eHealth NSW
news

NSW GOVERNMENT | eHealth

Qudos Bank Arena
NSW Health Vaccination Centre

Chief Executive's message
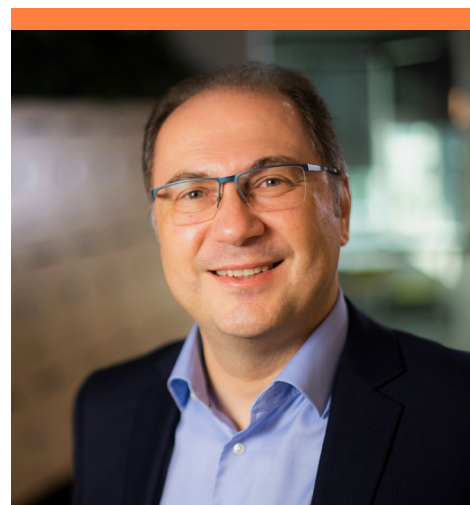
In this edition of eHealth NSW News, we highlight some of the innovative ways we've been supporting our clinical colleagues who have done a fantastic job delivering high quality care to the people of NSW during the ongoing pandemic.

This month, eHealth NSW introduced third dose and booster vaccination functionality into the NSW Health Vaccination Administration Management (VAM) platform as well as adding Moderna into the vaccination mix. VAM is also now sending email notifications with information on how to download a vaccination certificate, to ensure the public can access the new freedoms afforded to those who are double-dosed. Congratulations to the project team, our local health district colleagues and our industry colleagues for their collaboration and effort in reaching this important milestone.

eHealth NSW received a huge accolade being given an honourable mention as a finalist in the NSW Premier Awards Excellence in Digital Innovation category. We came second to the Department of Customer Services' COVID Safe check-in app, which indeed is a major digital innovation in its own right.

At the same time, we had finalist nominations for our partnership role supporting the NSW Telestroke Service, Sydney LHD's Turning the other cheek on COVID-19 quarantine testing program, the Covid-19 Critical Intelligence Unit, and NSW Health Pathology's 'Connecting patients and clinicians with results in real time to save lives' project. We were also pleased to be acknowledged as a key partner in Sydney LHD's winning 'Welcome to the NSW Health Mass Vaccination Centre' nomination in the Putting the Customer at the Centre category.

myVirtualCare has been growing in popularity across NSW with over 139,700 video consultations since its state-wide inception in September 2020, including 27,519 in October 2021. Convenience, saving time and COVID-19 restrictions are some of the reasons behind the recent rapid rise in the number of patients and clinicians using myVirtualCare. eHealth NSW has played a key role in the success of myVirtualCare by increasing data centre capacity to support much higher use of virtual care across the state.

The state-wide roll out of the Health Outcomes and Patient Experience (HOPE) platform continues to benefit both patients and clinicians, with 210 sites now live. The purpose-built Health Outcomes and Patient Experience (HOPE) platform was developed by eHealth NSW in partnership with the Agency for Clinical Innovation (ACI) and the Ministry of Health (MoH). It allows patients and their carers to provide

timely feedback while at the same time supporting the real-time collection of patient reported measures (PRMs).

eHealth NSW is working with the Ministry of Health and clinicians from Local Health Districts to deliver a new state-wide digital Outpatient Referral Management system. Known as the Engage Outpatients program, this new digital solution will ensure referrals from GPs to clinicians in the outpatient hospital setting, are managed more efficiently.

Considered one of the biggest digital change projects in NSW Health, the roll out of the state-wide Radiology Information Systems and Picture Archiving and Communications System (RIS-PACS) has continued unabated during COVID lockdowns. An essential initiative in ensuring medical imaging services remained active during the pandemic, RIS-PACS improves patient care by providing clinicians with access to complete imaging histories, comparison images and reports.

Stroke patients from across North West NSW now have 24-hour access to an innovative new telehealth service that is saving many lives in regional and remote NSW. Launched in March 2020, the NSW Telestroke Service is now available at sixteen locations in regional and rural NSW and connects local emergency physicians with expert stroke clinicians via video consultation.

As the year draws to a close, I would like to congratulate all our staff for their extraordinary efforts in an extraordinary year. And to all our LHD colleagues, Pillars, Specialty Networks, Ministry of Health colleagues and our Industry partners thank you for your support and collaboration during these unprecedented times.

Thank you,

Dr Zoran Bolevich

Chief Executive, eHealth NSW
Chief Information Officer, NSW Health

"As the year draws to a close, I would like to congratulate all our staff for their extraordinary efforts in an extraordinary year. And to all our LHD colleagues, Pillars, Specialty Networks, Ministry of Health colleagues and our Industry partners thank you for your support and collaboration during these unprecedented times."

Dr Zoran Bolevich

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How COVID-19 drove our speed of innovation and collaboration to new heights

Since January 2020, the COVID-19 virus has impacted all facets of society, including businesses, families, and individuals. NSW Health and our frontline health workers have been at the forefront of providing care to sick or vulnerable members of our community.

eHealth NSW is proud to have worked alongside NSW Health's local health districts (LHDs) and its vendor partners to support the COVID-19 vaccination effort. Its vaccination administration systems, along with Sydney LHD's MyCovax solution, have been instrumental in helping NSW realise its double dose status and seeing an end to the lockdown. Recently, eHealth NSW received a huge accolade being given an honourable mention as a finalist in the NSW Premier Awards Excellence in Digital Innovation category for those very systems.

Earlier this year, eHealth NSW designed and developed two systems for managing vaccinations in parallel. They were Covax, developed to vaccinate frontline staff, and the NSW Health Vaccination Administration Management platform or VAM, developed for both public and staff. Since then, eHealth NSW has moved all NSW Health vaccination clinics to VAM, so our ICT infrastructure works more efficiently at scale. It also means that valuable state-wide reporting can be produced easily and efficiently.

Importantly, the VAM system enables people to manage their own bookings. The team managed to roll both systems out across the state in three months, slashing nine months off the usual timeframe for an implementation of this scale. This would not have been possible without all the agencies and teams involved working so collaboratively. eHealth NSW continues to manage data between NSW Health and Services Australia systems to ensure everyone who is vaccinated can access their vaccination passport.

COVAX our first system in use at St Vincent's Hospital.

Covax solution – our first system
- Live from February to September 2021.
- **1.63M** Total number of appointments scheduled in Covax since go-live.
- **1.0 M** Total number of doses administered Covax to date.

*Vaccines through the eMR

VAM our final solution in use at Qudos Bank Arena Olympic Park.

VAM solution – our final system
- Live from June 2021.
- **1.6M** Total number of appointments scheduled in VAM since go-live.*
- **255,847** Total number of future appointments scheduled in VAM.*
- **1.35M** Total number of doses administered via VAM to date.*

*As at Wed 20 October.

The importance of this project to staff and public safety saw teams from across eHealth NSW, NSW Health, other government agencies and vendors collaborate more closely and effectively than ever before. To fast-track development, vendor partners joined daily project team meetings and enabled daily releases for weeks at a time. To support vaccination clinics, the eHealth NSW implementation and change team expanded its ranks with new members drawn from the Department of Customer Service, Service NSW and State Revenue departments. Our local health district partners experienced a heightened sense of collaboration they felt would remain a legacy of these projects.

"I witnessed very significant collaboration between eHealth NSW and LHD staff, to the point that I truly would consider it an integrated team. There was a clear common goal to be achieved and the teams worked tirelessly to achieve it through some extremely trying times," said Michael DiRienzo, Chief Executive, Hunter New England Local Health District.

"VAM brought together people from across eHealth NSW and from other agencies. To everyone who joined the Implementation & Change team I would like to acknowledge your significant contribution and collaboration. Thank you for your willingness to take up the challenge, for your responsiveness, motivation, and ability to pivot and accommodate the rapidly changing COVID-19 environment," said Genevieve Looney, Implementation & Change Portfolio Manager, Corporate Applications, eHealth NSW.

"I joined the NSW Health Vaccination Support Service Team when it launched in May 2021 and I took my first call on 3 May 2021 at 8 am. I can still remember the day; I was excited to be chosen to work on this helpline to assist people in NSW to get vaccinated," said Asma Anwar Mim, Healthdirect.

The visibility of this project to staff and the NSW public meant eHealth NSW faced some new and exciting challenges. Historically, eHealth NSW's systems have predominantly been used by clinicians or clinical and business support staff. Suddenly, eHealth NSW found itself designing a system, and providing system support, for the public too. *"Our team of Human-Centred Design, Customer Experience and Communications specialists drew on consumer feedback provided within the system, by email and via social posts, as well as insights from the NSW Health Vaccination Booking Support Service and the Department of Customer Service Behavioural Insights Unit,"* says Simon James, Executive Director, Customer Engagement and Service Transitions. Their recommendations included making the system language simpler and adding a new Help Hub to help consumers book faster and more easily.

What are eHealth NSW's vaccination project teams up to now? They are continuing to support vaccination clinics state-wide in relation to delivery of Dose 3 and Booster doses. In addition, they are working with Health Protection NSW's Immunisation Unit who are investigating the possibility of administering COVID-19 vaccinations in a school setting.
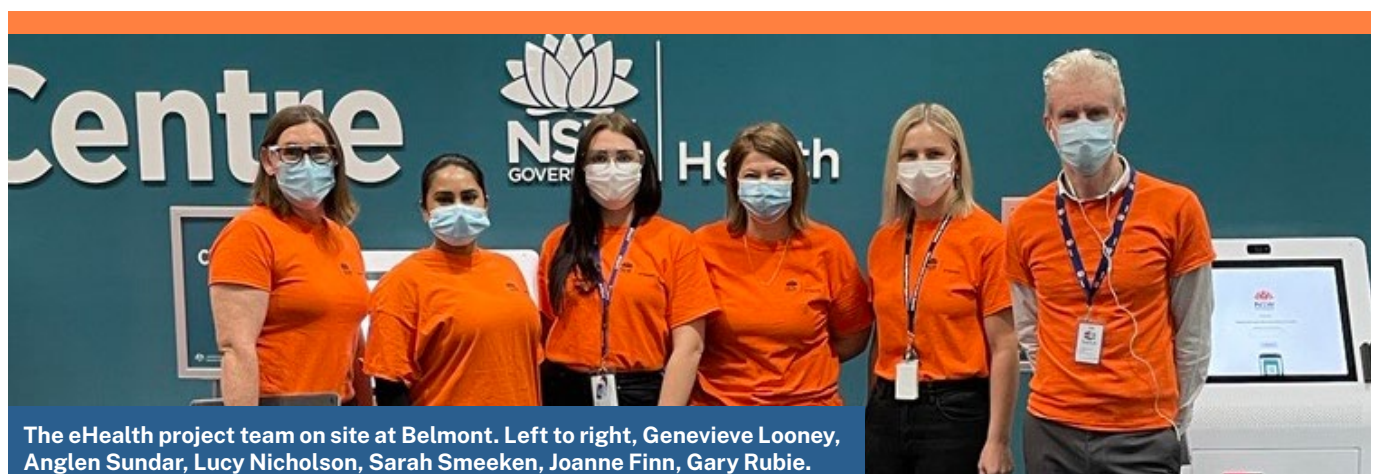
The eHealth project team on site at Belmont. Left to right, Genevieve Looney, Anglen Sundar, Lucy Nicholson, Sarah Smeeken, Joanne Finn, Gary Rubie.

Digital referrals to improve access to outpatient services

eHealth NSW is working with the Ministry of Health and clinicians from Local Health Districts to deliver a new state-wide digital Outpatient Referral Management system.

There is currently no standard approach to referral management across the state, and many GP practices and outpatient clinics still rely on paper-based processes including fax, post, and email.

Known as the Engage Outpatients program, this new digital solution will ensure referrals from GPs to clinicians in the outpatient hospital setting, are managed more efficiently. It also notifies referrers and patients of referral outcomes, such as when the referral is accepted by the outpatient clinic.

The digital referrals solution is currently in development with the prototype to be trialed in Northern NSW (NNSWLHD) and Sydney Local Health Districts (SLHD) early in 2022. GP eReferrals to the Lismore Base Hospital Speciality Outpatient Clinics and the Lismore Pain Clinic have already been in use by a small number of northern NSW general practices to ensure it is appropriate for wider adoption.

The Engage Outpatients program, will ensure referrals from GPs to clinicians in the outpatient hospital setting, are managed more efficiently.

General Manager at Lismore Base Hospital, Ian Hatton said: *"This will help staff work more efficiently, streamline the secure sharing of patient information between GPs and outpatient services, and provide a better user experience for referrers. We're really excited about this project."*

Northern NSW GP, Dr David Glendinning said, *"I can now see services that I didn't even know were available at the hospital which really reduces administration time."*

"For patients, often the hardest thing is not knowing what is happening, they are waiting to go and see a specialist, they are worried. As a GP you can now say to them, the hospital has received the referral, they are triaging it and have allocated a time," Dr Glendinning said.

The Engage Outpatients program focuses on three key areas:

1. Service Practitioner Directory (NHSD) - an up-to-date directory of NSW Health Outpatient clinical staff and services for GP referrers. It will centrally store, manage, and provide access to available outpatient services and associated providers to support secure messaging.

2. Referral Hub - to provide a state-wide view to track, report and enable a statewide dashboard for viewing outpatient clinics and service demand.

3. Referral triage and management – a state-wide electronic referral management system providing anytime, anywhere referral management and triaging for outpatient clinics as well as timely notifications back to GP referrers and patients.

eHealth NSW is engaging with a range of stakeholders to assist in the development and design of the prototype and its future suitability to be scaled across the state.

myVirtualCare proving popular with patients and clinicians

myVirtualCare has been growing in popularity across NSW with over 139,700 video consultations since its state-wide inception in September 2020, including 27,519 in October 2021. Convenience, saving time and COVID-19 restrictions are some of the reasons behind the recent rapid rise in the number of patients and clinicians using myVirtualCare.

myVirtualCare is a custom-built, web-based videoconferencing platform that helps patients, healthcare providers and carers safely access healthcare. Designed to complement in-person appointments, patients can skip the traditional trip to the hospital or health facility for their medical appointment, and conveniently receive care virtually.

According to patients and carers from the South Western Sydney Local Health District (SWSLHD), myVirtualCare is very easy to use and a great way to access their healthcare.

"Can myVirtualCare always be an option for future appointments?" asked one of the many patients and carers in online feedback provided to SWSLHD. Another one added *"This system is so much easier to use than other video conferencing solutions."*

In fact, 95% of the survey respondents said they would use virtual care again and 83% said the technologies used improved their access to care. The reduced need to travel to and from appointments was also highlighted as a huge benefit.

eHealth NSW has played a key role in the success of myVirtualCare by increasing data centre capacity to support much higher use of virtual care across the state. For patients, their families and carers, myVirtualCare provides a seamless and convenient way to access their clinical and social care providers using one web link on most internet-enabled devices.

SWSLHD has been experiencing significant growth in the number of clinicians using myVirtualCare for a range of services including mental health, speech and virtual visiting. In August alone, over 2500 consultations were conducted by SWSLHD clinicians, which is a 57% increase compared to the previous month.

"I can ensure patient care can still be carried out in the community while keeping people safe from unnecessary exposure to the COVID-19 virus," said Dr Christine Peng from Campbelltown Hospital.

COVID-19 has had a huge impact on patient care, including restricting patient visitors in hospital. Using myVirtualCare, virtual visiting has allowed for some heart-felt experiences such as enabling families to say goodbye to loved ones. *"Thank you for the opportunity to say goodbye to my beloved brother,"* said a family member who provided feedback.

It has also allowed for families to remain connected between wards and other hospitals when all family members have been admitted to hospital with COVID-19.

eHealth's Virtual Care Program Director Ian Schrader said: *"myVirtualCare is another great example of NSW Health safely taking healthcare beyond bricks and mortar and providing patients and clinicians with more choice about how, when and where care is delivered. It has also played a vital role during the pandemic."*

eHealth NSW would like to acknowledge the Agency for Clinical Innovation, who is managing the rollout of myVirtualCare by engaging change champions, developing resources and delivering training to health services across the state.

myVirtualCare is a convenient way for patients and clinicians to conduct virtual consultations.
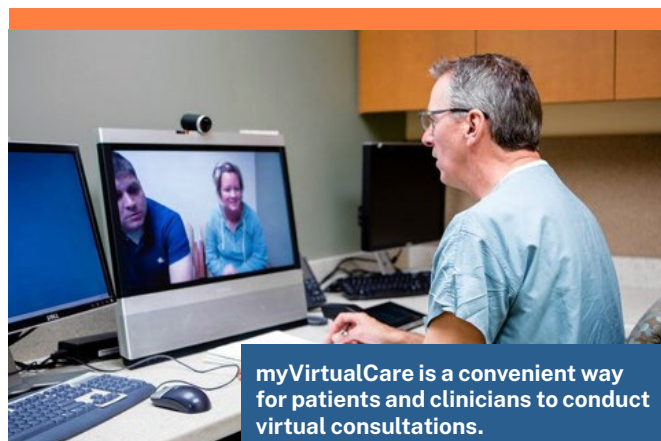
Hope platform now live at 210 sites

The state-wide roll out of the Health Outcomes and Patient Experience (HOPE) platform continues to benefit both patients and clinicians, with 210 sites live.

The purpose-built Health Outcomes and Patient Experience (HOPE) platform was developed by eHealth NSW in partnership with the Agency for Clinical Innovation (ACI) and the Ministry of Health (MoH). It enables patients and their carers to provide timely feedback while at the same time supporting the real-time collection of patient reported measures (PRMs).

Co-designed with consumers, clinicians and health managers, patients or their carers can use HOPE on a personal device to complete a survey and provide feedback on their health-related experiences and outcomes. These include quality-of-life measures, and what matters most to them.

The care team have real-time access to the PRM survey results, giving health professionals a deeper understanding of the patients' needs and impacts of treatment. This assists in providing holistic care with a focus on quality-of-life for patients and drives improvements across the health system.

A Nurse Practitioner from Murrumbidgee Local Health District, High Risk Foot Service said: *"It is my role to provide holistic assessment and management of my patients. HOPE is a bonus for me, as it addresses a lot of the quality-of-life issues that people with a chronic illness suffer with. It also helps me to direct my management plan in the best way I can with a patient centred approach. The integration of the HOPE system was seamless thanks to the training and implementation provided.*

Feedback from patients included: *"The survey helped me as it made me look at things I wouldn't normally think about. When you are asked specific questions about activities such as stairs and getting out of the shower, it made me look further into that."*

"I find the survey easy. It gives me a chance to talk through things that really matter even though I thought it is not necessarily related to my medical condition."

Fourteen local health districts, a specialty health network and a Primary Care General Practice are using the HOPE platform and the state-wide roll out continues.

Since the HOPE rollout began on 1 February 2021:

- **210** sites have access to HOPE
- **168** services are using HOPE
- **4,996** patients have completed a new HOPE survey
- **21,110** patient surveys have been added to HOPE (**9,877** surveys were completed on HOPE and **11,233** were migrated from legacy software)
- **3,744** respondents stated that they prefer filling out the survey face-to-face, with **1,081** preferring email and **171** preferring SMS.

(Data correct as of 7 October 2021)

Health professionals will have a deeper understanding of a person's disease burden, symptoms or treatment impact, and will be able to provide more holistic care.

RIS-PACS projects continue to roll out thanks to innovative support solution

Considered one of the biggest digital change projects in NSW Health, the roll out of the state-wide Radiology Information Systems and Picture Archiving and Communications System (RIS-PACS) has continued unabated during COVID lockdowns.

An essential initiative in ensuring medical imaging services remain active during these difficult times, RIS-PACS aims to improve patient care by providing clinicians with access to complete imaging histories, comparison images and reports.

RIS-PACS stores key information, digital images and results which are accessible to hospital-based treating teams state-wide. In simple terms, it means a patient's journey can be tracked from image requisition, through to diagnosis almost instantly.

With Sydney in the midst of a 106-day lockdown, a solution was needed to allow the project to continue without putting local clinicians at risk. To deliver RIS-PACS on the Mid-North Coast and in Northern NSW, the Sydney based team increased remote support.

They also setup a virtual remote support station onsite, a laptop or tablet that staff on the ground at Northern NSW hospitals could access, and it all worked seamlessly well.

"We're very appreciative of the thorough governance structures that have enabled two high risk projects, being the changeover of an ageing RIS-PACS system and going live in the midst of COVID," Northern NSW LHD district medical imaging manager Paul Green said.

Describing the process as nothing short of impressive, he called out how the team were able to achieve outcomes and maintain access to tech experts despite restrictions for on-site staff.

"The project team, in conjunction with the vendor, have developed virtual support contingencies using remote access, portable IT hardware and comprehensive pre training. These were tailored to our site requirements enabling the project to go ahead, irrespective of COVID restrictions."

The original plan had been a full on-site approach, with the vendor, eHealth NSW and the Local Health Districts, working together on the ground to implement the system. COVID and the State Government's lockdown, which kicked off in late July, put paid to that.

Working together with the project's steering committee and the LHDs, the team came up with everything from a 24/7 support phone number, to online guides, and even remote vendor support via a single secure terminal that kept patient data safe.

The dynamic solution is being constantly reviewed and has helped implement RIS-PACS in 17 hospitals across the region. Work on the Mid-North Coast has been completed, with the system operational.

The project continues to be implemented in Northern NSW and will be completed in the coming weeks.
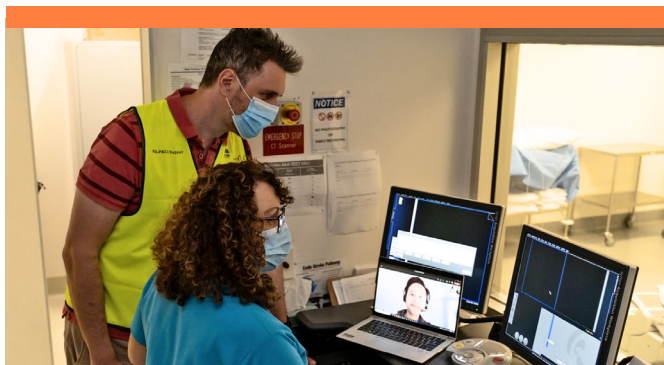
RIS-PACS stores key information, digital images and results accessible to hospital-based treating team across the state.

Clinical consultations at a safe distance

eHealth NSW continues to innovate around telehealth services to help protect our hospitals, their staff and patients from unnecessary risk of infection.

One small but important initiative has been the installation of new collaboration technology in two rooms at Royal North Shore Hospital. These rooms are proving instrumental in facilitating effective multidisciplinary meetings between clinicians and patients – from a safe distance.

Clinical Nurse Consultant at Royal North Shore Hospital, Heather Thom said that during the COVID-19 pandemic, the telehealth rooms have allowed patients and clinicians to attend meetings and reduce face-to-face contact.

The rooms have also given patients the option to stay connected with family during periods of restricted visits and travel.

"We have been able to help rural patients maintain contact with remote family members through the rooms and new telehealth initiatives on the ward. Over 50 per cent of our patients are from outside the Northern Sydney Local Health District (NSLHD), so the opportunity for them to remain connected to remote families is priceless.

"By having a reliable remote system with audio and visual options we can continue to have collaborative discussions around patient care plans, treatment options and follow ups. This has meant we are decreasing delays relating to formulation of care plans, providing specialist advice and arranging treatment options" Heather said.

Every patient discussed in the various Multi-Disciplinary Team (MDT) meetings will benefit as it means their care plans and discharge plans are still discussed through collaboration despite clinicians having restricted movement and reduced attendance on-site.

In the future, RNS predicts greater use by patients and families as the idea and acceptance of remote connection is further embraced.
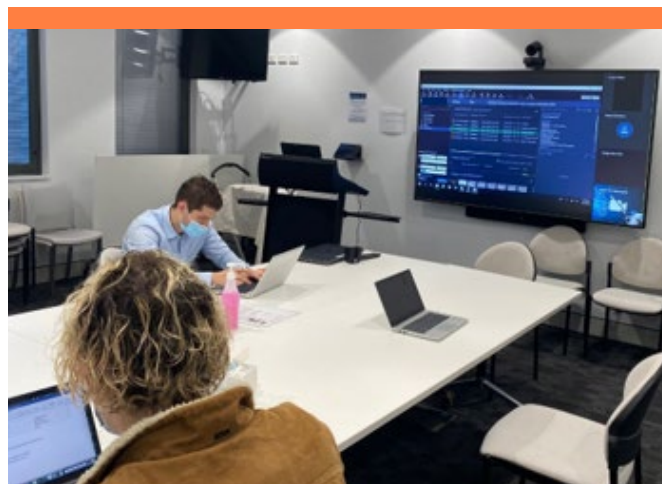
At RNS, clinicians use the newly fitted out meeting rooms to collaborate with other clinical experts to develop treatment and follow up plans. Pictured are Dr Lachlan Jackson (INR SRMO) and Dr Ryan McConnell (INR fellow) at a recent multidisciplinary meeting discussing neurovascular patients.

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Heather Thom

Clinical Nurse Consultant, Royal North Shore Hospital

Telestroke live at 16 hospitals

Stroke patients from across North West NSW have 24-hour access to an innovative new telehealth service that is saving many lives in regional and remote NSW.

Launched in March 2020, the NSW Telestroke Service is now available at sixteen locations in regional and rural NSW and connects local emergency physicians with expert stroke clinicians via video consultation to quickly determine the best treatment plan for a stroke patient.

Susan Heyman, Executive Director of Rural and Regional Health Services in the Hunter New England District said, *"These options include urgent treatment to dissolve a clot with 'clot-busting' thrombolysis here in Tamworth, or urgently transferring the patient to a specialised stroke centre for more complex treatment."*

eHealth NSW is proud of the vital role it is playing in providing the technology solutions that make the Telestroke Service possible.

A key component is the Statewide Enterprise Imaging Repository (EIR) which provides the Telestroke Neurologists with rapid access to world class multimodal CT brain imaging for each stroke patient.

Telestroke will be gradually rolled out to 23 sites by June 2022 and leverages the significant investments made by eHealth NSW in Statewide Infrastructure, Networking and Unified Communications.

A computerised tomography (CT) scan combines a series of X-ray images taken from different angles.

Valerie, a Telestroke patient from Shoalhaven, South Coast NSW.

"By the next morning, my condition had returned to normal... I couldn't be more grateful, knowing strokes can have a permanent impact on your life."

Valerie

Patient

Professor Ken Butcher, Medical Director, NSW Telestroke Service at the Prince of Wales Hospital said, *"Centralised imaging is a critical component of the NSW Telestroke Service. Diagnostic and treatment decisions are based on acute stroke images. It also provides access to historical images."*

One of the many patients thankful for Telestroke is Valerie from the Shoalhaven region on the South Coast. Valerie went to visit her son and when he opened the front door to greet her, he noticed his mother had slurred speech, and called an ambulance straight away.

Valerie was transported to the Shoalhaven District Memorial Hospital where Telestroke Neurologist, Dr Carlos Garcia Esperon from Hunter New England Local Health District, assessed her. By then, Valerie was paralysed on her left side and couldn't speak.

Valerie was prescribed the appropriate medicine and later transferred by road to the Prince of Wales Hospital in Randwick for a procedure that removed the blood clot.

"By the next morning, my condition had returned to normal, and I was kept in hospital for observation for another three nights," said Valerie.

"I couldn't be more grateful, knowing strokes can have a permanent impact on your life.

"My family were so relieved that I received instant care," Valerie added.

Implementation of the NSW Telestroke Service is a collaboration between eHealth NSW, the Prince of Wales Hospital, the Agency for Clinical Innovation and the NSW Ministry of Health.