

Telestroke

Organisational models

STROKE PATIENT JOURNEY USING TELESTROKE

Stroke is a medical emergency. Patient outcomes are improved by timely access to specialist clinical diagnosis and management. Currently there is a significant gap in access to time-critical therapies in NSW when compared to international and national standards. This gap is more pronounced in rural and regional NSW.

The NSW Telestroke Service offers a way to deliver time-critical therapies closer to where patients live. Telestroke links specialist stroke physicians to referring hospitals using telehealth technology to support the delivery of stroke care. Telestroke enhances different points of the stroke patient journey.

1



Assessment

Telestroke enhances acute stroke identification and assessment through: collaboration between ambulance and referring sites to determine presentation facility, standardisation of stroke identification, triage and assessment protocols; and rapid, virtual interpretation of acute stroke imaging by remote specialist stroke physicians.

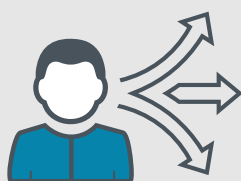
2



Hyperacute co-management

Telestroke enhances hyperacute stroke management through: shared virtual patient assessment and treatment with specialist stroke physicians, emergency clinicians and family/carers using telehealth technology; and timely access to reperfusion therapies if indicated.

3



Determine appropriate care pathway

Telestroke supports clinical decision-making and access to appropriate care pathways including: identification of patients requiring transfer to tertiary referral centres, local stroke unit care or ongoing neurological/medical care locally.

4



Ongoing care

The telestroke patient journey is continued locally with access to ongoing care including: multidisciplinary stroke unit care, access to rehabilitation, and transition to community and secondary prevention strategies with tailored patient education.

Operationalising telestroke

NSW TELESTROKE SERVICE (TSS)

- Establish medical director and operations manager roles; implement a rostering system to ensure 24/7 stroke physician coverage; install and maintain a centralised telestroke phone number
- Provide appropriate NSW Health IT equipment including rolling out access to a high quality imaging viewer for virtual consultants
- Implement standardised assessment and documentation tools
- Establish real-time clinical analytics to support quality improvement

TELESTROKE REFERRING SITE (TRS)

- Develop and implement a local acute stroke clinical pathway that includes a standardised emergency triage tool
- Revision of local stroke protocols, processes and workflows to include telestroke
- Education and training of clinical staff on telestroke clinical processes
- Engage local stroke coordinators to champion telestroke and support the coordination and ongoing care of the stroke patient
- Establish capability for acute stroke image acquisition including: equipment, 24/7 access to radiography services, and training for radiographers in acute stroke imaging acquisition
- Enhance or enable workstations on wheels with the NSW Health supported universal conference and collaboration platform to allow for virtual telestroke consults



SYSTEM ENABLERS

- Establish governance structures and clinical leadership both locally and centrally
- Partner with NSW Ambulance to review changes to transfer pathways and prehospital notification procedures
- Coordinate pre-hospital, emergency department and specialist care to enable care closer to home
- Provide a centralised imaging solution and high quality viewer with workstation capability
- Implement standardised protocols and procedures to support clinicians in the identification, assessment, diagnosis, treatment planning and documentation of care
- Recruitment of staff with the appropriate qualifications, skill and capability to provide high quality acute stroke consultation via a virtual platform
- Establishment of a highly specialised remote stroke workforce to provide 24/7 care using telehealth technology
- Collection and monitoring of clinical data to support patient safety and quality improvement