

JUNE/
JULY 2019

eHealth NSW news

CONTENTS

Telstroke scales across the state	1
Chief Executive's message	2
Sharing ICT Experience survey results state-wide	4
Delivering comprehensive care via our eMR	5
SARA proving popular	6
A hallmark of the RIS-PACS Program	6
The building blocks of a Child Digital Health Record	7
Living the NAIDOC 2019 theme: Working together for a shared future	8
Use of Clinical Information Access Portal surges	9
EOL pilot gives staff mobile freedom	9
Humanising digital healthcare via human-centred design	10
'Experience' this year's Expo	11
Celebrating 5 years driving the digital transformation of NSW Health	12



Now poised to go state-wide, the Telstroke model of care links city-based specialists with people presenting with stroke symptoms to rural and regional NSW Health facilities

Telestroke scales across the state

Lives are being saved and outcomes vastly improved thanks to a model of care which harnesses technology to deliver world-class assessment, treatment and management of stroke patients.

Originally developed by the Agency for Clinical Innovation with the support of eHealth NSW's Conference and Collaboration team and clinicians from Hunter New England, Mid North Coast and Central Coast Local Health Districts, the Telstroke model of care is now poised to go state-wide.

Telstroke links city-based specialists with people presenting with stroke symptoms to NSW Health's rural and regional health facilities.

Enabled by the Health Wide Area Network and using screen-sharing technology provided by eHealth NSW,

remote specialists can gain full access to patient imaging as it is being processed – allowing time-critical diagnosis and immediate treatment of stroke patients in rural and regional areas.

Margaret Christian of Port Macquarie benefited hugely from the power of Telestroke after she suffered a stroke while at home watching television last summer.

At 9.45pm, Margaret noticed that the tingling she'd felt hours earlier in her arm had progressed to weakness and numbness of the arm and side of her face, as well as problems with her vision.

Margaret's husband Peter called an ambulance and, by 10.30pm, Margaret was in Port Macquarie Hospital. A call was made to the NSW Health Telestroke Service, which contacted Dr James Evans,

Continued on page 3

➔ Check out our website at www.ehealth.nsw.gov.au
If you've got a story or feedback for eHealth NSW News,
please email EHNSW-Communications@health.nsw.gov.au



eHealth

Chief Executive's message



eHealth NSW is celebrating its five-year anniversary and we have marked the occasion by looking back...

We have achieved a great deal in that time – and this reflects the talent and dedication of the team at eHealth NSW.

From rolling out clinical systems such as the electronic medical record to corporate platforms such as StaffLink – and keeping the data they contain cyber-safe 24/7 – eHealth NSW's work is increasingly valued by NSW Health's Local Health Districts, Specialty Health Networks, Pillars and Agencies.

Any organisation is only as effective as its people. I'm proud to leading one that is

focusing on positive outcomes through strong partnerships and collaboration, to support healthcare delivery in NSW.

We have come a long way in five years. Our staff numbers have grown to deliver an expanding portfolio of initiatives, projects and programs.

You'll be interested to read a Q&A on page 10 with Dr Thomas Loveday – a new recruit to eHealth NSW as our Director of Human Centred Design (HCD) but no stranger to NSW Health, having established the Clinical Human Factors program at the Clinical Excellence Commission.

I very much relate to Thom's comments that HCD is all about putting people at the centre of the design process, as "the only ones who really understand how healthcare is provided are the people who do it every day – the clinicians – and the patients who are served by it".

Engaging more directly with consumers is something we have already started on, and which will certainly ramp up as we complete Horizon 2 and expand Horizon 3 of our eHealth Strategy for NSW Health, and see more and more examples of customised, digitally enabled and patient-centred healthcare.

Horizon 2 is focusing on integration of care and linking hospitals and community-based providers, while Horizon 3 is about engaging the consumer and creating a fully patient-centric experience.



eHealth

Driving the digital transformation of NSW Health since 2014

I'd like to thank each and every one of you for the work you do and the energy and dedication you bring to the digital transformation of NSW Health, all for the greater good.

Here's to a very successful five years to come.

A handwritten signature in black ink, appearing to read 'Zoran Bolevich'. The signature is fluid and cursive.

Dr Zoran Bolevich
Chief Executive, eHealth NSW
Chief Information Officer,
NSW Health

Continued from page 1

Telestroke scales across the state

a neurologist 315km away in Gosford Hospital and a specialist in stroke and neurovascular imaging.

Using Skype for Business, Dr Evans accessed screens from Port Macquarie Hospital's imaging system to view Margaret's scans.

Once Dr Evans had assessed the scans, he prescribed thrombolytic therapy for Margaret, a treatment that helps to dissolve dangerous clots in blood vessels, improve blood flow, and prevent further damage to tissues and organs.

Clots obstructing blood flow to the brain are the most common cause of

strokes – and the longer the clot is there, the higher the risk of irreversible brain damage.

After Margaret underwent thrombolytic therapy, she was transferred by fixed-wing aircraft to Newcastle's John Hunter Hospital, where Dr Ferdinand Miteff, a clinical neurologist with deep expertise in interventional stroke treatment, performed a procedure to remove the clot that was blocking her brain artery.

Two days after her successful surgery, Margaret returned to Port Macquarie Hospital, and was discharged three days later.

Six months later, Margaret continues to lead a very active lifestyle. She walks every day and husband Peter said: "There's no holding her back. She's even threatening to take up Zumba!"

Daughter Vivian said her mum had made "a textbook recovery" thanks to the rapid intervention of medical staff at Port Macquarie, Gosford and John Hunter Hospitals.

Involving three hospitals, an ambulance, a fixed-wing aircraft and the latest technology to tackle the tyranny of distance, Margaret's story is just one of almost 19,000 strokes which took place in NSW in 2018 alone.

A disproportionate number of strokes occur in regional areas, which have fewer specialist physicians to treat them, said ACI Stroke Network Manager Kate Jackson.

"The Telestroke project allows us to bridge distances and deliver world-class stroke assessment, treatment and management – irrespective of location," Ms Jackson said.

"Regional Australians are 19 per cent more likely to suffer a stroke than their metropolitan counterparts. All NSW citizens should have access to best-practice treatment and Telestroke is a major step in the right direction."

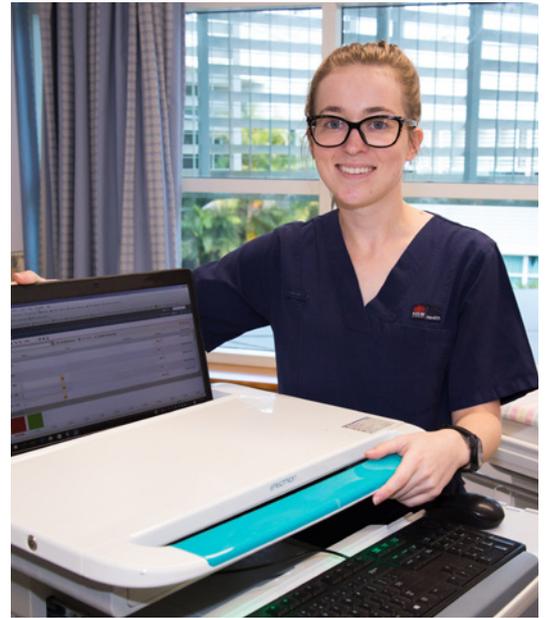
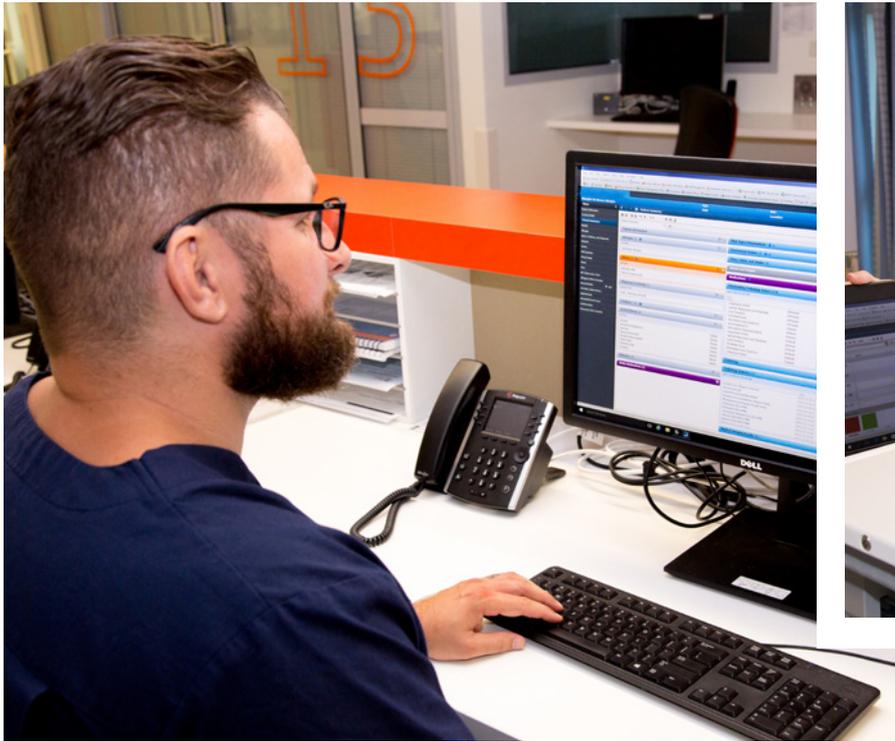
Taking up this challenge, the NSW Ministry of Health recently established a statewide steering committee, which is developing an action plan for rolling out the Telestroke service across NSW.

eHealth NSW is an active participant in this process and we look forward to sharing further updates as this important initiative progresses.

For more information on NSW Health's life-changing Telestroke service, see: <https://www.aci.health.nsw.gov.au/networks/stroke/about/nsw-telestroke-pilot>



Telestroke patient Margaret Christian of Port Macquarie with her husband Peter



Sharing ICT Experience survey results state-wide

Leaders from across the public health system are working with eHealth NSW Chief Executive, Dr Zoran Bolevich, to share with its 150,000-strong workforce the results of the inaugural My NSW Health ICT Experience survey.

Conducted over a three-week period in March and April, the survey drew responses from more than 10,000 staff across the state, who anonymously shared their views and experiences of Information and Communication Technology (ICT) services and systems across NSW Health.

The survey provided excellent coverage across each of the different NSW Health entities, including metropolitan, rural and regional Local

Health Districts, Pillars and Speciality Health Networks.

The responses will allow eHealth NSW and its partners in ICT service delivery across the state to track progress and plan priorities for the future.

“Next steps involve engaging with NSW Health colleagues in metropolitan, rural and regional Local Health Districts, our Pillars and in our Specialty Health Networks across the NSW Health landscape to explore opportunities for service refinements and improvements,” said Simon James, Executive Director of eHealth NSW’s Customer Engagement and Service Transitions directorate.

“Focus groups will be formed from those who volunteered for the opportunity to participate in the next phase of defining initiatives for enhancing the ICT experience of end users and creating action plans to put improvement activities in motion.”

Simon James

Dr Bolevich will also share eHealth NSW’s own results with eHealth NSW staff in August, and members of eHealth NSW’s Executive Management Team will brief their teams on the results for the service lines within their directorates.

Delivering comprehensive care via our eMR

eHealth NSW is designing an enhancement to the electronic medical record (eMR) that will support clinicians in providing comprehensive care to patients.

Comprehensive care seeks to ensure a patient's healthcare is planned and informed by their clinical and personal needs and preferences, and is delivered in partnership with patients, their families and/or carers.

Sponsored by the Ministry of Health and the Clinical Excellence Commission, this work will contribute to addressing the requirements of the second release of the National Safety and Quality Health Service (NSQHS) Standards.

State-wide deployment of the enhancement is expected to commence in 2020.

"As we redesign eMR functionality to meet the Comprehensive Care Standard, we want to address many of the pain points in the way patient care activities are documented and communicated," said Rick Turner, Program Director of eHealth NSW's eMR Connect Program.

"In doing so, we aim to make eMR formats more consistent, create tools that are better at collecting and documenting comprehensive care

information and plans, and ensure the end-to-end patient journey is more connected."

Developing a new and improved state-wide eMR solution requires insights from across the NSW Health network. Chief Executives from across the system have nominated representatives for a Comprehensive Care Design Working Group (DWG).

eHealth NSW will also integrate Human Centred Design principles in the project by completing user research and iterative usability evaluations during the design lifecycle.

"Crucially, the project will include patient representation," said Mr Turner.

"This will help to inform the process of how we partner with patients in their own care, and how we incorporate their personal needs and preferences. Additional work will be done to ensure we are addressing these needs in the most appropriate, effective and sustainable way."

The priorities for the first phase of the project are inpatient care, and implementing the foundational building blocks spanning visibility of care, risk screening and assessment, diagnosis, and goals of care.



How will a fresh approach to comprehensive care enhance the patient experience?

A 62-year-old man was recently admitted to hospital for surgery on a fractured hip after a fall, which was likely caused by a drop in his blood sugar as a result of type 1 diabetes.

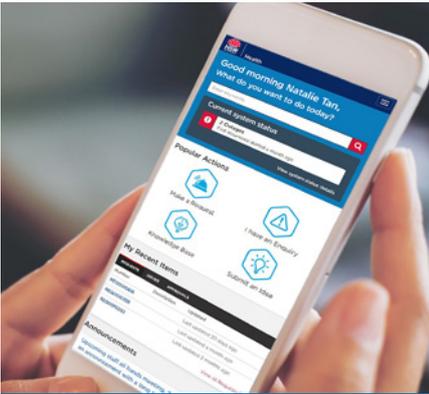
During his hospital stay, the man was seen by the orthopaedic team for his fracture; the endocrine team and a nurse specialist for his diabetes; a physiotherapist following surgery; and an occupational therapist and social worker regarding his living situation and discharge planning.

The patient and his family expressed frustration that the clinicians "don't seem to be talking to each other", as their messages about his care were inconsistent. They also felt their concerns about the possibility of him falling again once back at home weren't heard.

By ensuring better communication and visibility of a patient's situation and plan of care among all involved, the Comprehensive Care Standard aims to ensure situations like this don't happen.

It will help patients to work with healthcare providers to develop plans that meet their goals and healthcare needs in consideration of the impact their health issues have on their overall wellbeing.





NSW Health staff enjoy being able to access the SARA (Search And Request Anything) portal anytime, anywhere and on any device

SARA proving popular

NSW Health staff are using SARA, the new 'Search And Request Anything' portal, approximately 22,000 times a day to seek IT, payroll, recruitment, finance, purchasing and warehousing services and support.

SARA launched in early June as a new and improved portal to the services eHealth NSW and HealthShare NSW offer.

Because it's cloud-based, NSW Health staff can access SARA anytime, anywhere, on any device and users have been quick to see its benefits.

"Today I used the new SARA portal to request annual leave," said a nurse practitioner from The Tweed Hospital.

"It was immediately approved by my manager and I now have an emailed confirmation that leave is approved. I love it so thank you to the team who implemented this."

A hallmark of the RIS-PACS Program

eHealth NSW's RIS-PACS Program was invited to provide an update on its key focus areas, including its governance and procurement processes, to the NSW Health Senior Executive Forum in June.

Program Director David Cernjul took NSW Health's Chief Executives through some key highlights of the extensive clinical engagement that has been a hallmark of the process to procure a new radiology information system and picture archiving and communication system (RIS-PACS).

The new system will improve the way in which millions of medical images are captured, used and archived annually.

Following completion of a proof of concept project and successful commercial negotiations, eHealth NSW entered into an agreement with Swedish company, Sectra for the implementation and provision of the new platform,

which is being delivered to 11 NSW Health organisations on an 'as a service' basis.

Proactive stakeholder engagement has continued into the design and implementation phases, Mr Cernjul told SEF delegates, with the first go-live planned for 2020.

Mr Cernjul also discussed how the procurement and proof-of-concept approach enabled eHealth NSW to deliver multiple benefits, including economies of scale, for participating health organisations.

The new medical imaging platform is set to deliver benefits for the health system including greater efficiencies, and improvements for patients via features such as SMS appointment reminders.

The solution is made up of the Sectra PACS, the Kestral Karisma RIS, Spok critical result management, and data-centre hosting in the NSW Government Data Centres through AC3.



NSW Health's new RIS-PACS system will improve the way in which millions of medical images are captured, used and archived



The National Children's Digital Health Collaborative is building digital solutions with real-world benefits – empowering families to be partners in their child's care, alongside healthcare providers.

The building blocks of a Child Digital Health Record

Led by NSW Health in partnership with the Australian Digital Health Agency, the National Children's Digital Health Collaborative is making exciting progress in laying out a strong, technical foundation for a future national Child Digital Health Record (CDHR).

A proof of concept trial later this year in the Dubbo, Coonamble and Blacktown regions of NSW will demonstrate the benefits of a future national roll-out of the CDHR, which will enable the tracking of key health interactions, such as baby health checks, immunisations, growth charts and development milestones.

For parents, the solution will take the form of an app, while healthcare providers will access the information through their existing clinical systems in a longitudinal dashboard view, through an embedded health-provider viewer using SMART on Fast

Healthcare Interoperability Resources (FHIR) technology.

To support this, the Collaborative participated in a productive working group meeting with HL7 Australia, which champions the creation of Australian health interoperability standards (that is, the collection, analysis and movement of health information to support healthcare).

The working group meeting discussed the approach for turning the digital specifications of the CDHR into FHIR – the standards for exchanging health information electronically.

"The working group was able to leverage our successful harmonisation of the different state and territory baby books into a national dataset, achieved earlier this year," said Steve Badham, Director of Integrated Care and Lead for the National Children's Digital Health Collaborative.

"The harmonised national version

of the state and territory paper records enabled us to develop the Clinical Information Model. This defines the digital structure and clinical terminology of the child digital health record, to enable the information to be shared across borders and between systems."

With 20 participants, the working group discussed the targets of the Child Digital Health Record, an overview of health interactions, and the Collaborative's planned FHIR profiling process. Several recommendations emerged from the meeting around the modelling and implementation of different FHIR standards.

By developing FHIR standards, the Collaborative is building interoperable digital solutions with real-world benefits – empowering families to be partners in their child's care, alongside healthcare providers.

Living the NAIDOC 2019 theme: Working together for a shared future



Newcastle-based ICT trainee Riley Layer is offered guidance by SWSD Team Leader Ben Mills

During NAIDOC Week, which celebrates the history, culture and achievements of Aboriginal and Torres Strait Islander peoples, *eHealth NSW News* caught up with 17-year-old Riley Layer, one of four young Indigenous men recently hired as ICT trainees.

Riley joined eHealth NSW's State Wide Service Desk (SWSD) in June.

The SWSD is the 24/7 help desk servicing the 150,000+ staff members of NSW Health, and its Newcastle office welcomed Riley, Jackson Filmer and Tomas Woods, while Raymond King joined its Parramatta operation.

These young men's traineeships form part of our Aboriginal Employment Plan, which aims to provide greater opportunities for Indigenous people and to support them to build and develop careers with us.

The ICT traineeships operate on a buddy system, with senior analysts providing a two-and-a-half-week block of hands-on guidance to equip trainees with the skills and knowledge to provide IT support to the diverse customer base of NSW Health, followed by ongoing support and mentoring.

We asked Riley about life at eHealth NSW – and what the theme of this year's NAIDOC Week means to him.

Q Hi, Riley. How are you settling in to your first full-time job?

A The transition was a nice change from the workflow of high school. Being able to watch and listen to other employees gave me an insight into what the work is like and how it's handled. Fitting into the role was easier by taking each stage of the job at a time. The transition was still daunting, but the process and workload put in place for me made it a much more comfortable change.

Q What has been a professional highlight of the past two months?

A Receiving a call for the first time on an issue I didn't know how to solve – but fixing it after researching and evaluating a few solutions – was an incredible highlight.

Q What are your goals at eHealth NSW?

A I want to improve with the type of work and the workload I take on. I'm enjoying helping people through their day-to-day work lives with different issues and learning how to solve situations.

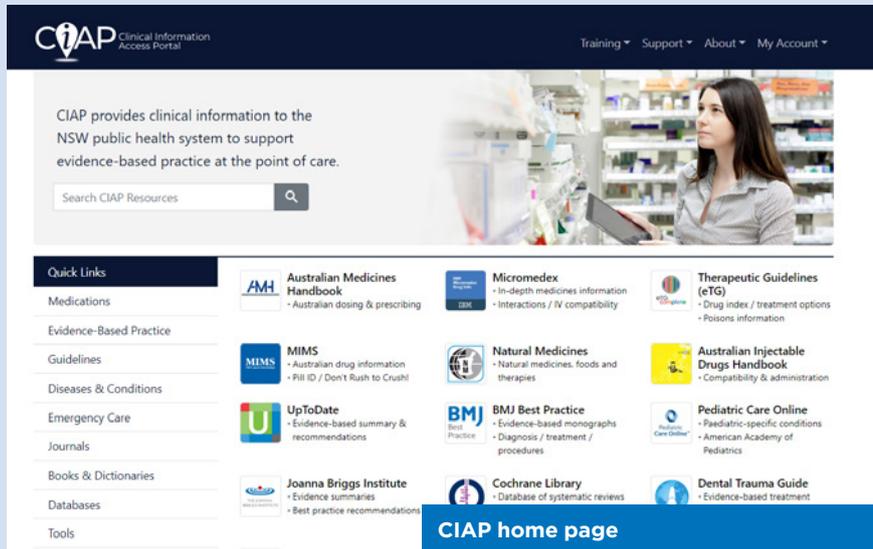
Q This year's NAIDOC Week theme is 'Working Together for A Shared Future'. How do you feel that relates to your own experience joining the full-time workforce?

A Change, opportunity for learning, and a calm relaxed attitude cannot be accomplished without a team environment. As I've transitioned into this role, the team environment has made a great impact on me with the kindness and care people have showed in helping me.

Q What are you most looking forward to professionally in the year ahead?

A Being able to progress in my traineeship to attain my certificate. I also want to assist others and improve personally in my own work as I get some experience under my belt.

Use of Clinical Information Access Portal surges



CIAP home page

Clinicians working in the NSW public health system highly value and are increasingly utilising – particularly on smartphones and at home – eHealth NSW’s Clinical Information Access Portal (CIAP).

More than 77 million accesses – that is, page views, article requests

and sessions – were made by NSW Health clinicians of CIAP resources in 2018, with drug resources the most highly sought-after.

High usage of online evidence-based medicine (EBM) resources has been shown to inform clinical decision-making and supports the

integration of best practice at the point of care.

CIAP provides the most relevant EBM resources and supports clinicians’ access of them through multiple access points.

“CIAP provides equitable access to the best available evidence for all clinicians, regardless of their geographic location or the size of the facility in which they are working,” said Marie Pryor, Manager of CIAP at eHealth NSW.

Annual usage has surged since CIAP was established in 1996, and the latest statistics show that a high proportion of clinical staff is aware of CIAP, find it is easy to use and feel it assists them to locate clinical decision support information to meet their needs, said Ms Pryor.

And interestingly, more than a quarter of clinical staff in NSW Health now access CIAP resources on a mobile device or at home.

The increase, seen across all clinical groups, is likely due to an increase in the availability and range of resources, Ms Pryor said.



L-R: Kathryn Bongiolatti, Courtney Prosser and Kelly-Ann Leven, ICU nurses at the Sydney Children’s Hospital Randwick, test-drive EOL Mobile

EOL pilot gives staff mobile freedom

eHealth NSW has partnered with the Sydney Children’s Hospitals Network to pilot a new mobile version of EOL (Employee Online).

More than 800 people took part in the pilot – including roster managers and creators, as well as full-time, part-time and casual staff.

The mobile-optimised site allows members of NSW Health’s 150,000-strong workforce to check their current rosters, make requests for future rosters and confirm roster periods they have already worked – all from their mobile phone.

The next steps are for feedback from our pilot participants to be assessed and incorporated into refinement of EOL ahead of a state-wide roll-out.

Humanising digital healthcare via human-centred design

Incorporating human-centred design (HCD) processes into the build of our digital health tools is a key aim of eHealth NSW, and one which will be enhanced by the recent appointment of Dr Thomas Loveday as Director of HCD in the Clinical Engagement and Patient Safety directorate.

Reporting to Chief Clinical Information Officer Dr Mark Simpson, Dr Loveday brings a decade of experience in improving the safety and performance of complex systems through the application of Organisational Behaviour and Human Factors Engineering principles.

In 2014, Dr Loveday was the first Human Factors specialist employed by NSW Health, establishing the Clinical Human Factors program at the Clinical Excellence Commission. He has spent the past 12 months consulting to large transportation projects, including managing human factors integration for Stage 3a of WestConnex.

In his new role, Dr Loveday will work with Dr Michaela Stockey-Bridge, Leia Giacomini and Selvana Awad to provide a broad range of HCD functions, including user research, co-design, and user experience and usability analysis.

eHealth NSW News caught up with Dr Loveday at the end of his first week on board.

Q Welcome back to NSW Health, Thom. Why is HCD so important in the field of healthcare?

A HCD is ultimately about putting people at the centre of the design process. In healthcare, this approach is critically important because of the incredible levels of complexity and variation involved in providing healthcare services. The only people that really understand how healthcare is provided are the people who do it every day – the clinicians – and the patients who are served by it.

Q How does healthcare stack up on HCD when compared with industries such as banking and retail?

A Banking and retail have strong drivers to invest in approaches to better understand their customers. After all, businesses make money when they provide products and services that are useful, usable and accessible. Healthcare has been a bit slower in adopting HCD approaches, however, this means that we can skip to tried and true approaches to improving designs. As the saying goes: good artists borrow, great artists steal.



Selvana Awad, Dr Thomas Loveday and Dr Michaela Stockey-Bridge from eHealth NSW's HCD team (absent: Leia Giacomini)

Q Which public healthcare systems, either in Australia or globally, are blazing a trail when it comes to HCD – and what can we learn from them?

A MedStar, the Mayo Clinic and the Australian Institute of Health Innovation have all done excellent work applying HCD approaches to individual projects. Certainly, we'll be looking to adopt tools and processes developed by these organisations. However, eHealth NSW is already an innovator in this space, with several projects using techniques like user observations, desktop reviews and usability testing to improve designs. By consolidating this work into a coherent HCD approach, eHealth NSW can be the trailblazer – with clinicians and patients across NSW Health being the beneficiaries.

What is Human Centred Design (HCD)?

The International Standards Organization (ISO) defines HCD as "an approach to interactive systems development that aims to make systems usable and useful by focusing on the users, their needs and requirements, and by applying human factors/ergonomics, usability knowledge, and techniques. This approach enhances effectiveness and efficiency, improves human wellbeing, user satisfaction, accessibility and sustainability; and counteracts possible adverse effects of use on human health, safety and performance".



‘Experience’ this year’s Expo

‘**Experience**’ is the theme of this year’s HealthShare NSW & eHealth NSW Expo, which is set to mark its 10th anniversary even bigger and better than ever, with a trade hall exhibition around twice the size of last year’s.

“We are passionate about creating an engaging experience at this year’s Expo with a number of immersive and interactive experiences on offer for delegates to enjoy,” said Events Manager Dearne Waters.

“We have a host of experiential activations designed to transform the attendee experience, with attendees booking themselves into chosen sessions and a ‘create your own adventure’ experience throughout the day via

the interactive Expo app.”

Registrations open in early September for this vibrant annual event, to be held on Friday 22 November at the International Convention Centre. A highlight on the NSW Health calendar, Expo 2019 is expected to attract more than 2,000 people from across Australia’s largest public health system.

Don’t miss the opportunity to grow your connections and networks with staff and colleagues from NSW Health networks, agencies, local health districts and pillars.

[Contact us](#) to learn more.

Head to our **new-look website** for more details
www.hsnsw-ehnswwexpo.health.nsw.gov.au



Celebrating 5 years
driving the **digital
transformation** of
NSW Health

