**eHealth NSW**

# eHealth NSW News

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**NSW GOVERNMENT**

# Chief Executive's message

Welcome to the latest edition of eHealth NSW News. I am delighted to share with you the latest updates on our innovative programs and initiatives that are shaping the future of healthcare in NSW.

The next 12 to 24 months represent an exciting time of transformation and growth for the NSW public health system as the ground-breaking Single Digital Patient Record (SDPR) program progresses. Contract negotiations are currently being finalised, while planning and information gathering lays the foundations for its statewide roll out. We are happy to share the latest update on SDPR and how it is set to provide a holistic, integrated and real-time view of every patient in the NSW Health system.

Advancing NSW Health's Virtual Care Strategy, a pilot will soon be underway in Western NSW and Southern NSW local health districts (LHDs) to explore the benefits of Remote Patient Monitoring (RPM) for patients with diabetes. We are proud to be working closely with these LHDs and the Agency for Clinical Innovation (ACI) to help to reduce unnecessary hospital admissions and empower patients to be more active in managing their health.

It's also exciting to have a state-of-the-art cardiac monitor/defibrillator device being piloted in NSW Ambulance vehicles at Ulladulla and Wollongong stations. The Clinical Device and Notification Platform (CDNP) project is supporting effective two-way communication between paramedics and specialists in hospitals, enabling prompt and targeted interventions that save lives.

We are proud to be celebrating the one-year anniversary of SafeScript NSW – a program that has been instrumental in providing prescribers and pharmacists with a tool to monitor and dispense controlled medicines safely. eHealth NSW's focus now turns to developing an authority management system, which is integral to good governance of controlled medicines.

MedSync is another game-changer for clinicians featured in this edition. It is allowing seamless, secure sharing of medical images which fosters collaboration, enhances diagnostic capabilities and supports better patient outcomes.

The Radiology Information Systems and Picture Archiving and Communications System (RIS-PACS) is getting fantastic feedback from clinicians around the state. In this edition you can discover how it's leading to faster medical imaging access and diagnosis and improved patient care. It's also pleasing to see how voice recognition software is simplifying the documentation process for clinicians across the state – enabling accurate and fast speech-to-text conversion, reducing administrative burdens and allowing more time for patient care.

Delivering an exceptional patient experience is the driving force behind our programs and solutions at eHealth NSW. It's therefore great to see the Health Outcomes and Patient Experience (HOPE) platform is now more accessible for culturally and linguistically diverse (CALD) patients and carers, supporting the delivery of more inclusive care.

# Chief Executive's message (cont.)

eHealth NSW was thrilled to host its own virtual event for Human Experience Week in May and reflect on how our work impacts the human experience of staff, patients, carers and families across the state. Thanks to Brigitte and Simon for sharing your incredible stories and valuable insights as consumers.

eHealth NSW is collaborating with Health Protection NSW on a new program that will improve infectious disease response and management across our state's Public Health Units. Find out how the Signal program will enhance our pandemic preparedness.

It's wonderful to now be able to allow NSW parents and carers to provide online consent for their child to receive routine vaccinations at school, thanks to the Consent and Records Management for Immunisation (CARMI) program.

Meanwhile, parents are also set to benefit from the digitisation of the 'Blue Book'. We know how important the first 2000 days of life are for a child's physical, cognitive, social and emotional health. The NSW Digital Baby Book will help give children the best start in life, as families and clinicians gain better access and control of children's health information.

A new digital supply chain system is transforming our procurement processes across the state. Read more about SmartChain and the Traceability pilot being undertaken in partnership with HealthShare NSW to simplify and digitise the source-to-pay process.

Finally, cloud migration continues to unlock new possibilities for our NSW Health systems and applications – giving us greater speed and reliability, improved data security and paving the way for a more agile and connected healthcare system.

I invite you to explore this edition of our eHealth NSW News and delve deeper into these remarkable programs to learn how they are making a positive impact on our health system.

Well done to our eHealth NSW staff who have had a busy first half of the year accelerating these programs.

Thank you to our colleagues across the NSW Health network including LHDs, specialty health networks (SHNs), statewide services, pillars and the Ministry of Health, as well as our NSW Government and ICT industry partners for your continued support and collaboration.

Together we are transforming the delivery of care, improving patient experiences and building a stronger health system for the people of NSW.

Best wishes,
Dr Zoran Bolevich

Chief Executive, eHealth NSW
Chief Information Officer, NSW Health

# Clinical care



## Single Digital Patient Record forges ahead

Preparations continue for the delivery of the next generation electronic health platform, Single Digital Patient Record (SDPR).

Much has been achieved since the announcement of Epic as the preferred supplier for the delivery of SDPR, pending successful contract negotiations.

A large amount of work has been underway to support a smooth roll out once contracts are signed.

This includes planning with local health districts (LHDs) and specialty health networks (SHNs) to assess the readiness and specific needs of individual health services.

Data will be gathered to inform the order of roll outs and support transitions during this important period of digitisation for the public health system.

For the first time, SDPR will enable healthcare teams to have secure access to holistic digital and unified clinical records for all patients through one system across the state. These records will also provide access to comprehensive patient pathology data.

SDPR will help staff to deliver care across 15 LHDs, 2 SHNs and all NSW Health Pathology laboratories.

Deputy Secretary, Health System Strategy and Patient Experience, NSW Health, Deb Willcox said the health system is embarking on an important journey.

*"This is the largest health transformation program that has occurred in Australia. It is not just an IT system change; it will allow us to continuously improve the delivery of public healthcare across NSW."*

*"Importantly, SDPR will help to ensure patients receive consistently high care across all NSW Health services. All NSW Health care teams, no matter their location, will be able to access the information they need about a patient".*

eHealth NSW, along with program partner NSW Health Pathology, are currently engaging with clinical and technical staff across NSW Health to increase awareness and gain feedback on SDPR.

This includes the planning of governance groups who will oversee the design and implementation of SDPR.

Contract negotiations are expected to conclude in mid to late 2023.

If you would like to know more about SDPR and receive regular updates please get in touch with our team at EHNSW-SDPR@health.nsw.gov.au.

You can also learn more by visiting the SDPR page on the eHealth NSW website.

# Clinical care (cont.)

## Remote patient monitoring: keeping people out of hospital

Patients with diabetes will be able to manage their care from the comfort of home – thanks to a new program, launching in the second half of 2023.

The Remote Patient Monitoring (RPM) program will be piloted at Western NSW and Southern NSW LHDs in August for patients with diabetes and diabetes with chronic heart failure.

Delivered by eHealth NSW in partnership with the Agency for Clinical Innovation (ACI), the program supports patients to receive safe, reliable and timely care in the comfort of their own home, community setting or on country.

The RPM program aims to reduce unplanned hospital visits and shorten hospital stays for patients. It does this by providing virtual support and assisting the early detection of health issues. It enables healthcare teams to intervene quickly and provide effective treatment, keeping patients out of hospital and emergency departments.

Patients enrolled in the RPM program receive a personalised kit. It includes devices such as a thermometer, blood glucose monitor, pulse oximeter, blood pressure monitor and weight scales. They also receive a user-friendly device to track their vital signs and record symptoms.

Real-time patient data is sent to the healthcare team, who can use it to make informed decisions about the best treatment options. If any abnormal readings are recorded, the team is alerted and can quickly take action.

The Ministry of Health will monitor and evaluate the benefits of these pilots, to help inform a statewide rollout, which is part of the wider Virtual Care Strategy in NSW Health.

For more information visit the RPM Program page on the eHealth NSW website.

## New cardiac care technology trial underway

A state-of-the-art cardiac monitor/defibrillator device and transmission platform is being trialled in the Illawarra and South Coast of NSW as part of the Clinical Device and Notification Platform (CDNP) project.

The device and platform will assist clinicians in carrying out their life-saving work, particularly when treating patients with acute coronary syndrome. This is a group of conditions affecting blood flow to the heart, including heart attacks.

The new device replaces existing equipment that is nearing end of life and helps to make it simpler to obtain a wide variety of diagnostic data. Paramedics from the 2 stations are using the new device as their primary cardiac monitor and testing aspects of the hardware.

The upgraded devices weigh considerably less than previous defibrillators, making them safer and easier for paramedics to use. These defibrillators also perform non-invasive blood pressure monitoring, pulse oximetry, temperature recording and pacing.

The new transmission platform allows paramedics to send electrocardiograms (ECGs) and other clinical observation data to hospital specialists. This enables rapid confirmation of diagnosis when treating a patient with suspected heart attack on the road.

It supports effective two-way communication between paramedics and in-hospital specialists. Emergency clinicians in smaller hospitals will also use the platform to obtain specialist advice in future.

The technology is being piloted at the Ulladulla and Wollongong ambulance stations, in partnership with the Illawarra Shoalhaven Local Health District (LHD).

Paramedics have said they like the ergonomic design and that it supports a variety of patient monitoring functions all in one device.

Since the pilot began in early December 2022, feedback has been positive and the team are learning a great deal. The captured insights will help to inform the statewide rollout, which is planned to start later this year.

*"So far, I have found the new system easy enough to get used to. I love all the extra info it provides and the lightweight machine, and it already feels almost as familiar as the older technology,"* a paramedic participating in the pilot said.

The CDNP project is a collaborative effort between eHealth NSW, NSW Ambulance, LHDs and the Agency for Clinical Innovation.

The initiative will eventually see nearly 1,300 ambulances equipped with these state-of-the-art electrocardiograms/defibrillation devices.

NSW Ambulance Chief Executive Dr Dominic Morgan said the new cardiac notification platform would help streamline the transfer of patients from ambulance into hospital by improving communication between emergency departments and clinicians.

*"The cardiac notification platform assists with the transfer of clinical observation data from ambulances and regional hospitals to tertiary hospitals so we can provide more rapid and effective treatment to patients with suspected heart attacks,"* Dr Morgan said.

Delivering the CDNP project is a key component of the State Cardiac Reperfusion Strategy and will help save lives for patients with suspected acute coronary syndrome.

eHealth NSW Chief Executive Dr Zoran Bolevich said the new technology provides a platform for the management of a range of conditions and the provision of virtual care in the years to come.

*"The technology and capability on offer with the new device and notification platform opens up many future opportunities for NSW Ambulance and the wider health system,"* Dr Bolevich said.

The CDNP program supports a recent ministerial commitment to transform cardiac care in NSW.

To learn more, visit the CDNP solution webpage.

# Clinical care (cont.)



## SafeScript NSW celebrates one year anniversary

It has been one year since SafeScript NSW, the state's real time prescription monitoring system, became available to all practising prescribers and pharmacists in NSW.

Through SafeScript NSW, prescribers and pharmacists have access to real-time information about a patient's prescribing and dispensing history for certain high-risk medicines. This information helps prescribers and pharmacists to make safer clinical decisions and reduces the incidence of harm, including death, from the unsafe use of monitored medicines.

Delivered by eHealth NSW in partnership with the Ministry of Health, SafeScript NSW's uptake has been strong and health practitioners report they find it to be a helpful clinical tool.

Dr Gunjan Singh, Principal Doctor, Crestwood Family Practice, said SafeScript NSW empowers both practitioners and patients, providing additional information to support decision making.

*"Through a patient focused approach, SafeScript NSW supports a team-based, transparent and supportive culture in prescribing and using monitored medicines."*

And according to Scott Walters, Pharmacist and Pharmacy Tutor, University of Sydney: *"SafeScript NSW is an essential tool to assist pharmacists in taking a multi-disciplinary, person-centred approach to patient care."*

In the 12 months since SafeScript NSW was introduced, more than 22,000 health practitioners have registered (66% of general practitioners and 64% of pharmacists in NSW). In addition, more than 270,000 unique patient records have been viewed by eligible health practitioners.

### Next step: improving monitored medicine regulation

eHealth NSW implemented a new digital solution to manage the application process for authority to prescribe a controlled drug under the Poisons and Therapeutic Goods Act 1966 (NSW).

This solution is used by the NSW Ministry of Health's Pharmaceutical Regulatory Unit and aims to help improve regulation and supply of monitored medicines. It replaces the Electronic Recording and Reporting of Controlled Drugs (ERRCD) system previously used by the Ministry.

Later this year, new functionality will be introduced to allow prescribers to submit authority applications online and track progress and reduce turnaround time.

This new feature will be available in the SafeScript NSW health practitioner portal, providing a central location to support prescribers in their clinical decision-making when monitored medicines are involved in a patient's care.

# Clinical care (cont.)

## NSW Health clinicians embrace lightning-fast voice recognition technology

Clinicians are saving over 840 hours each month using voice recognition software to dictate their notes instead of typing.

This highly accurate, cloud-based software uses voice-to-text technology to transcribe clinical notes in real-time. Studies undertaken by NSW Health clinicians show that notes can be dictated up to 3 times as fast as most people type.

Hundreds of clinicians across the state are using Dragon Medical One to capture clinical information such as notes for outpatient clinics, diagnostic reports and discharge summaries. The software is available on any NSW Health computer and can use a mobile phone as a microphone, making it a versatile and convenient solution for clinicians on the go.

Dr Marty Sterett, a staff specialist and emergency physician from Northern Sydney Local Health District (LHD), has been using Dragon Medical One for 10 years.

*"The most surprising thing is the accuracy right out of the box for almost anybody that uses it,"* he said.

The software has increased the speed and quality of many practitioners' documentation. Since Dragon is compatible with electronic medical records systems and other software commonly used in hospitals, it easily fits into a clinician's workflow.

Michelle Cox is a Nurse Practitioner with over 30 years of experience in Liverpool Hospital's Emergency Department (ED).

*"Time is at a premium in the ED. One of the most useful things about Dragon is that I can rattle off patient notes, transcribe long and complex documents like CT scans or ultrasound reports,"* she said.

NSW Health clinicians interested in learning more about this voice recognition software can email ehnsw-voicerecognitionservice@health.nsw.gov.au

# Clinical care (cont.)

## Safe and secure image sharing

Digital clinical collaboration continues to make strides across NSW Health with the ongoing roll out of MedSync, a platform designed to simply, safely and securely share messages and images.

MedSync was created by eHealth NSW in partnership with Microsoft using advice and insights from healthcare experts. The app is accessed via MS Teams on desktop, web and mobile devices, allowing NSW Health clinicians to chat and share images with each other on the go. The images are also securely linked to the patients' digital health record via the Enterprise Image Repository (EIR).

Since its go-live in September 2022, over 110,000 clinical staff now have access to MedSync to upload clinical photographs and videos. Clinicians have praised MedSync as a "game changer" and "timesaver." MedSync has launched at 45 hospitals with another 39 currently underway.

MedSync continues to expand its capabilities with new features including video upload, and the ability to connect with colleagues outside of the MS Teams platform. Additionally, role-based messaging capabilities are under development with a view to potentially deploying these to pilot sites.

MedSync is an important tool for improving clinical collaboration in NSW Health. Its intuitive interface and secure and stable sharing capabilities make it easier for clinicians to provide quality healthcare to patients.

For more information visit the MedSync page on the eHealth NSW website.

## RIS-PACS leads the way to digitise diagnostic services

The statewide roll out of the Radiology Information Systems and Picture Archiving and Communications System (RIS-PACS) is on track to be operational at 90 hospitals by the end of 2023.

Since its launch in 2020, RIS-PACS has seen the migration of more than 27 million historical images across 46 NSW hospital sites.

Already in 9 local health districts (LHDs) and one speciality health network, a further 2 sites were delivered in April 2023 (Shellharbour and Port Kembla) with Milton, Ulladulla and Wollongong scheduled in the coming months.

RIS-PACS stores patient information, digital images and results, providing a centralised solution which is accessible to hospital-based treating teams statewide.

It integrates seamlessly with existing systems, has reduced double handling and the need to manage multiple systems independently when documenting patient care.

Paul Green, District Medical Imaging Manager at Northern NSW LHD, said the RIS-PACS solution has made it easier for NSW Health services to share important information about patients' health.

*"This means that doctors can quickly and easily access patient records, which helps speed up the process of diagnosing illnesses,"* Mr Green said.

*"The broader statewide management of the RIS-PACS solution has avoided unnecessary imaging and works well in conjunction with other healthcare systems used by NSW Health to give doctors a full picture of a patient's health."*

The ability to look at data and images on the move, particularly on mobile devices for on-call doctors is revolutionary, according to Associate Professor Naren Gunja, Chief Medical Information Officer at Western Sydney LHD.

*"You could be an orthopaedic doctor, a plastics doctor, a neurologist, anybody who is on call and needs to see the images remotely,"* Associate Professor Gunja said.

*"We've never had this kind of flexibility with the ability to see everything – the entire domain's worth of imaging. For clinicians, and especially for mobile clinicians, it's a game-changer – a new way of working."*

RIS-PACS has vendor-neutral archiving solution design. This means that clinicians can retrieve images no matter what format they are in or which system they came from originally.

RIS-PACS also features 3D viewing to aid diagnosis and web and mobile image viewing for easy access on multiple devices. It also offers radiation dose tracking, SMS reminders for appointments and orthopaedic templating to aid surgical interventions.

For more information. please visit the RIS-PACS page on the eHealth NSW website.

If you would like to know more about RIS-PACS please contact EHNSW-RISPACS@health.nsw.gov.au.
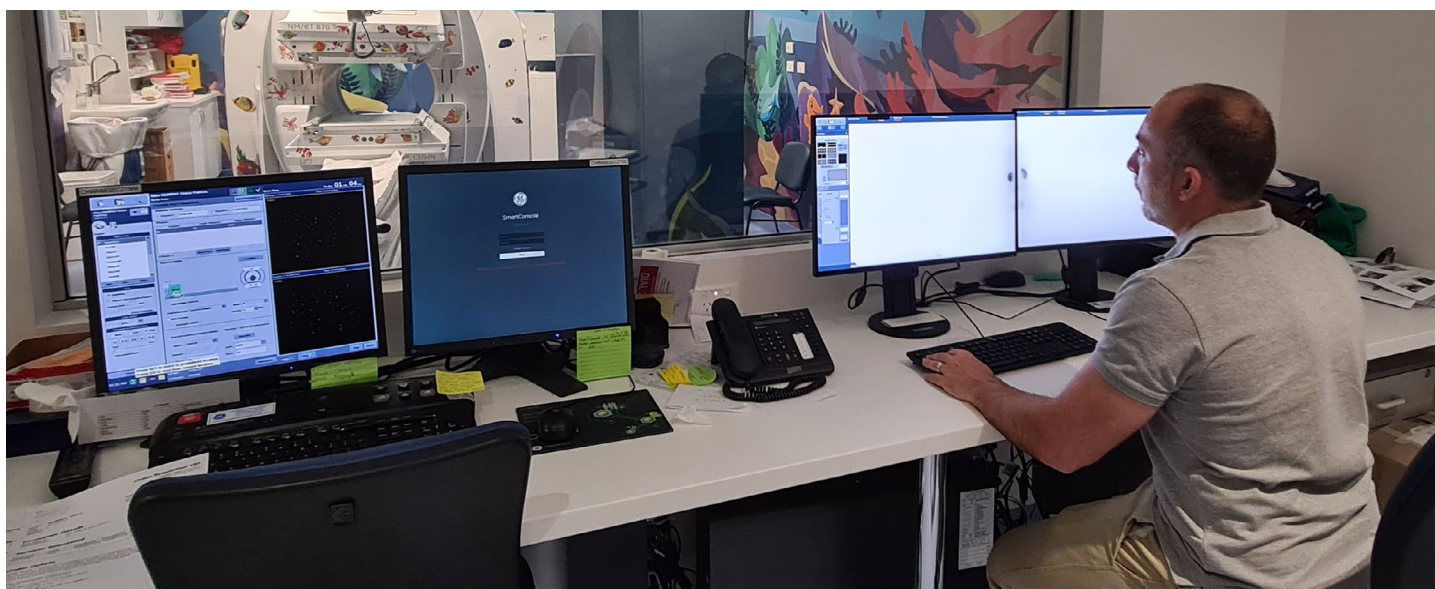
# Patient experience

## Blue Book to go digital for NSW parents

Launching in 2024, the NSW Digital Baby Book will provide parents, carers and clinicians with a digital record of a child's health, development and immunisation information.

The majority of a child's brain structure develops in the first 2000 days of their life (from pregnancy until their 5th birthday). This time has a huge impact on how a child grows, develops and learns. Evidence shows that a child's experiences in the first 2000 days of their life can predict their educational outcomes, the probability of doing well in employment and relationships, and their chance of having chronic disease as an adult.

Evidence also shows that certain interventions in the first 2000 days can improve a child's long-term outcomes. It is important that parents and clinicians have access to information and tools to support children during this time.

eHealth NSW is collaborating with NSW Government partners, clinicians, parents and carers to develop the NSW Digital Baby Book. This work forms part of a NSW whole-of-government initiative, led by the Department of Education, to give all children in NSW the best start in life.

When a child is born in NSW, parents receive a My Personal Health Record Book (known as the Blue Book). Parents, carers and clinicians use this paper-based book to record the child's health and development information.

The NSW Digital Baby Book will provide a digital option for this record. For families, this means easier access to, and better control over, their child's health information. It will feature a schedule of a child's health and development checks and immunisations, with reminders to help busy families navigate this process. It will also have questionnaires and information for parents including the milestone monitoring tool (Learn the Signs, Act Early).

Providing families with the information they need, when they need it, empowers them to partner with healthcare providers in their child's care. It will also help to open the pathways to extra care and early interventions for those who need it.

This resource can support clinician decision-making and improved care for families. Increasing the capacity for families and health professionals to work together to build a digital health record from birth will help clinicians predict the potential long-term health outcomes of children, and act early with families to improve the health of their children for life. The initiative is expected to support future integration with the National My Health Record.

The NSW Digital Baby Book is an exciting step towards enhancing the quality of children's care in NSW. The program will be delivered in phases over 3 years, with the first release due in 2024.

For more information visit the NSW Digital Baby Book page on the eHealth NSW website.

## HOPE for CALD patients

Culturally and linguistically diverse (CALD) patients and carers can now share their feedback in 9 languages, thanks to updates to the Health Outcomes and Patient Experience (HOPE) platform.

The HOPE platform was co-designed with consumers, clinicians and service managers, then developed by eHealth NSW in partnership with NSW Health and the Agency of Clinical Innovation (ACI).

It allows patients and carers to give feedback on their outcomes and experiences. This allows the real-time collection and use of Patient Reported Measures (PRMs).

The HOPE patient and carer portals now support Greek, Italian, Korean, Macedonian, Serbian, Simplified Chinese, Spanish, Traditional Chinese and Vietnamese. Arabic translation is due for release later in 2023. All Patient Reported Outcome Measures (PROMs) surveys are also now translated to support culturally safe and inclusive care for patients.

Melissa Tinsley, Associate Director, Integrated Digital Enablement Accelerator at the ACI said these translations made it easier for CALD patients and carers to share their experiences.

*"This helps give health professionals a stronger understanding of culturally diverse patients' needs and impacts of treatment,"* Melissa said.

The Osteoporosis Refracture Prevention (ORP) outpatient service at Westmead Hospital collected the state's first PRM survey in a language other than English this year.

An ORP clinician said it was helpful to offer the survey in a patient's preferred language. The ORP service has continued to translate surveys with several other patients.

The collection and use of translated PROM surveys gives health professionals a better understanding of the unique health needs of NSW's growing CALD communities.

The PRMs team continue to update the portals to improve patient experience. An example of this is the recent addition of QR code access to make sign in quick and secure. A Grafton Base Hospital patient said, *"the survey was quick and easy and using the QR code was really helpful."*

Visit the eHealth NSW website to find out more about Health Outcomes and Patient Experience – Patient Reported Measures.

The statewide PRMs/HOPE platform rollout continues with **717 sites live** and over **60,000 patient surveys completed**.

This includes **203 PROM surveys completed in languages other than English**, as at April 2023.

## Consumers in the spotlight for Human Experience Week

Consumers were at the heart of eHealth NSW's Human Experience Week celebrations in May.

Previously known as Patient Experience Week, Human Experience Week (1–7 May 2023) was renamed this year to reflect the inextricable link between patient, carer, family, volunteer and staff experiences that all form the human experience in healthcare.

Events took place in person and online across the NSW Health network with the theme 'All of Us: the Power of Community'.

eHealth NSW's live virtual event embraced this theme – giving consumers and community partners the opportunity to share their stories about how digital technologies have impacted their own personal healthcare experiences. The event also showcased 2 eHealth NSW programs that are empowering and engaging consumers.

Brigitte Sigl, a member of the eHealth NSW consumer reference group, shared her challenging and inspirational journey with chronic illness. She opened up about her lived experience with multiple sclerosis to give a better understanding of the patient perspective. It gave insight into how eHealth NSW can work with consumers to meet their digital needs.

*"My good and bad experiences make me a very passionate person and I want to improve the system and build bridges between staff and consumers,"* Brigitte said.

*"We can learn from each other, and co-design and co-creation can be achieved by mutual trust and respect for each other.*

*"Consumers and staff, hand-in-hand from the beginning is essential, and only then can true partnership and superior outcomes be achieved for our community."*

eHealth NSW recently established the consumer reference group to provide advice and recommendations to various eHealth NSW committees and programs. This currently includes 8 consumers representing communities across NSW.

The group provides an independent voice to ensure the preferences, needs and values of consumers like Brigitte are considered in planning and decision-making in relation to eHealth NSW's digital solutions.



eHealth NSW consumer reference group member Brigitte Sigl spoke about the importance of building bridges between health staff and consumers.

## Consumers in the spotlight for Human Experience Week (cont.)

Simon Herd, Executive Principal at Hunter Christian School, also spoke openly about the emotional rollercoaster he and his wife Sharlene experienced when she had a sudden, unexpected seizure and was diagnosed with meningioma.

Simon said he was thankful for the digital systems in place that allowed Sharlene's clinicians to have access to the latest information and act quickly.

*"The data collected and speed of information going into the system so the specialists had it at their fingertips was outstanding and it really ensured the best patient experience for Sharlene,"* Simon said.

*"These are the stories that you don't often hear, and the impact of the work you've done in creating an interface is often unseen, but for us it was huge.*

*"For us, the work eHealth NSW does behind the scenes is actually at the frontline in supporting patient experience."*

eHealth NSW is exploring community partnerships with schools, including Hunter Christian School, as part of our ongoing work to promote STEM (science, technology, engineering, and mathematics) 'real world' learning opportunities.

The Human Experience Week event also spotlighted our Health Outcomes and Patient Experience (HOPE) and Engage Outpatients programs.

Empowering patients and carers to share their health experiences is at the core of HOPE, designed by eHealth NSW in collaboration with the Agency for Clinical Innovation. The HOPE platform enables patients and their carers to share feedback on their health outcomes and experiences of care. This allows the real-time collection of Patient Reported Measures (PRMs) giving clinicians insight into the needs of patients and driving improvements in their social, emotional and overall wellbeing.

Engage Outpatients is a new digital referral management solution to improve the referral experience of patients, referrers and clinicians in outpatient services. Through Engage Outpatients referrals are sent digitally to outpatient services, notifying both referrers and patients of referral outcomes. Continuity of care is improved for patients by streamlining the secure sharing of patient information between referrers and outpatient services, enhancing the experience for all involved.



Simon Herd, pictured with his wife Sharlene spoke from personal experience about the positive impact eHealth NSW's systems have on patients and their loved ones.

The virtual event highlighted the positive impact eHealth NSW's work can have on human experience.

To find out more about human-centred healthcare in NSW, view the Elevating the Human Experience –NSW Health's guide to action for patient, family, carer and caregiver experiences. It outlines how we can all partner together to transform the way NSW Health delivers high quality, compassionate and personalised care.

NSW Health also recently launched All of Us: A guide to engaging consumers, carers and communities across NSW Health.

# Population heath

## Signal: Improving our disease outbreak response

eHealth NSW is working with Health Protection NSW to create a new platform to improve our statewide response to major public health threats.

The Signal program will review and re-design current practices across NSW Public Health Units and within Health Protection NSW to automate, standardise and streamline processes across the state.

The COVID-19 pandemic showed the need for greater surveillance and outbreak response capabilities to help NSW Health rapidly detect and respond to infectious disease outbreaks.

Dr Kerry Chant AO PSM, Chief Health Officer and Deputy Secretary, Population and Public Health, said:

*"The Signal program is the most significant investment in the enhancement of our public health surveillance and outbreak response platform for NSW Health for well over a decade.*

*"Health Protection NSW is proud to partner with eHealth NSW in the design and delivery of this program and will continue to ensure the needs of the public health network, and the lessons learned from the COVID-19 response, are integrated into the delivery of the platform."*

The Signal program will enable:

- improved outbreak surveillance ability
- investigation of public health threats
- access to data through appropriate gateways
- collaboration within the public health network
- public health action at scale through the production of rapid operational metrics to aid public health decision-making.

Signal will also connect to national data systems for notifiable conditions or diseases.



### About Health Protection NSW

Health protection involves the prevention and control of threats to health from communicable diseases and the environment.

One of the core functions of health protection is to undertake statewide surveillance of notifiable conditions to trigger public health action.

A range of stakeholder groups are responsible for the management of notifiable diseases in NSW. Those with a central role include Health Protection NSW (HPNSW), Public Health Units (PHUs), and NSW Health Pathology. Other organisations including private pathology entities, the Centre for Epidemiology and Evidence (CEE) and the Clinical Excellence Commission (CEC) also play a role.

# Population heath (cont.)

## School vaccination consent now quick and easy for parents

Parents and carers can now provide online consent for their child to receive routine vaccinations at school, rather than complete paper-based consent forms. This change makes it easier for parents and supports vaccination uptake.

Launched in early 2023, Consent and Records Management for Immunisation (CARMI) is a digital solution enabling online consent, clinic management and operational reporting for the NSW School Vaccination Program.

eHealth NSW partnered with Health Protection NSW to develop CARMI. The new digital solution is improving the collection and management of school vaccination consent records across the state.

As part of the NSW School Vaccination Program, NSW Health works with schools to offer the vaccines recommended and funded for adolescents by the National Health and Medical Research Council (NHMRC). Students in Year 7 are offered Diphtheria-Tetanus-Pertussis (dTpa) and Human Papillomavirus (HPV) vaccines. Students in Year 10 are offered Meningococcal ACWY vaccine.

There were 324,000 vaccination doses given through the school vaccination program in 2022. For students to get their free vaccinations at school, parents or carers must provide their consent for each vaccine.

Parents are provided a link from their child's school and use their Service NSW login to access the system, to give consent and update their child's details in the online portal. Parents also now get SMS notifications when vaccinations are given. Since launching in February this year, over 76,000 online consent forms have been completed (as at 27 April 2023).

CARMI enables real-time recording of vaccination details, resulting in a faster upload to the Australian Immunisation Register (AIR). This means better data quality and security and improved access to vaccination records.

It also benefits Public Health Units (PHUs) and Community Health Centres (CHCs) who administer the vaccination program in schools. It has reduced the administrative burden for staff by replacing the remote scanning of paper-based consent forms and automating manual reporting processes.

The scheduling feature helps clinic staff to allocate resources. The scheduler advises if there are catch-up vaccinations needed at certain schools, and reserves

clinic resources to make sure these can be completed. As at 27 April 2023, approximately 1,900 school vaccination clinics have been scheduled in CARMI.

Barbara Wilson, a PHU Immunisation Coordinator currently using CARMI, said that while introducing any new system does present some teething issues, the new solution is presenting real benefits.

*"CARMI has enhanced the experience of the school immunisation providers. It's allowing the school vaccination program to go paperless, providing real-time data and easier documentation for clinicians, which has built confidence and trust in the system,"* Barbara said.

*"Importantly the student's school immunisation history is updated immediately onto the Australian Immunisation Register (AIR) for parents and carers to view, as well as other immunisation providers,"* Barbara said.

Parents and carers can still complete a paper-based consent form if needed, or if they don't have a Medicare card, by requesting the paper consent form directly from their child's school.

Digitising the consent management system is saving time and improving the overall experience for PHU and CHC staff managing clinics. An offline solution is being developed to support school vaccination clinics in remote areas with limited or no mobile connectivity.

For more information visit the NSW School Vaccination Program web page.

# Digital connectivity and enablement

## Benefits of cloud migration are crystal clear

Cloud technology is delivering greater speed and reliability for information technology (IT) and clinical services right across NSW Health.

In its first 12 months the Infrastructure Refresh Program has saved 120,000 clinical productivity hours by transitioning eHealth NSW services to the cloud.

This included a 70% reduction in unplanned outages and a 50% reduction in maintenance windows.

As at May 2023, 30% of eHealth NSW services have been migrated and 90% of critical applications are planned for cloud migration by the end of 2024.

The program has saved $25 million in total over the past year in avoided costs, reduction in capital expenditure and improvements in productivity.

Meanwhile eHealth NSW's Statewide Data Centre Reform Program is working with health organisations across the state to migrate their locally managed services to the cloud.

The program has achieved $70 million worth of benefits for local health districts and specialty health networks through productivity savings, reduced server downtime and the ability to scale server capacity.

One example is the Sydney Children's Hospital Network where the ability to quickly scale up their cloud-hosted server capacity has reduced the risk of an outage. An overloaded server could cause clinical or corporate applications to stop running, impacting patient care.

So far, more than half of the 825 in-scope applications have been migrated to eHealth NSW's cloud platform and service. These include applications such as Medical Director, Cardiovascular Imaging, NSW Health's Rapid Response (ICU) application and clinical surveillance applications.

Almost a third of the 1,740 servers identified as cloud candidates have also been migrated.

Visit the eHealth NSW Journey to the Cloud page to find out more.

### Let's talk cloud

In April 2023 eHealth NSW hosted a Cloud Community Day in partnership with Microsoft.

The event was an opportunity for representatives from across NSW Health to come together and share their latest cloud technology learnings and insights.

Speakers from South Eastern Sydney Local Health District, NSW Health Pathology and eHealth NSW showcased their latest cloud initiatives.

eHealth NSW Director of Cloud Services, Adam Stanzione said it was great to share, collaborate and interact on all things cloud.

*"The day had a great mix of insightful content and certainly demonstrated the progress of cloud technology in healthcare."*

## Transforming our supply chain system with SmartChain

The SmartChain program will deliver a new statewide digital solution for NSW Health supply chain and procurement systems.

Co-led by eHealth NSW and HealthShare NSW, it will simplify procurement processes and ensure decision-making is based on reliable and trusted information, enhancing patient safety.

In a major milestone for the project, the Traceability solution pilot recently launched.

An end-to-end tracking solution manages the supply of implantable devices and other products. It tracks and assesses product usage across the supply chain at department, facility, local health district (LHD) or statewide level.

The Traceability solution can also quickly track items to patients, improving stock management, and enhancing ordering and reporting capabilities. It will also reduce risks of adverse patient safety outcomes in the event of product recalls.

Lizafe Muriel, Clinical Support Officer at Nepean Hospital's Cardiac Catheterisation Lab, is using the Traceability solution to track items to patients and raise orders.

*"The SmartChain Traceability solution is more efficient in ordering and has greater control over cost and reduction in manual record keeping. It also has better visibility of stock and usage. Thank you to HealthShare NSW, eHealth NSW and the procurement teams and everyone involved for making my job easier, but most importantly saving overspend for the users,"* Lizafe said.

Nepean Hospital was the first pilot site. It has since been rolled out at Blue Mountains Hospital and Lithgow Hospital.

Clinical departments taking part in the pilot include cardiac catheterisation labs and medical imaging.

*"The SmartChain Traceability solution will deliver many benefits including enhanced patient safety. It will improve how products are traced to patients and will provide greater visibility of theatre ordering and streamline the process,"* Shehryar Khan, SmartChain Solution Lead, eHealth NSW said.

Over the next 18 months, eHealth NSW will support the implementation of the Traceability solution at LHDs and specialty health networks across the state.



Lizafe Muriel, Clinical Support Officer at Nepean Hospital's Cardiac Catheterisation Lab

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