Save time and simplify with SARA

NSW Health staff across the state have a new and improved way to get IT, payroll, recruitment, finance, purchasing and warehousing services and support.

SARA – which stands for Search And Request Anything – is a new cloud-based portal which will empower staff to be able to check a leave request on their mobile while ordering a coffee; submit a pay enquiry while in the bus queue; or check progress on an IT support ticket from their laptop (including seeing exactly who’s investigating the ticket and where it’s up to).

As well as offering great functionality, SARA has a user-friendly interface that can be accessed anywhere, anytime on mobile phones, tablets or desktop devices.

Once fully up and running, SARA will become a one-stop portal to everything!

NSW Health staff can now use SARA to:
■ Raise an IT issue, and then track it and get it resolved (Note that SARA the CA Tool/SWSD Service Desk Manager Tool)
■ See real-time state-wide system outage information
■ Find the most widely and frequently used online forms
■ Access service-related knowledge articles – with our library set to grow into the future
■ Take a guided tour of the portal from within the portal (just click the ‘Tours’ tab)

From 17 June, NSW Health staff will also be able to use SARA to:
■ Raise a payroll, recruitment, finance, purchasing and warehousing support enquiry or request, and then track it and get it resolved.
There is never a dull moment in the field of digital health, but the past couple of months have been particularly eventful. And, if I chose one word to sum them up, it would be connection.

That connection ranged from reaching out to all 150,000 staff of NSW Health with our system-wide ICT Experience survey to better understand how we can work together on ICT service improvement efforts, to meeting with our ICT industry partners, universities and other stakeholders to explore how we can build a digital health workforce for tomorrow, today.

We've also launched a new way for our colleagues and users – the staff of NSW Health – to connect with our services via a new app through which they can ‘Search and Request Anything’. SARA is the front-end of a much more ambitious program of transforming our service management platform and streamlining a myriad of support services offered by eHealth NSW – from the State Wide Service Desk to complex technology projects and change requests. That program is well underway and we'll share its progress with you in the coming months.

I was pleased to open the NSW Health Showcase at the Zenith Theatre in Chatswood in mid-May. A precursor to the annual Cerner Regional User Group (RUG), which was held in Sydney this year, the showcase attracted a number of colleagues from across the nation who came to hear about the innovative work underway across NSW Health. A range of presenters from eHealth NSW and LHDs showcased their work in the areas of Electronic Medical Records implementation, integration of clinical records between different platforms, advances in data analytics, and the processes we've put in place to safeguard and enhance the safety and quality of digital solutions.

Together with LHDs, Pillars, Health Agencies and industry, we’ve been working on a number of pilot innovation projects that use health data, artificial intelligence and Internet of Things (IoT) technologies. Projects to support patient safety include using a risk trigger monitoring tool to identify combinations that may be indicative of patient harm, and AI-driven analytics to better identify sepsis at ED triage.

We've also been active in the workforce development field. Developing digital literacy in our current and future workforce is critical to delivering patient-centred and safe care. The ability to create, use and interpret information, problem-solve, connect, collaborate and innovate will support better patient experiences and outcomes. To this end, eHealth NSW has partnered with the Health Education and Training Institute (HETI) and the University of Sydney to develop a Massive Open Online Course (MOOC) on how clinical health data can be harnessed for better healthcare.

Finally, as a result of our industry partnership summit, we're starting to work with industry and universities on initiatives to raise awareness of careers in digital health and build skills and pathways for our workforce of today and tomorrow. I look forward to seeing more clinicians, like our fantastic nurse informaticians featured on page 7, joining the digital health community of practice.
Trialling digital tools for better patient care

eHealth NSW is joining forces with a number of industry partners in a bid to enhance the safety and quality of patient care, with clinicians at one of the state’s major rural hospitals harnessing the power of digital tools in two exciting proof-of-concept (PoC) projects.

At the 325-bed Wagga Wagga Base Hospital in the state’s south-east, eHealth NSW and Murrumbidgee Local Health District are partnering on two PoC projects which combine the expertise of Alcidion, CSIRO and Evidentli and use Apple products.

The first PoC project is exploring how critical test results can be shared securely and in real time via mobile devices to support enhanced clinical decision-making.

For Dr Stephen Wood, Director of Wagga Wagga Base Hospital’s Emergency Department (ED), this PoC has the real potential to assist clinicians with making decisions about the diagnosis and treatment of patients in time-pressured ED environments.

“We want to give clinicians fast access to meaningful data insights which can help them to identify patients at risk of deterioration, and provide more timely mobile access to pathology results and X-rays,” Dr Wood said.

A team of 10 ED clinicians is trialling mobile notifications of real-time pathology results and risk indicators, via Alcidion’s Miya Precision Clinical Decision Support (CDS) tool. Notifications will be delivered through Apple products, including iPad, iPhone and Apple Watch.

The Miya Precision platform uses the Fast Healthcare Interoperability Resources (FHIR) to map data to standard terminology. This can form a basis for integrating other Artificial Intelligence and Predictive Analytics algorithms to monitor and detect safety problems.

In order to prove these capabilities, the CSIRO’s ED re-admission risk algorithm will use the data supplied and make the results available via the Miya Precision platform.

David Hansen, Chief Executive Officer of CSIRO’s Australian e-Health Research Centre, added: “It’s exciting to work with NSW Health to bring new technologies into everyday use in healthcare. Data-driven healthcare is very much the future of innovation in healthcare – this project is part of that transformation.”

The second PoC aims to create an open platform that provides access to simulated data, which researchers and developers can use to test functionality and feasibility of their models in a safe environment and without putting patients’ privacy at risk.

Multiple yet anonymised datasets are being mined, via the Miya Precision platform, to cover common health challenges such as diabetes, cancer and cardiovascular disease.

Cloud software company Evidentli is using its Clinical Research Automation software, Piano, which connects to a variety of data sources and provides security and workflows to automate research.

Best-of-breed statistical, analytic, and documentation tools will enable Murrumbidgee LHD to perform clinical research in a fraction of the time it has historically taken.

“The digitisation of healthcare is ramping up and all clinicians need to embrace it,” said Dr Wood.

“We are excited to be a part of these six-month projects and I hope both prove to be successful.”
eHealth NSW’s Electronic Record for Intensive Care (eRIC) is now enhancing patient care and safety for the critically ill at two new hospitals within Central Coast Local Health District.

Integrating data every minute from multiple devices into a clinical information system, eRIC replaces the paper charts and forms used in Intensive Care Units (ICUs).

Joining 17 other NSW Health ICUs which have adopted the use of eRIC, the adult ICUs at Wyong Hospital and Gosford Hospital transitioned to eRIC in mid-March and early May respectively.

With eight ICU beds at Wyong and 20 at Gosford, these latest transitions complete the Central Coast LHD deployment.

Simon Wyer, ICU Director at Wyong Hospital, said: “Since the implementation of eRIC there has been a range of improved efficiencies including the ability to extract patient observations and prioritise tasks, allowing staff to provide more ‘hands-on’ time with the patients. “The eRIC system has also enabled better surveillance of patients within the ICU, empowering the team to make informed decisions and improve the continuum of care. The reduction in administrative tasks has enhanced staff collaboration and increased quality in provisions of care.”

Asked what long-term benefits he anticipated from the eRIC deployments, Michael Bastick, ICU Director at Gosford Hospital, said he was hoping for improved reporting functionality, greater consistency in information gathered about patients, and improved handover and continuity between shifts.

More than 10,000 NSW Health staff shared their views and experiences of Information and Communication Technology (ICT) services and systems in the 2019 ‘My NSW Health ICT Experience’ survey.

Guided by the 10-year eHealth Strategy for NSW Health, eHealth NSW is designing, building and supporting a strong and responsive ICT environment in order to provide a digitally enabled and integrated health system.

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 survey responses will allow eHealth NSW to track progress and plan priorities for the future.

eHealth NSW aims to provide NSW Health staff with the top-line survey results by the end of June. Leaders across NSW Health organisations will then communicate the detailed breakdown for their areas so that everyone can collaborate on priority issues and develop action plans for the future.
Delivering a better user experience for clinicians

eHealth NSW’s Statewide Infrastructure Service team, known as SWIS, is working with Health entities across the State to drive a more agile, self-improving and sustainable ICT health system.

One project is the integration of the electronic medical record (eMR) login and password with the Statewide Identity initiative – more simply described as ‘same sign-on’ for Cerner eMR platforms.

Same sign-on is a major step forward in improving the clinical user experience, delivering simplified access to digital systems. Up until now, clinicians had to remember various credentials and passwords to do their work.

Over the past 10 months the SWIS team has collaborated with Northern NSW, Mid North Coast, South Eastern Sydney, Illawarra Shoalhaven, Western Sydney and Nepean Blue Mountains Local Health Districts (LHDs) to deliver and integrate Cerner eMR with the Statewide Active Directory.

The Active Directory holds information about all the objects in a health facility’s network, such as network logins and credentials for application access. It provides users with access to applications and services via a unique eight-digit Statewide identity and password.

Lead by eHealth NSW Program Manager Stephen Dubos, the SWIS team worked with their LHD colleagues to deliver time-saving benefits including reduced administration tasks, a decline in in-bound service desk calls and, most importantly, a better clinical user experience.

Ann Bodill, Director of Nursing and Executive Officer at Wauchope District Memorial Hospital, welcomed the move to simplify access to the eMR. “The eMR integration was a positive experience, exceeding my expectations,” she said. “The support was terrific and the migration went off without a glitch. There was excellent communication prior to the migration, staff reported feeling well informed and supported. Terrific job!”

Patrick Regan, Nursing Unit Manager, Intensive Care Unit at Port Macquarie Base Hospital, saw the completion of the project as a dream come true. “The simplification of passwords has long been a dream for clinicians. We had good early warning of the change and we were well supported on the day the migration went live.”

David Collins, Director, Intensive Care Unit at Prince of Wales Hospital, said it was great to see the eHealth NSW project team proactively help with the transition. “Your attendance in the ICU ensured that everything went remarkably smoothly.”

Karen Brodaty, Administration Officer to Director of Nursing and Midwifery and Workface Manager at The Royal Hospital for Women, appreciated the project team being on the ground the day before go-live. “The whole process was extremely well run from the time the team came to the wards the day before to explain what would occur,” she said. “They were on-hand to sort out any problems. It was all very smooth with no issues at all.”

David Lazaro, Acting Deputy Director of Nursing at Mount Druitt Hospital, said: “It was a positive experience with no concerns raised by staff.”

More than 112,000 NSW Health staff now use their Statewide identity to access the multiple eMR systems which are managed by eHealth NSW.

Sydney LHD and South Western Sydney LHD plan to commence migration in mid-2019, meaning another 36,000 staff will access Cerner eMR using their Statewide identity.
Building the digital health workforce for tomorrow, today

According to Professor Klaus Schwab, founder and executive chairman of the World Economic Forum, we are entering a new industrial revolution characterised by technologies that fuse physical, digital and biological worlds. It is impacting all disciplines, economies and industries – and healthcare is no exception.

The recent Topol Review released by England’s National Health Service (NHS) estimated that by 2039, 90 per cent of all jobs in the NHS will require some element of digital skills. The review found clinical staff will need to be able to navigate a data-rich healthcare environment and all staff will need digital and genomics literacy.

With these statistics front of mind, participants from across NSW Health, the ICT industry, universities and vocational education sectors came together at eHealth NSW’s second workforce-focused Industry Partnership Summit in May to further explore ways in which to build the digital health workforce for tomorrow, today.

A preliminary framework to guide digital health workforce initiatives was presented. The framework includes a Digital Health Workforce Advisory Group and a Digital Health Workforce Implementation Group, which will consist of representatives from across NSW Health, universities, education and industry.

eHealth NSW’s Chief Clinical Information Officer Dr Mark Simpson introduced the NHS Digital Academy, and the Academy’s CEO, Rachel Dunscombe, gave a video overview of the drivers behind establishing the Academy and applicable learnings for NSW.

Three Rivers University, Western Sydney University, the University of Sydney and HISA also presented on their initiatives to support the workforce continuum, as did industry partners including Dimension Data, Microsoft and Cerner.

“This is not just about transforming the workforce, it’s also about transforming the workplace,” eHealth NSW Chief Executive Dr Zoran Bolevich told participants in his opening address.

“The key thing to remember here is that this is an incredibly complex topic, and one we can only solve by working together.”

Petra Milnes of eHealth NSW and Andrew Williams of VMware update delegates on a preliminary framework being developed by the Digital Health Workforce Advisory Group

A key way in which eHealth NSW is helping to develop tomorrow’s digital health workforce is through a new Massive Open Online Course (MOOC), which it developed in partnership with the University of Sydney, the Health Education and Training Institute (HETI) and the Digital Health Cooperative Research Centre (CRC).

Members of the existing and future health workforce can now access this new foundational curriculum to learn how clinical health data can be harnessed for better patient care.

The ‘Using clinical health data, information and knowledge for better healthcare’ MOOC provides a rich and context-relevant experience for all students undertaking health and medical degrees, the NSW Health workforce, as well as teaching staff who seek quality curriculum resources, said Adjunct Professor Annette Solman, Chief Executive of HETI.

Access to the MOOC via the online learning platform Coursera is free. Around the end of June, staff of NSW Health will have free access and certification through My Health Learning.
Nurses play a part in NSW Health’s digital transformation

Whether at the bedside or in a boardroom, NSW Health’s nurses are making a significant difference to patient care and safety.

The state’s digital health agency, eHealth NSW, employs a number of current and former nurses in roles ranging from program managers and design governance leads to application specialists and ICT investment managers.

To mark International Nurses’ Day on 12 May, we spoke with a selection of nurses employed by eHealth NSW to learn how their frontline experience is supporting the digital transformation of Australia’s largest public health system.

Being able to help people every day influenced Alex Thompson, Program Manager for the RIS-PACS program, to train as a nurse – a job she greatly enjoyed for the difference she could make to people’s lives.

“By transitioning from nursing into the digital health space, I felt I could achieve positive outcomes for patients on a larger scale rather than just helping one person at a time,” said Alex.

Nursing gives a deep understanding of a hospital’s day-to-day operations, which eHealth NSW’s Director of ICT Investment Management Toby Mathieson said is key to understanding how digital solutions can support care delivery from emergency, to ICU, to general wards to palliative care and outpatients.

“Nurses tend to be good listeners, are trained to assess situations and understand process, which means they are well suited to system design, process analysis and also how information is used,” Toby said.

“My nursing background gives me a keen sense of the initiatives that should be pursued and have value, as well as bringing a frontline perspective to discussions on plans and priorities.”

Rosanna Mackinnon, Business Analyst for eHealth NSW’s Single Digital Patient Record (SDPR) initiative, said frontline nursing experience gives her an acute understanding of the needs of patients, carers and families.

“Clinicians need information that is integrated, clear, concise and at their fingertips in order to make informed and timely decisions, often in high-stress environments,” said Meredith.

“Digital systems need nursing input and need to be designed thoughtfully so that they integrate into the way clinicians care for patients.”

Rosanna Mackinnon, Project Officer for eHealth NSW’s Rural Medicines Formulary project, also brings a frontline perspective to her work, having been exposed to electronic medical record (EMR) systems while studying nursing.

“As a nurse I offer a perspective around administration versus prescribing, a focus on evidence-based practice and I often think of the medicine from a patient’s perspective, such as adherence, pill burden, and ease of use,” said Rosanna.

eHealth NSW Chief Executive Dr Zoran Bolevich acknowledged the great efforts of the many nurses among eHealth NSW’s workforce.

“As a nurse I offer a perspective around administration versus prescribing, a focus on evidence-based practice and I often think of the medicine from a patient’s perspective, such as adherence, pill burden, and ease of use,” said Rosanna.

Rosanna Mackinnon, Meredith Faggoter, Alex Thompson and Toby Mathieson are bringing frontline clinical experience to the digital transformation of NSW Health.
New medical imaging platform to improve patient care

Patients and staff across NSW Health are set to benefit from a new radiology information system and picture archiving and communication system (RIS-PACS) which will improve the way in which more than 1.8 million medical images are captured, used and archived annually.

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

Being delivered on an ‘as a service’ basis to 11 NSW Health organisations, the solution is made up of the Sectra PACS, the Kestral Karisma RIS, Spok critical results management, and data centre hosting in the NSW Government Data Centres through AC3.

The Program is now moving into the design phase, with the first implementation planned during 2020.

“With the procurement now complete, we are fully focused on the design and implementation of the new solution,” said David Cernjul, Program Director of eHealth NSW’s RIS-PACS Program.

“The Design Working Group and specialty/workflow groups we initiated in May place our local health district and specialty health network clinicians and technical experts in the driving seat for designing the new system. These are planned to run until the end of the year.

“We are also in the process of initiating the lead implementation projects with our Western Sydney and Nepean Blue Mountains LHD colleagues. Detailed planning is underway to ensure we develop a robust implementation schedule that we can deliver in partnership.”

For further information email: EHNSW-RISPACS@health.nsw.gov.au or visit http://www.ehealth.nsw.gov.au/programs/clinical/mi

What are the benefits?

- Patient images will be readily accessible to clinicians working in different hospitals and in remote locations – providing diagnostic benefits and meaning patients will no longer need to carry films/images with them.
- A critical results management system and radiation dose tracking will be implemented – improving patient safety.
- Integration with other NSW Health systems to provide clinicians with a complete picture of a patient’s health status.
- Different types of images (e.g. videos or PDFs) can be stored and easily retrieved without the need for conversion from proprietary formats.
- Providing patients with SMS reminders about forthcoming appointments, improving efficiency at hospitals and giving patients the ability to view their images via an online portal.
eMeds roll-out accelerates to major milestone

NSW Health’s digital transformation reached a significant milestone in May, with more than 100 facilities across the state now live with electronic medication management (eMeds).

This means that more than one million patients receiving care in NSW Health facilities each year now have access to the benefits of eMeds, including improved safety and clinical quality in several areas such as removing transcription errors and flagging potential medication clashes or allergies.

Westmead Hospital’s Emergency Department, one of the state’s busiest, was the 100th site to go live with eMeds, with Chief Medical Information Officer Dr Naren Gunja saying earlier roll-outs at Auburn and Blacktown Hospitals had helped Westmead Hospital to plan for this moment.

Macksville and Bellinger River District Hospitals and Dorrigo Multipurpose Service also went live with eMeds in May, as did Ballina District Hospital and the 450-bed Bankstown-Lidcombe Hospital, capping a busy month.

Rick Turner, Program Director of eHealth NSW’s eMR Connect Program, said the 100th-site milestone was testament to strong collaboration across NSW Health.

“What with each successful roll-out, we have learnings that can be shared and applied to subsequent implementations,” Mr Turner said. “And by continually innovating, we have been able to more efficiently and effectively deliver better and safer care for our patients.”

The foundations for the eMeds program originated in the Sydney Local Health District, with Concord Repatriation General Hospital the first site.

By the end of 2017, 17 sites were live with eMeds. But it’s been the application of innovative approaches during the past year, including a ‘stacked’ approach to implementations, which has significantly accelerated the pace, with 70 facilities adopting eMeds in the past 12 months alone.

eMeds will be implemented at a further 98 facilities by the end of 2019, making it the largest program of its kind in Australia and possibly globally.

The Rural eMeds Program, a partnership between the six rural Local Health Districts, has played a significant role in this, with 48 rural facilities going live with eMeds since September 2018, and a further 65 planned for rural and remote NSW by the end of 2019.
VaxLink program launched

On 1 April the Ministry of Health and eHealth NSW launched Vaxlink – a single, statewide secure database in StaffLink that will record the immunisation records for all NSW Health staff.

This database will better manage the process of ensuring immunisation compliance by NSW Health staff, and also streamlines the process of information sharing across all NSW Health agencies. As such, staff will have a better overview of their immunisation records via StaffLink.

Only staff who are required to access information for the purpose of managing immunisation compliance will have access, to ensure high security of the program. There are no changes to existing immunisation records as the data will be transferred to the VaxLink system.
NSW Health is making progress in its aim to ensure its foundational ICT infrastructure is robust, reliant and future-ready for hospitals to provide the best possible healthcare to the people of NSW.

Central to this aim is the Health Grade Enterprise Network (HGEN) initiative, with a vendor shortly to be announced to work in partnership with NSW Health to pilot HGEN at the Westmead Redevelopment Precinct, involving a new building (Central Acute Service Building - CASB), the refurbished Westmead Hospital and The Children’s Hospital at Westmead.

Strongly aligned with the priorities of the State Health Plan, HGEN aims to establish reliable, secure and financially sustainable infrastructure platforms within hospitals and other health facilities to provide greatly enhanced capabilities for the delivery of key clinical and corporate IT applications to the bedside and ward stations.

Led by eHealth NSW in partnership with Western Sydney Local Health District, Sydney Children’s Hospitals Network, Health Infrastructure and HealthShare NSW, the HGEN pilot at Westmead involves testing options for a new approach to the procurement and management of robust clinical-grade digital infrastructure. A contract with a vendor will soon be signed following a competitive tender process.

The HGEN team is also looking at testing the HGEN model in a rural hospital and a corporate setting, with Coffs Harbour Hospital and St Leonards the likely locations, said HGEN Director Andrew Pedrazzini. Additional capabilities, including telephones, mobiles, voice, data, video conferencing and audio conferencing, are likely to also be tested.

What benefits will the HGEN pilot deliver?

- Greater mobility for staff through more consistent and wider coverage of Wi-Fi networks within health facilities.
- End-to-end consistent performance to the bedside for critical clinical systems such as the electronic medical record through standardised consistent ICT infrastructure with contractually enforced service levels.
- Reduced complexity in hospital environments to more effectively support timely integration and delivery for new state-wide IT systems to support integrated care including the electronic medical record, the Electronic Record for Intensive Care, radiology information and picture archiving and communications platforms and patient Wi-Fi.
- Predictable and contained recurrent costs given that refresh and maintenance costs will be avoided.

An artist’s impression of the Westmead Redevelopment Precinct, where HGEN will be piloted
Welcoming Aboriginal ICT trainees

eHealth NSW has welcomed five Aboriginal ICT Trainees and one full-time Analyst to our State Wide Service Desk (SWSD), the 24/7 help desk servicing the 150,000+ staff members of NSW Health.

Conway Oliver and Raymond King have joined the SWSD’s Parramatta operation, while Riley Layer, Jackson Filmer and Tomas Woods are new to the Newcastle desk. In addition, Thomas Evans has commenced in the Newcastle team as a full-time SWSD Analyst.

Their traineeships and appointment form part of our Aboriginal Employment Plan, which aims to provide greater opportunities for Indigenous people, to support our Aboriginal staff to build and develop their career with us and to enhance staff understanding of the world’s oldest living culture.

“The traineeship program we have established at eHealth NSW has the power to be life-changing,” said Abby Frith of the Aboriginal Workforce team.

“This is not just about giving Aboriginal people jobs – it is about empowering Aboriginal people such as these young men, who recently finished high school and are continuing their studies, to build long-term careers.”

Ms Frith said the trainees, most of whom are aged in their mid to late teens, were “succeeding at work and going back out into their communities saying how much they love their jobs, which has positive flow-on effects for their friends and families”.

eHealth NSW Chief Executive Dr Zoran Bolevich welcomed the trainees and said he looked forward to following their contributions to the digital transformation of NSW Health.