with the 7 rural and regional LHDs. Updates will be provided soon

Congratulations to all the presenters and poster entries in the **2022 Smart Strokes Conference**



Photo: Members of the Rural Stroke Network presenting at Smart Strokes

# NSW Telestroke Service: eHealth update

## EIR celebrates 10 years... but what is the EIR?



NSW Health completed the first phase of an ambitious project to create a state-wide health imaging exchange in 2012. Prior to the **Enterprise Imaging Repository (EIR)**, it was extremely challenging to access imaging performed across health district borders. In some instances it could take days for CDs containing patient images to be physically sent between hospitals. The EIR is a centralised archive sharing digital radiology images & reports between all public hospitals in New South Wales. EIR archives 3.5 million studies each year from all 15 NSW Local Health Districts, Sydney Children's Hospital Network, St Vincent's Hospital & the Northern Beaches Hospital.

### How does NSW TSS use EIR?

EIR supports the NSW TSS by providing a platform to store and view CT images. CT scanners at NSW TSS Referring Sites are configured to auto-send images directly from the CT scanner when a hyperacute stroke work-up is performed using the NSW TSS order set, allowing our neurologists to review the CT scan in real-time. This is why it's important for radiographers to use the dedicated Telestroke protocols setup on their CT scanners. Through EIR, our neurologists can also access patient's prior imaging from NSW public hospitals. This provides our neurologists with a more complete knowledge of each patient's prior medical history. NSW TSS neurologists access EIR directly, however most clinicians will access EIR images via a Healthnet link in local eMRs.



Photo: EIR Team (L-R) Kenny Yung, Kaine Tilley, Molly Sheppard, Peter Csontos, Eddy Yip

### Benefits of the EIR include:

- Ability to provision statewide telehealth services for regional & rural NSW. i.e. NSW Telestroke Service
- Remote viewing of images for specialist opinion. Specialist services can review scans remotely to prioritise patients who might require urgent care in a tertiary centre. When patients do not require transfer to a tertiary centre, the burden of unnecessary patient transfers is avoided
- Reduction of repeat imaging (due to access issues) is avoided along with unnecessary use of radiation for patients who are transferred between hospitals
- Ability to compare to historical images. Prior studies can be easily retrieved from the EIR to provide clinicians with a patient's public hospital imaging record. The ability to compare to relevant prior studies can provide valuable context for some radiological findings

### What next for the EIR?

- EIR celebrates its 10<sup>th</sup> anniversary this year
- Work to increase the EIR's scope with the inclusion of further imaging specialties
- Hosting Medsync - eHealth have released the [Medsync](#) app in MS Teams for storage of clinically-relevant images (photos taken by clinicians on their camera-phone). Applications for this service include wound management, podiatry, community health and more

## WOW migration from SfB to MS Teams

eHealth are now halfway through the migration from SfB to MS Teams on the NSW TSS WOWs. SNSWLHD, MLHD, ISLHD, WNSWLHD are now all on MS Teams.

Next in line is the HNELHD with dates to be confirmed for the MNCLHD and the NNSWLHD.

### Teams Tip: Finding the username for the WOW

The quickest and easiest option is to click on the picture icon at top right of MS Teams and advise the NSW TSS Neurologist of the WOW name to call.

