PERFORMANCE

NSW STATE HEALTH PLAN

INNOVATION BRINGS CHANGE, AS DO DEMOGRAPHIC TRENDS.

Healthcare moves with the times, as the needs and expectations of communities, patients and their carers evolve. In recent years, new challenges and priorities have emerged for funding, planning and delivering services. These arise from increased demand, an ageing population and a greater number of people living with chronic illnesses, such as diabetes, heart disease and cancer. New treatments and diagnostic tools mean we can do more, increasing expectations.

The *NSW State Health Plan* provides the strategic framework that brings together existing NSW Health plans, programs and policies.

Together with the NSW Premier's Priorities, this plan underpins our work across the system to deliver the right care, in the right place, at the right time, while being vigilant about on the safety of patients and staff in the health system.

Eight Strategic Priorities contribute to our vision of a sustainable health system that delivers outcomes that matter to patients, is personalised, invests in wellness and is digitally enabled.

The Strategic Priorities determine how health services work together to achieve the vision in hospitals, the workforce, research and innovation, eHealth and infrastructure in a financially sustainable way.

Strategic Priorities

KEEP PEOPLE HEALTHY

PROVIDE WORLD-CLASS CLINICAL CARE: PATIENT SAFETY FIRST

INTEGRATE SYSTEMS TO DELIVER TRULY CONNECTED CARE

DEVELOP AND SUPPORT OUR PEOPLE AND CULTURE

SUPPORT AND HARNESS HEALTH AND MEDICAL RESEARCH AND INNOVATION

ENABLE EHEALTH, HEALTH INFORMATION AND DATA ANALYTICS

DELIVER INFRASTRUCTURE AND SYSTEM CAPABILITY

BUILD FINANCIAL SUSTAINABILITY AND ROBUST GOVERNANCE

PREMIER'S PRIORITIES 2015–2019

In 2015, the Premier of NSW committed to delivering 12 Premier's Priorities. The priorities aimed to keep the economy strong, create jobs, deliver world-class services, protect the vulnerable, and ensure that all NSW citizens and communities share in the state's success.

NSW HEALTH HAS CONTRIBUTED TO THESE PREMIER'S PRIORITIES:

- Building infrastructure, with key infrastructure projects to be delivered on time and on budget across the state.
- Creating jobs, with a target of 150,000 new jobs in all sectors across the state by 2019.
- Driving public sector diversity, by increasing the number of Aboriginal people and women in senior leadership roles by 2025.
- Reducing domestic violence, with the proportion of domestic violence perpetrators who re-offend to be reduced by 25 per cent by 2019.
- Protecting children, by decreasing the percentage of children and young people re-reported at risk of significant harm by 15 per cent by 2019.
- Improving government services, by improving customer satisfaction with key government services every year during this term of government to 2019.

NSW HEALTH HAS DIRECT RESPONSIBILITY FOR THESE PREMIER'S PRIORITIES:

- Improving service levels in hospitals, with 81 per cent of patients through emergency departments within four hours by 2019.
- Tackling childhood obesity, by reducing overweight and obesity rates of children by five per cent by 2025.

NSW HEALTH HAS ALSO CONTRIBUTED DIRECTLY TO THESE STATE PRIORITIES:

- Deliver better government digital services, with 70 per cent of government transactions to be conducted via digital channels by 2019.
- Cut wait times for planned surgeries, by increasing on-time admissions for planned surgery, in accordance with medical advice.
- Deliver strong budgets, with expenditure growth to be less than revenue growth.
- Transitioning to the National Disability Insurance Scheme (NDIS), with successful transition of participants and resources to the NDIS by 2018.
- Reducing adult re-offending, by reducing the number of adults in the justice system who re-offend by five per cent by 2019.

The NSW Premier's Priorities 2015–2019 are available at www.nsw.gov.au/improving-nsw/premiers-priorities-2015-2019.

NSW HEALTH STRATEGIC PRIORITIES 2018–19

PRIORITY 1

KEEPING PEOPLE HEALTHY

KEY ACHIEVEMENTS FOR 2018–19

- Launched the Milk Bank in December 2018, to provide pasteurised donor human milk to vulnerable infants in neonatal intensive care units.
- Increased distribution of influenza vaccines doses from 2.2 million doses in 2017-18 to 2.4 million doses in 2018-19.
- Vaccinated 120,000 high-school students against meningococcal ACWY disease.
- Fully vaccinated 90,357 children aged one year (94.0 per cent) and 97,396 children aged five years (94.7 per cent).
- Invested $38 million in overweight and obesity prevention.
- Around 88 per cent of centre-based early childhood services participated in the Munch & Move program and 83 per cent of primary schools participated in Live Life Well @ School.
- Invested more than $13.5 million on tobacco control initiatives and developed the *NSW Health Tobacco Strategy Work Plan 2019-2021* to guide efforts to tackle smoking, which is a leading cause of disease and premature death.
- Committed $225.3 million to minimise harm from alcohol and other drug use by delivering comprehensive education, brief intervention, treatment, rehabilitation and continuing care programs through NSW Health public sector services, non-government organisations (NGOs) and Aboriginal community–controlled health services.
- Referred more than 500 women to the expanded Substance Use in Pregnancy and Parenting Service.
- Scaled up the Hepatitis in Prisons Elimination Program and almost eliminated hepatitis C in 12 correctional facilities.
- Completed Housing for Health measures in 23 Aboriginal communities to improve safety and reduce infections.

1.1 IMPLEMENT POLICY AND PROGRAMS TO REDUCE CHILDHOOD OBESITY

More than one in five children are overweight or obese. The NSW Ministry of Health invested $38 million in overweight and obesity prevention in 2018-19.

KEEPING PEOPLE HEALTHY
HEALTHY FOOD IN CHILDCARE

Hunter New England Local Health District

The Hunter New England Local Health District took out the Keeping People Healthy category at the 2018 NSW Health Awards for an online menu-planning program that supports childcare services to provide meals consistent with dietary guidelines.

To ensure all children in care have access to healthy foods, the local health district developed an online menu-planning program that has helped plan healthier menus and improved children's diets.

The free program has been disseminated nationally, with over 1800 services (400 in NSW) accessing the program.

Photo: Brad Hazzard, Minister for Health and Medical Research; Elizabeth Koff, Secretary, NSW Health; Serene Lin Yoong, Hunter New England Local Health District; Alice Grady, University of Newcastle; Luke Wolfenden, Hunter New England Local Health District; Dr Kerry Chant, Chief Health Officer; and Dr Teresa Anderson, Chief Executive, Sydney Local Health District.

Preventive measures

Childhood obesity prevention programs delivered through the NSW Healthy Children Initiative target children's settings and families, including early childhood services, schools, and junior community sport clubs.

Around 88 per cent of centre-based early childhood services participated in the Munch & Move program and 83 per cent of NSW primary schools are participating in Live Life Well @ School. Go4Fun, a healthy lifestyle program for children aged 7-13 years who are above a healthy weight, has helped 13,400 children and their families to adopt a healthier lifestyle. A Go4Fun program tailored for Aboriginal families is being delivered across NSW in partnership with 23 Aboriginal communities. In 2018-19, four new Aboriginal communities participated in the program.

Local health districts continue to work with all communities to support and encourage them to remain engaged in Go4Fun and deliver future programs.

Go4Fun Online is a non-face-to-face version of the program delivered online with telephone coaching and support. It is available to improve access for families, particularly those in rural areas.

FIRST STATEWIDE MILK BANK OPENS IN NSW

NSW Health is committed to the safe, equitable and ethical provision of pasteurised donor human milk to vulnerable infants in neonatal intensive care units.

The Milk Bank, a partnership between NSW Health and the Australian Red Cross Blood Service, was launched in December 2018, to provide pasteurised donor human milk to these infants. Neonatal intensive care units at the Royal Hospital for Women, the Liverpool, Nepean, Westmead, John Hunter, Royal North Shore and Royal Prince Alfred hospitals, and the two units located in the Sydney Children's Hospitals Network can access pasteurised donor human milk from the Milk Bank.

Go4Fun has helped 13,400 children and their families to adopt a healthier lifestyle

NSW Health continues to increase routine growth assessments for children as part of good-practice clinical care across health settings. This helps health professionals to identify children who are above or below a healthy weight, and provide parents with brief advice and referral if needed. The Healthy Kids for Professionals website, developed in collaboration with experienced health professionals and families, provides online resources and training, and supports face-to-face engagement. Website visits increased by 48 per cent from 68,268 in 2017-18 to 100,813 in 2018-19. More users accessed content, with a 40 per cent increase in the number of resources downloaded.

The NSW Ministry of Health conducted two social marketing campaigns to help children stay at a healthy weight. Evaluation found that people targeted in the campaign – which included parents of children aged 5-12 years – intended to adopt a range of healthier behaviours after being exposed to the campaign.

1.2 ENSURE PREVENTIVE AND POPULATION HEALTH PROGRAMS TO REDUCE TOBACCO USE

Smoking is a leading cause of disease and premature death in NSW. NSW Health has developed the *NSW Health Tobacco Strategy Work Plan 2019-2021* and invested more than $13.5 million in tobacco control initiatives.

Reducing smoking during pregancy is a priority. NSW Health has rolled out a comprehensive statewide training and incentive program for antenatal service providers.

Smoking rates among pregnant Aboriginal women reduced from 45% in 2015 to 42.4% in 2017

NSW Health has also prioritised smoking cessation support for Aboriginal people and people with a lived experience of mental health issues. In partnership with the Aboriginal Health and Medical Research Council of NSW, NSW Health hosted an Aboriginal tobacco control roundtable. Outcomes from the workshop will drive action to further reduce smoking rates among Aboriginal people.

The NSW Ministry of Health invested $485,500 in Aboriginal Community Controlled Health Services for the provision of nicotine replacement therapy in 2018-19, to assist in reducing smoking rates in Aboriginal communities.

A range of nicotine replacement therapy products, and interventions in declared emergency departments and mental health facilities, strengthened support for mental health consumers in 2018-19.

The Cancer Institute NSW launched the Smoking Cessation in Cancer Services project, to embed brief interventions to stop citizens smoking in local health district clinical cancer settings.

Anti-tobacco campaign

From September 2018 to June 2019, the Cancer Institute NSW delivered a comprehensive anti-tobacco advertising campaign. This included the 'Win' campaign, which focused on the positives of quitting smoking.

Quitline and iCanQuit.com.au

In 2018-19, there were 6424 inbound calls to Quitline and 6904 outbound calls from Quitline.

iCanQuit.com.au logged 789,614 sessions, with tobacco control social marketing campaigns continuing to drive traffic to the iCanQuit tools and peer forum. An evaluation of iCanQuit in November 2018 demonstrated that the site provides an important online resource that offers smokers information, useful tools and the opportunity to share their quitting journey.

1.3 EMBED A HEALTH SYSTEM RESPONSE TO ALCOHOL AND DRUG USE AND WORK ACROSS GOVERNMENT AGENCIES

In 2018-19, NSW Health committed $225.3 million to minimise harm from alcohol and other drug use by delivering education, brief intervention, treatment, rehabilitation and continuing care programs through NSW Health public sector services, non-government organisations (NGOs) and Aboriginal Community Controlled Health Services statewide.

Criminal justice diversion programs

In 2018-19, 3984 people were referred for assessment and 2336 people were accepted and supported in the Magistrates Early Referral into Treatment (MERIT) Program which aims to break the drug-crime cycle.

Support for women during pregnancy

The Substance Use in Pregnancy and Parenting Services (SUPPS) is a key program implemented to improve the reach and effectiveness of multidisciplinary support for pregnant women who use alcohol and other drugs during pregnancy, their families and the health service system.

As part of the NSW Drug Package announced in 2016-17, $15 million over four years was allocated to expand SUPPS across NSW. Eight local health districts received funding to expand and develop SUPPS, with funding also being allocated through regional enhancements. This has resulted in most local health districts being able to offer some support to pregnant women who may be using substances and their families.

More than 500 women were referred to the expanded services in 2018-19.

Opioid Treatment Program reform

In July 2018, NSW Health released updated NSW Clinical Guidelines: Treatment of Opioid Dependence. Over the one-year period since this policy change, there has been an increase in both accredited (6.5 per cent) and non-accredited (5.8 per cent) prescribers, contributing to an increase of 6.2 per cent in total opioid treatment prescribers in NSW.

Overdose prevention

The Overdose Response and Take Home Naloxone Translational Research Grants Scheme trial tested methods to increase the uptake of naloxone, a medication that can prevent death or disease from opioid overdose including enabling and supporting specific health workers to safely supply naloxone and train clients for home use.

Support for families

Workforce development and the provision of direct support has been expanded to support the needs of families impacted by alcohol and other drug use. Part-time allied health workers support the families of young people engaged in treatment services. Family inclusive workshops were delivered by NSW Health and across non-government sector services in rural and metropolitan districts to increase the capacity of health workers to support families and significant others.

The Justice Health and Forensic Mental Health Network delivered targeted programs for Aboriginal people, including court diversions into treatment,

ELIMINATING HEPATITIS C

NSW is moving closer to eliminating hepatitis C, with research showing more than 22,000 people across the state have been cured of the virus, using new easy-to-take treatments. Around 32 per cent of people estimated to be living with hepatitis C in NSW have now been treated.

For 2018-19, the avoided costs per patient treated was $1612 per year, which equates to $87 million in avoided healthcare costs since direct-acting antiviral therapy became available on the Pharmaceutical Benefits Scheme.

New medications have a cure rate of 95 per cent. They can be prescribed by any GP and a cure is usually achieved within eight to 12 weeks, with few or no side-effects, providing amazing health outcomes for persons who have been infected.

rather than servicing custodial sentences, through the Drug Court of NSW.

1.4 REDUCE THE IMPACT OF INFECTIOUS DISEASE ON THE COMMUNITY

HIV

NSW Health continued to make progress towards the virtual elimination of HIV transmission in NSW. In 2018, 17 per cent fewer NSW residents were diagnosed with HIV than the average of the previous five years.

Programs targeted at hard-to-reach populations include the NSW Dried Blood Spot program and increasing HIV testing in general practice, mental health, drug and alcohol, and emergency departments.

NSW Health continued to ensure access to pre-exposure prophylaxis (PrEP) for those at high risk of HIV, with the listing of PrEP on the Pharmaceutical Benefits Scheme in April 2018.

Hepatitis C

The elimination of hepatitis C as a public health concern in NSW by 2028 remains a priority. There has been a focus on improving access to testing and curative treatment for vulnerable populations,

CAMPAIGN URGES TRAVELLERS HEADING OVERSEAS TO GET A MEASLES JAB

NSW Health rolled out a new campaign in April 2019 in response to the increase in measles cases across the state. Several cases were linked to overseas visitors and residents returning from countries where measles is more common.

The campaign 'Bring back memories not measles!' aimed to raise awareness among people travelling overseas about the ongoing risks of measles and encourage full vaccination prior to travel.

including people who inject drugs and Aboriginal people.

The NSW Dried Blood Spot program provides greater access to hepatitis C testing for at-risk populations, particularly those who are reluctant to test in traditional settings.

Influenza programs

NSW Health funded programs to provide influenza vaccinations to children aged six months to less than five years. Stronger influenza vaccines for people aged 65 years and over were successfully rolled out under the National Immunisation Program. Strategies to assist general practitioners manage their influenza vaccines supplies were put into action, including a web-based GP information kit.

On 1 May 2019, NSW Health launched its 2019 Winter Flu campaign to encourage people to get a flu shot and combat the spread of the flu virus by practising healthy respiratory hygiene habits.

Management of significant infectious disease outbreaks

In July 2018, NSW Health identified the first known contamination of Australian eggs with *Salmonella* Enteritidis. Between July 2018 and June 2019, the outbreak affected 242 residents of five states, most of whom were NSW residents. The outbreak led to seven separate recalls of eggs, affecting 21 egg products in NSW and Victoria, and prohibition orders were issued to at least five food venues by the NSW Food Authority. NSW Health, along with the NSW Food Authority and the NSW Department of Primary Industries continues enhanced surveillance for *Salmonella* Enteritidis.

Between October 2018 and June 2019, NSW Health identified and helped control a multi-state outbreak of a novel strain of *Salmonella* Typhimurium linked to eggs. At least 235 people developed the infection as a result of poor handling or poor cooking of eggs. The NSW Food Authority and local councils issued prohibition orders on 10 food venues found to be responsible for one-third of all cases. The outbreak was controlled through enhanced sanitisation and cleaning at the egg farm, and prohibition of raw egg use at food venues in affected council areas.

NSW Health responded to 44 cases of measles among NSW residents (38) and visitors to NSW (six) between December 2018 and June 2019. Despite the significant increase in the number of importations of infectious measles (30 cases – almost four times higher than the same period in 2017-18), secondary spread was limited (14 cases). Measles vaccine demand in NSW almost doubled during April and May 2019.

1.5 EMBED ABORIGINAL CULTURAL CONCEPTS OF HEALTH AND WELLBEING IN PROGRAMS AND SERVICES

The Centre for Aboriginal Health is developing and implementing a suite of tools and resources to embed cultural safety across the health system.

The centre commenced development of a NSW *Aboriginal Health Governance and Accountability Framework*, to support system reforms to better deliver improved Aboriginal health outcomes.

The centre also released the mid-term evaluation of the *NSW Aboriginal Health Plan 2013-2023*, which outlined 43 recommendations to drive systemic changes in Aboriginal health. The evaluation provides priority focus areas for the remaining five years of the plan.

The centre also began development of the NSW Health Services Aboriginal Cultural Engagement Self-Assessment Tool to identify ways of strengthening cultural engagement between NSW Health organisation staff and their Aboriginal stakeholders to enhance cultural respect and collaboration across the system.

The Centre for Aboriginal Health also reviewed and published updated versions of *Communicating Positively*, and the *Aboriginal Cultural Activities Guidelines*.

The first of a series of symposia, partnering with Public Health Units and Aboriginal Community Controlled Health Services, was held, to find solutions to current and emerging public health issues.

A new Aboriginal Health Dashboard and accompanying toolkit was also released, to better enable local health districts to demonstrate their performance against a range of Aboriginal health indicators.

EXCELLENCE IN THE PROVISION OF MENTAL HEALTH SERVICES
WHEN LESS IS MORE – WEIGHT GAIN IN MENTAL HEALTH UNITS

Murrumbidgee Local Health District

Murrumbidgee Local Health District took out the Excellence in the Provision of Mental Health Services category at the 2018 NSW Health Awards for its 'When less is more' project. An audit of consumers on second-generation antipsychotic (SGA) medication indicated an average weight gain of 13.96 per cent during admission to the acute Mental Health Unit at Wagga Wagga Base Hospital. This project aimed to reduce weight gain to under five per cent for consumers admitted for longer than five days, prescribed SGA medication, and whose baseline weight was within or above the healthy weight range.

Post intervention, a repeat audit showed average weight gain had decreased to 1.6 per cent, exceeding the project's target. Metabolic monitoring increased from 70 per cent to 88 per cent. Effective interventions included psycho education, physical activity opportunities and routine metabolic monitoring.

Photo: Brad Hazzard, Minister for Health and Medical Research; Elizabeth Koff, Secretary, NSW Health; Katherine Swords, Murrumbidgee Local Health District; Dr Alyson Hickey, Murrumbidgee Local Health District; Sherylyne Rosengren, Murrumbidgee Local Health District; and Dr Nigel Lyons, Deputy Secretary, Health System Strategy and Planning.

PROVIDE WORLD-CLASS CLINICAL CARE: PATIENT SAFETY FIRST

KEY ACHIEVEMENTS FOR 2018-19

- Provided a more comprehensive picture of cancer control in NSW, with the Reporting for Better Cancer Outcomes Program reporting on 67 key performance indicators in 2018, three times the number of indicators in 2015.
- Minimised potential harm by issuing 21 Safety Alert Broadcasts and four medication shortage communications.
- Risk-assessed 670 medical devices; 17 identified were as high risk and two as extreme risk, requiring a system-level response.
- Increased use of the Quality Data Improvement System to over 5000 clinicians and managers in NSW Health, with users empowered with their local data to improve patient safety and healthcare quality.
- Continued to build the NSW Health workforce patient safety and quality improvement capabilities, training 693 improvement coaches, with 417 taking part in Safety System Skills training.
- Trained 58 improvement coaches as part of the Mental Health Patient Safety Program to assist local teams to improve their safety priorities.
- Released a new version of the Between the Flags electronic observation charts, including charts for Antenatal Short Stay, Standard Maternity and Standard Newborn.
- Recorded 27,000 occasions where patients received acute care in a Hospital in the Home service rather than having to stay in a hospital bed.
- Successfully implemented the Emergency Department Patient Experience initiative in the emergency departments at Liverpool, Lismore, Blacktown and Nepean hospitals, creating significant improvements for patients awaiting care.
- Developed the *Patient Reported Measures (PRM) Strategic Framework* to ensure a more consistent and coordinated approach to the collection and use of PRM information across the state.
- Invested an additional $2 million to further improve access to elective surgery services in NSW. Around 97.1 per cent of patients had elective surgery in their clinically recommended timeframe.
- Supported implementation of Leading Better Value Care initiatives in more than 100 health facilities to help accelerate NSW Health's move to value-based healthcare.
- Continued to drive the Patient Flow Collaborative, a statewide program to implement improvement initiatives and collectively address patient flow challenges. More than 240 improvement initiatives have been implemented across 31 hospitals.

- Developed and implemented adult intensive care and neonatal intensive care statewide dashboards to enhance visibility and access to adult and neonatal critical care beds across NSW.
- Developed Electronic Patient Journey Boards and a bed status update tool, which was rolled out to special care nurseries to improve patient flow and ensure babies were safely transferred closer to home.
- Exceeded the 40 per cent target by rolling out My Food Choice – a more personalised way of serving patient meals – to 42 per cent of beds statewide, an increase from 33 per cent at the end of 2017-18.

2.1 CONTINUE TO EMBED QUALITY IMPROVEMENT AND REDESIGN TO ENSURE SAFER PATIENT CARE

NSW has a system-wide approach to delivery. One that is safe, high quality, timely, efficient and evidence based.

Eight hospital-acquired complications were identified as key performance indicators in 2018-19, and incorporated into local health district and specialty health network service-level agreements. These were:

- pressure injuries
- venous thromboembolism
- healthcare-associated infections
- falls resulting in fracture/other intracranial injury
- surgical complications requiring unplanned return to theatre
- medication complications
- third-and-fourth degree perineal laceration during delivery
- neonatal birth trauma.

Progress in achieving targets associated with these key performance indicators has been monitored in line with the *Purchasing and Performance Framework.*

In 2018-19, the NSW Ministry of Health developed the Data Quality for Improved Performance Program (DQIPP) app, which is progressing through user acceptance testing.

Quality improvements

Over 2018-19, the Clinical Excellence Commission (CEC) continued to develop improvement leaders across NSW, and equip them with coaching and tools to drive local improvements.

The Quality Improvement Academy, within the CEC, continued to build the NSW Health workforce patient safety and quality improvement capabilities, training 693 improvement coaches, with 417 taking part in Safety System Skills training. Since 2007, over 5000 participants have been trained in improvement science through the academy.

> **Increased use of the Quality Data Improvement System to over 5000 clinicians and managers in NSW Health**

Quality Improvement Data System

The Clinical Excellence Commission (CEC) continued to develop its Quality Improvement Data System, a digital analysis platform for sharing information to assist with patient safety and quality improvement activities. By the end of June 2019, more than 5000 clinicians and health managers were using the Quality Improvement Data System. Additionally, they had created more than 200 improvement projects, and were generating or refreshing around 15,000 reports every month.

Hospital-acquired complications

In collaboration with key agencies, in 2018-19, the Clinical Excellence Commission continued to develop resources and strategies to reduce hospital-acquired complications. Information on prevalence of hospital-acquired complications is now provided to clinical teams by the CEC. Using data, consultation commenced with senior clinicians to identify patient safety priorities. There are around 14 types of recognised hospital-acquired complications. Reports of healthcare-associated infection, one of the highest reported hospital-acquired complications, have fallen over the reporting year. The overall rate of reported hospital-acquired complications has also decreased in 2018-19.

Clinical incident and deteriorating patients

As part of the redesign of the Clinical Incident Review System, a new preliminary risk assessment was developed in consultation with clinical leaders and directors of clinical governance, and is being piloted in two local health districts.

In collaboration with eHealth, the Clinical Excellence Commission released Version 4 Between the Flags electronic observation charts in March 2019 including the Antenatal Short Stay Observation Chart, the Standard Maternity Observation Chart and the Standard Newborn Observation Chart.

Quality improvement in cancer control

In 2018, the Better Care Outcomes program reported on 67 key performance indicators across cancer control (including nine patient-reported measures), which is three times the number of indicators reported in 2015.

The NSW Prostate Clinical Cancer Registry now has more than 8000 registrants and has, to date, collected quality-of-life information on 2526 men.

eviQ

The eviQ Cancer Treatments Online website (eviQ.org.au) is a free resource of evidence-based, consensus-driven cancer treatment protocols and information. Provided by the Cancer Institute NSW, eviQ supports health professionals in the delivery of cancer treatments at the point of care. It now has 50,000 users per month – a 100 per cent increase since the new eviQ website was launched in August 2017.

New information resources

The Cancer Institute NSW launched a new website patients.cancer.nsw.gov.au to help people affected by cancer talk to their cancer care team, understand their options, and make informed decisions about their treatment and care.

The *Understanding chemotherapy* eviQ resource was produced in 10 community languages, with development informed by multicultural network members.

Education resources – in simplified and traditional Chinese, Vietnamese and Arabic – were also developed to help patients have informed conversations with their doctors after a cancer diagnosis.

Aboriginal Cancer Network

In 2018-19, the Cancer Institute NSW grew the statewide Aboriginal Cancer Network to 524 members. The Aboriginal Cancer Network Forum was held in April 2019, highlighting best-practice models of care to improve cancer outcomes for Aboriginal people in NSW.

2.2 CONTINUE TO MOVE TO PATIENT-CENTRED VALUE-BASED CARE

Healthcare worldwide is changing along with the needs and expectations of patients, carers, clinicians and communities. Patients have greater expectations and understanding of what they would like to receive and what they expect from their health journey.

Value-based healthcare will improve health outcomes that matter to patients by evolving how we organise and provide care. This will be achieved with a focus on delivering and measuring health outcomes, and using insights to further inform expenditure, clinical models and the experience of receiving and giving care.

Value-based healthcare in NSW means continually striving to deliver care that improves:

- health outcomes that matter to patients and the community
- experiences of receiving care
- experiences of providing care
- effectiveness and efficiency of care.

Understanding the patient journey

The *NSW Patient Reported Measures Strategic Framework* was developed to achieve a more consistent and coordinated approach to the collection and use of information about patient-reported measures across NSW Health. This strategic approach will enable the health system to improve clinical practice and patient quality of life, identify excellence and drive improvement.

Leading Better Value Care

Leading Better Value Care is a statewide program that is helping to accelerate NSW Health's move to value-based healthcare. It does this by identifying and scaling evidence-based initiatives for specific conditions.

Foundational measurement activities were completed, including finalising the measurement alignment approach, measuring the economic impact of the first two years of Leading Better Value Care, and costing studies to support the provision of care in new settings.

In 2018-19, Leading Better Value Care activities focused on continuing to work with local health districts to

VALUE-BASED HEALTHCARE

Value-based healthcare is a contemporary model of care in which health systems put the patient at the centre of the care they deliver. Value-based healthcare involves measuring clinical outcomes and the outcomes that matter to the patient.

Value-based healthcare in NSW means continually striving to deliver care that improves:

- health outcomes that matter to patients and the community
- experiences of receiving care
- experiences of providing care
- effectiveness and efficiency of care.

In 2018-19, NSW Health continued to implement and embed initiatives to support the move towards value-based healthcare. This included foundational work for collecting patient-reported measures and data linkage, and support for local health districts to implement new models of care through the Leading Better Value Care and Integrated Care programs.

embed and expand the reach of the eight Tranche 1 initiatives and developing solutions for five new Tranche 2 initiatives.

Statewide approaches have been developed to improve outcomes for:

- paediatric bronchiolitis
- hip fracture care
- direct access colonoscopy for positive faecal occult blood tests
- hypofractionated radiotherapy for early-stage breast cancer
- wound management.

Supporting implementation

This year, the Agency for Clinical Innovation (ACI) hosted a series of webinars, meetings and forums that focused on capability and skills development and knowledge sharing to deliver change in key statewide clinical priority areas, under the Leading Better Value Care initiatives. The ACI, in partnership with the NSW Ministry of Health, also held capability development, system knowledge and clinical solution-sharing workshops across all clinical initiatives.

Other key Leading Better Value Care achievements include:

- More than 100 NSW Health staff attended a bronchiolitis workshop, including paediatric and emergency clinicians from across the state.

- More than 50 clinicians attended workshops on chronic obstructive pulmonary disease and chronic heart failure.
- The hip fracture care team partnered with the Australian and New Zealand Hip Fracture Registry to deliver a two-day workshop to launch an initiative.
- The Diabetes and Endocrine Network supported local health districts and specialty health networks in implementing the inpatient management of diabetes initiative. Resources to support junior medical officers and nursing staff as they care for patients with diabetes in hospital continued to be implemented across the system.
- The clinical decision support app Thinksulin recorded 4800 users and a series of eLearning and Qstream modules are being used by clinicians across the state.
- The Diabetes Network hosted a statewide workshop to share best practice in NSW hospitals and build further capability in spreading change and patient-reported measures.
- The Diabetes Network continued to improve access to high-risk foot services across NSW, with 27 services now active across 13 local health districts and specialty health networks.
- The ACI partnered with Sydney Local Health District podiatry services and the Royal Prince Alfred Hospital Diabetes Centre to run a two-day workshop to support sites in setting up a high-risk foot service.
- The ACI also convened a working group to provide advice on incorporating telehealth to align with the standards for high-risk foot services in NSW.
- The Musculoskeletal Network continued to support the implementation and ongoing evaluation of the osteoporotic refracture prevention and osteoarthritis chronic care programs. These services are now available in each of the 16 local health districts and at St Vincent's Health Network.
- In 2018-19, a group was established to support the planning and facilitation of a series of peer-mentoring events, including a consumer experience panel in which patients shared their experience of living with chronic disease and participating in the programs.
- The Musculoskeletal Network hosted two workshops to teach behaviour change methodology to 58 clinicians who are delivering models of care, and techniques to use in their clinical role. The network also hosted a forum for more than 100 attendees, which showcased the work and progress of service sites, implementation groups and researchers working in musculoskeletal health.
- The patient-reported measures team worked with key stakeholders to identify surveys, collection points and clinical processes to support the routine collection of outcomes and experiences that matter to patients.

Understanding progress toward implementation and outcomes

Between August 2018 and February 2019, NSW Ministry of Health listened to the experiences of local health districts in implementing the Leading Better Value Care program and found:

PATIENTS AS PARTNERS
MY RECOVERY – THE CONSUMER LED JOURNEY

Murrumbidgee Local Health District

Murrumbidgee Local Health District took out the Patients as Partners category at the 2018 NSW Health Awards for My Recovery – The Consumer Led Journey. The Mental Health Recovery Unit tries to empower consumers to achieve their own goals and take control of their own support networks during their recovery. Consumers chair their own 'Recovery Reviews' at weeks two, five and seven, giving them an opportunity to review their goals and enlist support from relevant parties.

Evaluations have revealed that 88 per cent of consumers felt like a leader in their own recovery journey, and 82 per cent felt as though their relationship with mental health services had improved.

Photo: Elizabeth Koff, Secretary, NSW Health; Brad Hazzard, Minister for Health and Medical Research; Paul Templeton, Murrumbidgee Local Health District; Amanda Larkin, Chief Executive, South Western Sydney Local Health District; and Scott McLachlan, Chief Executive, Western NSW Local Health District.

- widespread support for value-based healthcare across the state
- a structured statewide approach to Leading Better Value Care created a strong enabling environment
- approaching Leading Better Value Care as part of long-term reform contributes to more sustainable implementation
- districts have identified many opportunities to involve community health, allied health and primary care providers in improving the coordination and appropriateness of care
- more support is required to help districts to embed, scale and sustain progress.

More than 100 health facilities now have a Leading Better Value Care initiative in place

2.3 IMPROVE THE PATIENT EXPERIENCE

The principles of exceptional patient and carer experience align with the Premier's Priority of 'putting the customer at the centre of everything we do'; however, the clinical outcomes and complexities of

IMPROVING THE PATIENT EXPERIENCE

In 2018-19, the NSW Ministry of Health set out to define an innovative system-level strategy for patient and carer experience.

The Emergency Department Patient Experience initiative was implemented into emergency departments at Liverpool, Lismore, Blacktown and Nepean hospitals. Four key strategies were rolled out to help patients, carers and their families feel more welcome, safe, cared-for and empowered including:

- patient experience managers
- enhancing the waiting room facilities
- multilingual digital patient information
- patient experience development for staff.

The mid-point pilot evaluation demonstrated significant improvement in the experience with, on average, a 30 per cent improvement in patient satisfaction across all four hospitals. These key strategies are now being implemented in a further 15 emergency departments.

human interactions and vulnerability in healthcare make the patient experience more complex.

A Patient Experience Executive Strategy Group was established to oversee this work. The Group has representation from the Ministry, local health district and pillar organisation executives, and two consumer representatives. It is chaired by the Deputy Secretary, Patient Experience and System Performance division.

Supporting the patient experience

In 2019, the Clinical Excellence Commission (CEC) and the Agency for Clinical Innovation (ACI) hosted the fifth Patient Experience Symposium which was also supported by the Cancer Institute NSW, Bureau of Health Information, Health Education and Training Institute, HealthShare NSW, NSW Health Pathology, eHealth NSW and the NSW Ministry of Health.

The two-day event, held in Sydney, attracted 657 attendees, with almost one in five being consumers.

The event qualified for the #consumertick logo, demonstrating recognition of its commitment to integrating the experience and insight of consumers into program development.

NSW Patient Survey Program

In 2018-19, the Bureau of Health Information (BHI) continued to manage and expand the NSW Patient Survey Program, asking almost 300,000 patients about their time in the NSW health system.

This year, additional surveys covering 10 high-priority clinical cohorts were undertaken to support the Leading Better Value Care program. BHI also created a new survey of patients with longstanding health conditions to support NSW Health's Integrated Care program, particularly with respect to how different healthcare professionals and services work together.

The NSW Ministry of Health is working in partnership with BHI to better understand and improve Aboriginal patient experiences.

> **74% of consumers reported an excellent or very good experience in mental health services**

In 2018-19, more than 26,000 Your Experience of Service (YES) questionnaires were returned in NSW, and 74 per cent of people reported an excellent or very good experience. YES is the nationally developed consumer experience of care measure used in NSW public mental health services. In 2018-19, an online version of YES (eYES) was introduced to make YES more accessible and provide consumers with immediate feedback.

Health literacy

The Clinical Excellence Commission worked with consumer groups and held formal and informal consultations with local health literacy champions, groups and staff to identify the main principles for a *NSW Health Literacy Framework*.

Poor health literacy is one of the social determinants of health and is associated with more hospitalisations, greater use of emergency care, lower uptake of screening and vaccines, less ability to take medications appropriately, less ability to interpret labels and health messages, and, among elderly persons, poorer overall health status and higher mortality rates.

The *NSW Health Literacy Framework* released in April 2019 is a call to action for NSW Health. Its four priority areas are:

- All patients, their families and carers are active partners in their healthcare.
- Staff communicate with patients, families and carers in ways they understand.
- Health facilities and centres are easy to access and navigate.
- Our health systems are built to be sustainable and reliable for every patient, every time.

Food service improvements

My Food Choice was introduced in 2017 as a new, more personalised way of serving patient meals in NSW public hospitals. My Food Choice uses technology to cut the time between ordering and

YOUR HEALTH LINK NATIONAL PHOTOGRAPHIC COMPETITION

Each year, photographers of all abilities are encouraged to enter the Your Health Link National Photographic Competition. The prestigious competition is run by the Mid North Coast Local Health District, as part of the Your Health Link initiative, a strategy aimed at enhancing community understanding of health and healthcare information, and how people can apply that information to their lives.

The competition offers a host of prizes in the categories of Mobile Photography, Open, Primary and High School, and includes prizes to support healthy school canteen programs.

receiving meals to under four hours, and gives patients a menu of up to 18 hot meals at lunch and dinner.

In 2018-19, HealthShare NSW increased coverage of My Food Choice in NSW hospitals and Living Well changes in multipurpose services, with patients in a total of 42 per cent of beds across the state now receiving better service and more nutritious meals. In total, My Food Choice and Living Well has been rolled out to 8152 beds across 75 hospitals and multipurpose services.

2.4 ENSURE TIMELY ACCESS TO CARE, WITH A FOCUS ON EMERGENCY, SURGERY AND AMBULANCE PERFORMANCE

Emergency treatment performance

For the majority of emergency departments in NSW, attendances are typically higher in winter and lower in summer; however, in 2018-19, NSW emergency department attendances in the summer matched the peak activity levels of winter. An increase in acuity was also evident, with higher numbers of triage category 2 and 3 presentations.

The *NSW Health Recovery Performance Framework* was revised to strengthen all service access and flow indicators and identify support needs. This process involves close collaboration with the districts and networks as well as the NSW Ministry of Health on strategies to address patient flow and ensure patients are efficiently moving through emergency departments.

In 2018-19, the NSW Ministry of Health continued to provide structured, on-site support to hospitals to improve the flow of patients through the emergency department.

The Patient Flow Collaborative is a statewide program driven by the NSW Ministry of Health that partners with local health districts to implement improvement initiatives and collectively address patient flow challenges. The initial 13 hospitals participating across NSW continued to be supported into 2019 through Patient Flow Collaborative 1. Due to the success of the program, Patient Flow Collaborative 2 launched in 2019, with an additional 18 hospitals across three streams – metropolitan hospitals, rural hospitals and mental health services.

> **240 improvement initiatives were implemented across 31 hospitals through the Patient Flow Collaborative**

The Patient Flow Collaborative provides participating hospitals with a dedicated coach to support the hospital with diagnostic activities, implementation and evaluation of improvement initiatives.

Through 2018-19, strong networks across all participating hospitals have been formed and more than 240 improvement initiatives have been implemented across the 31 hospitals.

Surgery performance

NSW Health is committed to cutting waiting times and increasing on-time admissions for planned surgery. The NSW Ministry of Health developed a comprehensive model for elective surgery access performance (ESAP) management. The ESAP Monitoring and Recovery Support programs targets facilities with high numbers of overdue elective surgery patients and poor on-time performance. The Ministry worked closely with the hospitals to monitor improvement strategies, including spot purchasing, to reduce the number of overdue elective surgery patients and improve on-time performance.

Intensive care capacity

Winter 2017 was the worst flu season on record and created a significant challenge across the system, especially in intensive care units (ICUs).

In 2018/19 the NSW Ministry of Health led work to:

- develop a live ICU dashboard to enhance the visibility and accessibility of available ICU beds, and to monitor and manage the available beds statewide
- review existing polices and processes to support the timely acceptance and transfer of critically unwell patients
- develop a critical care governance model for management of statewide critical care capacity, and strategic direction for critical care in NSW.

Key achievements include the development and implementation of adult intensive care, paediatric intensive care and neonatal intensive care statewide dashboards, which have enhanced visibility and access of adult, paediatric and neonatal critical care beds. The dashboard has also been implemented in all birthing suites and Level 4 special care nurseries across NSW to provide real-time information on the level of demand for beds, and has led to improved patient flow and safer transfer of babies closer to home.

PATIENT SAFETY FIRST DEVELOPMENT OF AN EXTENDED DWELL PERIPHERAL CATHETER PROGRAM

South Western Sydney Local Health District

South Western Sydney Local Health District won the Patient Safety First category at the 2018 NSW Health Awards for the development of an extended dwell peripheral catheter program. This program aimed to reduce multiple, painful cannulation attempts and complication rates related to peripheral catheters in patients with difficult venous access. An insertion algorithm was developed to provide the most suitable intravascular device based on ultrasound assessment.

Results showed that:

- four in every five catheters were inserted at the first attempt
- the insertion algorithm contributed to the majority of devices remaining in place until therapy ended
- phlebitis rates (inflammation of the walls of a vein) were minimal and no infections were reported.

Photo: Brad Hazzard, Minister for Health and Medical Research; Elizabeth Koff, Secretary, NSW Health; Craig McManus, South Western Sydney Local Health District; Dr Evan Alexandrou, South Western Sydney Local Health District; Susan Pearce, Deputy Secretary, Patient Experience and System Performance; Dr Michael Brydon, Chief Executive, Sydney Children's Hospitals Network; Vanno Sou, South Western Sydney Local Heath District; and Nicholas Mifflin, South Western Sydney Local Health District.

Newborn Paediatric Emergency Transport Service

Work commenced on the implementation of a Newborn Paediatric Emergency Transport Service, a nurse-led transport service to enhance the model of transport, improve the timeliness of transfer of neonates and small babies, and free bed capacity in vital neonatal intensive care units (NICUs).

Addressing surgical access block

The Agency for Clinical Innovation (ACI) worked with the NSW Ministry of Health to design and implement local solutions to address surgical access block in several hospitals across the state. This included strategies to structure workflow processes and theatre schedules efficiently, strengthen criteria around patient selection for surgical interventions, and enhance coordination of surgical services between hospitals to improve collaboration and promote a more integrated service across local health districts.

NSW Ambulance integrated care initiatives

NSW Ambulance has continued to expand and implement a number of integrated care initiatives to provide patients with appropriate care options and reduce the number of transports to emergency departments. These include patient referral to alternate destinations, palliative and end of life care, aged care, Paramedic Connect and frequent user management.

Non-emergency patient transport

The Patient Transport Service established the Booking Better project, a collaborative initiative with the Patient Transport Service booking hub, frontline, and training and education teams working closely with the NSW Ministry of Health Patient Flow Portal team and local health districts and specialty networks. The project redesigned and implemented a booking form that better records essential clinical information for all patient transport.

The Patient Transport Service more accurately matches the right staff, in the right vehicle, to the right patient at the right time, and reduces on-scene cancellations.

Pathology transport

NSW Health Pathology continued to enhance pathology specimen transport and tracking in 2018-19. Procedures were streamlined at the point where samples come into laboratories to ensure rapid diagnosis, which underpins urgent patient care.

2.5 USE SYSTEM PERFORMANCE INFORMATION TO DRIVE REFORM TO THE SYSTEM

NSW Health Data Governance Framework

The *NSW Health Data Governance Framework* was published in March 2019. The framework outlines the key data governance roles and responsibilities as well as the people, processes and technology necessary to support good governance of NSW Health's statewide data assets.

Board engagement

The development of Board Reports standardised board reporting across the state by identifying the key performance indicators within the service level agreements. In June 2019, the inaugural reports were distributed, and future reports will be distributed quarterly.

> **Board reporting was standardised across the state**

The reports have been developed in consultation with a working group of Board Chairs and Chief Executives, to ensure they meet the needs of NSW Health boards.

Data assets for patient experience and outcomes

The Bureau of Health Information (BHI) manages the NSW Patient Survey Program, which gives thousands of patients across a variety of health settings the

opportunity to provide feedback about their experiences of care and subsequent outcomes. The program is a key source of patient-reported measures for the health system, and BHI's survey results can be used alongside other data to provide in-depth analysis and insights for specific population groups, conditions or services.

In 2018-19, NSW Health created the Register of Outcomes, Value and Experience (ROVE), a public health registry that links the Leading Better Value Care administrative, clinical and patient-reported measures data in one place. ROVE supports the system-wide move toward a patient-centred, value-based healthcare system and will eventually operate as a virtual registry.

The NSW Ministry of Health is working with the patient-reported measures teams at eHealth NSW and the Ageny for Clinical Innovation to enable the flow of data from patient-reported measures into EDWARD (Enterprise Data Warehouse for Analysis Reporting and Decisions) and ROVE , which will be used by stakeholders. This includes application of the *NSW Data Governance Framework* to this process and implementation of data quality and error reporting.

INTEGRATE SYSTEMS TO DELIVER TRULY CONNECTED CARE

KEY ACHIEVEMENTS FOR 2018-19

- Launched the *Strategic Framework for Integrating Care* to guide better coordination of care, and greater health literacy and self-care, reduce duplication in investment and services, and support greater job satisfaction for clinicians and staff.
- Changed the funding for Integrated Care from a grant-based to a population-based purchasing model.
- Selected five locally-led integrated care initiatives with proven patient-centred outcomes to be scaled for future rollout.
- Led negotiations to secure National Disability Insurance Scheme (NDIS) funding for disability-related health supports.
- Audited the patient population to identify individuals who are experiencing NDIS related discharge delays.
- Led negotiations on a National Hospital Discharge Delay Action Plan for NDIS participants.
- Successfully advocated for improved disability supports for young children to the National Disability Insurance Agency (NDIA).
- Established the NDIS Critical Services Incident Response (CSIR) to provide an escalation pathway for urgent or critical NDIS-related issues for health patients, including delayed discharges.
- Launched the *Strategic Framework for Suicide Prevention in NSW 2018-2023*. The framework started the journey towards zero suicides in NSW.
- Released the *NSW Strategic Framework and Workforce Plan for Mental Health 2018-2022* to strengthen suicide prevention and recovery-oriented services, deliver holistic care, improve physical care for consumers, increase community-based options and organise local systems of care.
- Provided $1.1 million recurrent funds through the Parents Package to expand Perinatal and Infant Mental Health Services, which means an additional seven full-time equivalent positions are funded across regional local health districts, and funded positions in metropolitan districts with the highest birth rates.
- Established a working group to develop strategies to support clinicians to maximise the benefits of using the clinical information held in the My Health Record.
- Committed $67.2 million over five years to implement key recommendations from the Royal Commission into Institutional Responses to Child Sexual Abuse.
- Released the *Integrated Prevention and Response to Violence, Abuse and Neglect Framework*.

3.1 DRIVE SYSTEM INTEGRATION THROUGH FUNDING AND PARTNERSHIP AGREEMENTS

The *NSW Health Strategic Framework for Integrating Care* was launched to provide an overarching vision for how NSW Health approaches the integration of care.

The framework supports:

- better coordination of patient care across different settings
- improved health and wellbeing of the population, with greater health literacy and self-care
- a more value-based health system, with reduced duplication in investment and services
- more effective use of resources
- greater job satisfaction for service providers, clinicians and other staff, with improved experiences of providing care.

> **Launched the *NSW Health Strategic Framework for Integrating Care***

Health and primary care partnerships

Integrated care is crucial to delivering care that is patient-centred and of greatest value to the population.

In 2018-19, five initiatives were selected from other locally led models of integrated care to be scaled up.

They focus on:

- patients attending an emergency department more than 10 times in 12 months
- families (parents and their children) with complex health and social needs
- residential aged care facility residents
- patients requiring specialist care in primary health settings
- regional and/or isolated paediatric patients

The funding for integrated care changed from a grant-based to a population-based purchasing approach.

Collaborative commissioning with primary health networks

NSW Health continued the design and planning for collaborative commissioning, reflecting a continued focus on local autonomy, decision-making and accountability. This design will meet local priority population health needs using local resources to provide care in the community.

Data quality improvement

The NSW Ministry of Health, eHealth NSW and Northern NSW Local Health District have partnered to undertake a proof of concept project with the Australian Digital Health Agency (ADHA).

The project will deliver the capability to identity where:

- external healthcare services are provided

- internal Northern NSW Local Health District healthcare services are provided.

This is a joint initiative with primary health networks.

Health Care Home initiative

The Australian Government led the Health Care Home initiative, which focuses on identifying people in a primary care practice with chronic disease and at risk of hospitalisation. This initiative aims to keep people well and out of hospital. The primary focus for practices in this early phase has been completing the training modules, redesigning the practice flow to support Health Care Home patients, and implementing the capitation funding model. The program has been extended to 2021 for existing patients only. Around 10,000 people enrolled in approximately 170 primary care practices across Australia. The monitoring of the enrolled patients and evaluation of the program outcomes will continue to 2021.

As at 30 June 2019, the NSW Health Care Home showed:

- Primary Health Networks had enrolled:
  - 2040 patients
  - 47 practices

Local health districts and primary health networks are working together on coordinating care for these patients to ensure there is no duplication of case management.

3.2 DELIVER MENTAL HEALTH REFORMS ACROSS THE SYSTEM

Mental Health Strategic Framework and Workforce Plan

The *NSW Strategic Framework and Workforce Plan for Mental Health 2018-2022* (The Framework and Workforce Plan) was released in August 2018. It demonstrates how the vision of *Living Well: A Strategic Plan for Mental Health in NSW 2014-2024* will be delivered and outlines approaches to embed the NSW Health values of collaboration, openness, respect and empowerment in practice, to build a health system where consumers are able to access and receive high-quality care.

An implementation plan articulates nine key areas for action under three goals:

1. Holistic, person-centred care to:

- strengthen recovery-oriented services
- deliver holistic care
- improve physical healthcare for consumers
- increase community-based options.

2. Safe, high-quality care to:

- continuously improve safety and quality
- intervene early for children and young people
- strengthen suicide prevention.

3. Connected care to:

- organise local systems of care
- improve transitions.

PATHWAYS TO COMMUNITY LIVING INITIATIVE
DOUGIE'S STORY

The *Pathways to Community Living Initiative* is a coordinated statewide approach to supporting people with severe and persistent mental illness, who have been in hospital for more than 12 months, to re-establish their lives in the community.

One person who has benefited from this initiative is Dougie. He has lived an itinerate lifestyle, with long periods of homelessness and frequent extensive mental health hospital admissions.

As a result of the *Pathways to Community Living Initiative* and the improved partnerships with aged care facilities, Dougie was offered a placement at Annie Green Court in Redfern.

He has now been living in the community at Annie Green for two years, with no hospital readmissions and continues to enjoy the freedom and safety his new home provides him.

Thank you to Dougie for giving permission to share his story.

Achieving the objectives will drive improvements in health outcomes for mental health consumers and carers, and deliver more efficient and effective care. Ongoing implementation of the Framework and Workforce Plan is a key priority for NSW Health in 2019-20.

Reducing the use of seclusion and restraint in NSW

Following the release of *Mental health safety and quality in NSW: A plan to implement the recommendations of the review of seclusion, restraint and observation of consumers with a mental illness in NSW Health facilities* a statewide plan was developed.

The statewide plan required action from all local health districts and specialty health networks to reduce and, where possible, eliminate the use of seclusion and restraint. Implementation actions addressed areas of culture and leadership, consumer safety, accountability and governance, the workforce, consumer and carer engagement, data, and the built and therapeutic environment.

A key element of the plan is to work in collaboration with mental health consumers, carers and families. All districts and networks worked with consumers, carers, families and staff to complete a local plan to reduce the use of seclusion and restraint.

The NSW Government committed $20 million to improve the therapeutic environment of acute mental health units. The NSW Ministry of Health worked collaboratively with peak consumer and carer

organisations to ensure investment targeted the development of welcoming environments that were trauma-informed and would foster hope and safety. Funding was approved for all districts and networks to co-design projects with consumers and carers to improve care experiences and outcomes. Many of these projects were delivered in 2018-19.

> **$20 million committed to improve the therapeutic environment of acute mental health units**

Reducing the use of seclusion and restraint is a safety and quality priority. As part of the implementation plan, the Mental Health Patient Safety Program was established in 2018-19. The program is being implemented by the Clinical Excellence Commission. It is informed by contemporary quality improvement science.

Potential local priorities include leadership and culture, suicide prevention, least restrictive practice, co-morbidity and safe use of medicines.

Delivering coordinated suicide prevention strategies

The *Strategic Framework for Suicide Prevention in NSW 2018-2023* was launched by NSW Premier Gladys Berejiklian and the former Minister for Mental Health, Tanya Davies, on 17 October 2018.

The framework was developed by the NSW Mental Health Commission and the NSW Ministry of Health in collaboration with residents with lived experience of a suicide attempt or who were bereaved by suicide, communities concerned about suicide, government agencies, clinicians, service providers and experts in suicide prevention. More than 1800 people contributed to the framework's development.

The framework starts the journey towards zero suicides in NSW. It sets out NSW's priorities for further coordinating, integrating and investing in suicide prevention activities, while building on what is already in place.

The launch of the framework was accompanied by a commitment of $87 million over three years from 2019-20 for new and expanded initiatives to implement priorities including:

• strengthening practices in the mental health system to eliminate suicides and suicide attempts among people in care

• aftercare services for people who have made a suicide attempt

• alternative services for people presenting to emergency departments in distress

• support services for people bereaved by suicide

• more counsellors for regional and rural communities

• expanded community mental health outreach teams

• resilience building in local communities, with particular focus on Aboriginal communities

• improvements to the collection and distribution of suicide data in NSW.

In June 2019, *Towards Zero Suicides* became a NSW Premier's Priority.

Perinatal and infant mental health

In the 2018 State Budget, the NSW Government's Parents Package provided $1.1 million recurrent funds to expand perinatal and infant mental health services. An additional seven full-time equivalent positions are funded across regional local health districts, as well as in metropolitan districts with the highest birth rates. Twenty-six specialist perinatal and infant mental health workers are now funded across the state to provide services for up to 1248 perinatal women with mental health needs annually. This brings the total annual perinatal and infant mental health services funding to $4.3 million.

Culturally safe mental health resources

Aboriginal mental health workers, academics and community elders guided the NSW Ministry of Health production of a workforce resource – *Working with Aboriginal People: Enhancing Clinical Practice in Mental Health Care Video* and *Discussion Guidebook*. These resources provide cultural insight into effective engagement with Aboriginal people, particularly young people with mental health issues.

Pathways to Community Living

The *Pathways to Community Living Initiative* was established by the NSW Government under the NSW Mental Health Reform 2014-2015 to transition people who are long-stay inpatients (over 365 days), where appropriate, to the community.

Three years into this initiative, the Australian Health Services Research Institute from the University of Wollongong has found that it is transforming people's lives and contributing to practice change in mental health hospitals.

Transitions to the community of the original 380 from July 2015 have increased as forecast from 143 in 2017-18 to 161 at December 2018, a rise of 12.6 per cent. During 2018-19, there was a substantial increase in the transitions of the original cohort of patients with age-related issues, with more than 60 per cent successfully transitioning to high-quality aged care mental health partnership services. They are reunited with their families, living near them and enjoying normal aged care community life with specialist support funded by the NSW Government.

The *Pathways to Community Living Initiative* is promoting system reform and transforming people's lives.

3.3   INTEGRATE THE APPROACH TO END OF LIFE AND PALLIATIVE CARE

Work continued on rolling out initiatives under the $100 million set aside to enhance palliative care (2017-18 to 2020-21). In 2018-19, funding was provided for new Aboriginal Health Worker and allied health positions in palliative care across all parts of NSW.

Projects were also undertaken to provide accessible information about palliative care for people from culturally and linguistically diverse backgrounds and people with disability.

Funding continued to support more nursing and medical specialist positions for palliative care, and 600 palliative care on-the job training and scholarship places for health professionals across NSW.

> ### $100 million set aside to enhance palliative care

A new model for community palliative care for people in the Western Sydney Local Health District, run by Silver Chain Group, continued into its second year in 2018-19.

The *NSW End of Life and Palliative Care Framework 2019-2024* was released to guide the future direction for palliative and end of life care for people across NSW. An End of Life and Palliative Care Committee, with senior representatives, was established to oversee implementation of the framework.

3.4 SUPPORT PEOPLE WITH DISABILITY WITHIN THE HEALTH SECTOR AND BETWEEN AGENCIES

Integrated Service Response

Between February 2018 and June 2019, the Integrated Service Response supported the service system to deliver a wraparound service response for 138 people with disability who have complex support needs.

Enhancing and expanding specialised intellectual disability health teams

In 2018-19, three new specialised intellectual disability health teams in Hunter New England, Western NSW and Sydney local health districts were established to complement the three existing teams in South Western Sydney, South Eastern Sydney and Northern Sydney local health districts. In districts without a team, nine new specialised intellectual disability nurse or senior allied health positions are funded to provide expert advice for support staff to deliver quality healthcare to people with intellectual disability. The six teams will deliver outreach services to other local health districts.

> ### New specialised intellectual disability health teams

NSW Health Disability Inclusion Action Plan 2016-2019

The *NSW Health Disability Inclusion Action Plan 2016-2019* sets out the high-level vision and objectives of disability inclusion for the NSW health system.

People with disability are consulted across NSW Health organisations as part of the design, development and testing of programs and initiatives to ensure they are inclusive and person-centred. This ensures the development and delivery of services are more appropriate and meaningful for people with disability.

SUPPORTING OUR PEOPLE
IMPROVING SPECIALIST OUTPATIENT SERVICE WAITLISTS

Hunter New England Local Health District

To improve timely access for patients referred for specialist outpatient services, John Hunter Hospital implemented a collaborative whole-of-service approach designed to engage and enable staff and stakeholders to improve access to care.

A suite of data-informed and clinically led strategies were introduced within and across specialist outpatient services. Executive leadership support and collaboration with partners were integral to the success of this program.

Results showed:

- Over the past four years, the number of patients waiting more than one year without a scheduled appointment fell by 68 per cent (5711 patients).

- The longest wait time for a patient without an appointment more than halved.

This project received the Supporting Our People Award at the 2018 NSW Health Awards.

Photo: Elizabeth Koff, Secretary, NSW Health; Susan McCarthy, Hunter New England Local Health District; Brad Hazzard, Minister for Health and Medical Research; Ruth Toneguzzi, Hunter New England Local Health District; Karen Harrison, Hunter New England Local Health District; Robin Haskins, Hunter New England Local Health District; Sushila Wagener, Hunter New England Local Health District; Adjunct Professor Annette Solman, Chief Executive, Health Education & Training Institute; and Sam Sangster, former Chief Executive, Health Infrastructure.

National Disability Insurance Scheme

NSW entered full-scheme operation of the National Disability Insurance Scheme (NDIS) on 1 July 2018.

Over the first year of being fully operational, NSW Health has worked with renewed intensity with the National Disability Insurance Agency (NDIA) and other government departments to negotiate agreements to fund disability-related health supports, to implement a plan to assist with discharging NDIS participants from hospital, and ensure faster access to early intervention services for children with disability.

The NSW Ministry of Health supported local health districts and specialty health networks to embed clear referral pathways, resolve NDIS-related issues as quickly and locally as possible, and develop supporting resources for participants and health staff.

As at March 2019, approximately 101,963 disability clients were being supported by the NDIS in NSW, including 34,397 who began receiving support for the first time. There continues to be no observable increase in health service utilisation for this group (that is, emergency department presentations, length of stay, unplanned re-admissions or potentially preventable hospitalisations), compared with the four years before the NDIS Plan approval date.

3.5 LEVERAGE HEALTH INFORMATION AND ANALYTICS TO CONNECT CARE ACROSS THE SYSTEM

The integration of healthcare information has enabled insights to inform policy and planning, and guide the strategic directions of the NSW health system. This has facilitated greater collaboration between health service providers and improved the value of care delivered to patients.

Integrated care evaluation and collaboration

The development of algorithms is enabling NSW Health to identify patient cohorts by those who are likely to benefit and those less likely to benefit from a program, based on historical data. These insights could generate cost savings of around 35 per cent, with no reduction in outcomes.

The Ministry has worked with local health districts to enhance their data analytics capability to realise potential benefits and to evolve the targeted, proactive recruitment of individuals across the state who are very likely to benefit from an integrated care intervention program.

3.6 SUPPORT VULNERABLE PEOPLE

The parenting package

Research and evidence shows that investing in the early years of a child's life can ensure better health throughout their lifetime. In 2018-19, $157 million was committed over four years for additional services and supports for new parents and their children, known as the parenting package. The $35.3 million funding allocation for the parenting package in 2018-19 included:

- providing additional child and family health nurse home visits across NSW to new parents who need extra support in the first months of their child's life. This includes a partnership with the early parenthood support non-government organisation Karitane, to provide virtual home visits for parents in regional and rural locations
- establishing Regional Family Care Centres in partnership with Tresillian in Queanbeyan, Coffs Harbour, Dubbo, Taree and Broken Hill. These centres provide local intensive support for vulnerable families with infants living in regional and rural NSW.
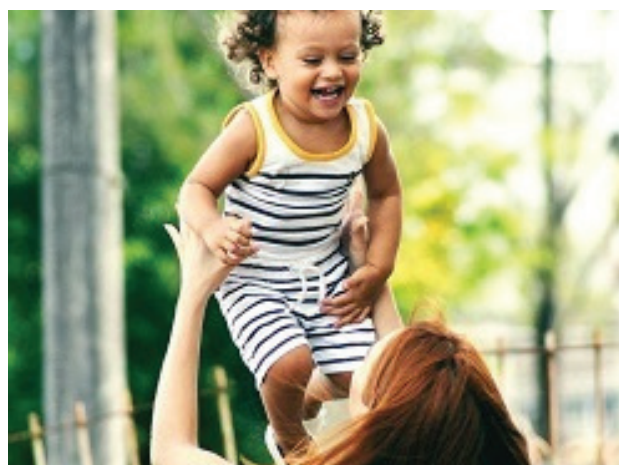
A CHILD SAFE HEALTH SYSTEM

NSW Health has supported proposals in the Office of the Children's Guardian's Regulating Child Safe Organisations discussion paper. Our response was informed by significant input from local health districts, specialty health networks and pillar organisations. The response promotes building on existing good practice and includes suggestions for how standards can be implemented and monitored in diverse service settings across the health system.

NSW Health will continue working closely with the Office of the Children's Guardian's on regulating child safe standards.

Investing in the early years of a child's life can ensure better health throughout their lifetime

Their Futures Matter

NSW Health is a key partner in the Their Futures Matter reform. The reform highlights the NSW Government's commitment to improving outcomes for current and future generations of vulnerable children and young people and their families across the state.

NSW Health, in collaboration with other partner agencies, has contributed to significant changes to the NSW human services system under the Their Futures Matter reform, including:

- designing and delivering of evidence-based, wraparound service solutions to meet the needs of vulnerable children, young people and families
- establishing the first human services cross-agency data set in NSW, with data linkage undertaken by the NSW Health Centre for Health Record Linkage.
- completing the first stage of liability and outcomes modelling to improve statewide responses, and deliver more effective service system reforms
- beginning a redesign of the child wellbeing and safety intake, assessment and referral system.

NSW Health continues to work closely with the NSW Stronger Communities Investment Unit – Their Futures Matter, and partner agencies, to implement this landmark cross-government reform.

My Personal Health Record

In 2018-19, NSW Health incorporated the 'Learn the Signs. Act Early. Milestone Monitoring Tools' into the My Personal Health Record (Blue Book). This helps parents and carers track their child's development using milestone tools before every health check with their child and family health nurse or doctor.

Royal Commission into Institutional Responses to Child Sexual Abuse

In response to the Royal Commission into Institutional Responses to Child Sexual Abuse (Royal Commission), the NSW Government committed $127.2 million over five years to implement its key recommendations. NSW Health will receive new investment of $67.1 million over five years to implement specific initiatives that aim to improve services for people who have experienced sexual assault and to improve prevention and response to children's problematic and harmful sexual behaviour.

Enhancements are designed to meet urgent service gaps identified by the Royal Commission and focus on:

- prevention
- early intervention
- improving access to therapeutic services
- meeting the needs of groups that are disproportionately impacted by sexual abuse.

As an initial response to the Royal Commission's final report, NSW Health funded additional New Street services in Murrumbidgee and Northern NSW, which are currently being established. New Street is a leading specialist service for children and young people aged 10 to 17 years who display harmful sexual behaviours.

NSW Health has additionally funded a broader expansion of the New Street service network to achieve statewide coverage. New full-service hubs will be in Mid North Coast, South Western Sydney and Southern NSW local health districts. New spoke services will be located in the Central Coast and Far West local health districts.

The Ministry has funded Survivors and Mates Support Network to provide trauma-informed counselling and holistic support to adult male survivors of childhood sexual abuse and their partners, family members/carers, prioritising Aboriginal men and young men in rural and regional areas. This funding increase recognises the Royal Commission's identification of an immediate gap in community support services to adult male survivors of child sexual assault.

Integrated Prevention and Response to Violence, Abuse and Neglect (IPARVAN) Framework

NSW Health released the *IPARVAN Framework* as a key component of the VAN Redesign Program, which is seeking to enhance the capacity of the public health system to provide 24-hour, trauma-informed and trauma-specific integrated psychosocial, medical and forensic responses to sexual assault and child physical abuse and neglect presentations. It will also broaden the scope of these services to respond to domestic and family violence presentations.

DELIVERING INTEGRATED CARE NON-EMERGENCY PATIENT TRANSPORT REFORM PROJECT
HealthShare NSW

The Non-Emergency Patient Transport Reform Project is a single, statewide service that safely and efficiently transports non-emergency patients. It provides timely and high quality care, frees the NSW Ambulance emergency fleet to provide more incidents of life saving, critical care and assists patient flow.

HealthShare NSW collaborated with local health districts and NSW Ambulance to develop a service to replace a slow and fragmented system with multiple providers. HealthShare NSW built an equitable, value for money service that partners with NSW Health to integrate into demand and capacity management.

The project uses advanced technology to automatically plan and optimise trips, allowing clinicians to electronically book and track patients' travel between hospitals, home and aged care. It provides a better service for patients and clinicians, and greater capacity for hospitals and the ambulance service.

This project received the Delivering Integrated Care Award at the 2018 NSW Health Awards.

Photo: Front: Paul Willma, Cerner; Brad Hazzard, Minister for Health and Medical Research; Alex Graham, Kylie Sammut and Dushan Tatic, HealthShare NSW.
Middle: Jennifer Van Cleef, Dr Anne Mok, Sarina Strickland, Romana De Beer, Hayley Arnott, Thavashanie Govender, Vanessa Allen, HealthShare NSW.
Back: Stephen Rodwell, Chief Executive, Far West LHD; Elizabeth Koff, Secretary, NSW Health; Melanie Frost, HealthShare NSW; Carmen Rechbauer, A/Chief Executive, HealthShare NSW; Dunko Grubisic, HealthShare NSW; James Munro Ford and Cate Coles, HealthShare NSW.

The *IPARVAN Framework* provides an overarching strategic platform for all of NSW Health to respond to violence, abuse and neglect. It also outlines guiding principles and key priorities to strengthen NSW Health services responding to violence, abuse and neglect, and detailed guidance for NSW Health's specialist related services.

The framework emphasises the need to mobilise NSW Health at the system, service and practice levels to support the successful integration of service responses for victims and families.

DEVELOP AND SUPPORT OUR PEOPLE AND CULTURE

KEY ACHIEVEMENTS FOR 2018–19

- Exceeded our target for the number of Aboriginal people in the workforce, which rose to 2.75 per cent of staff.
- Filled 139 rural preferential intern positions, building on recruitment within rural hospitals across NSW Health.
- Developed the *Aboriginal Workforce Culture Diagnostic Framework*, to identify priority areas of health service delivery against an appropriately supportive Aboriginal workforce model.
- Commissioned research into ways to increase the number of Aboriginal and Torres Straight Islander people to enter and remain in allied health careers.
- Supported workforce recruitment through advertising campaigns aimed at recruiting junior medical officers to regional and rural NSW.
- Commenced development of the *Workforce Planners' Workforce Initiative*, which aims to build the capabilities of workforce planning at the district level and drive a consistent statewide approach.
- Commenced the Finance Executive Development Program pilot to prepare 20 participants for the critical role they will play in leading and transforming health organisations.
- Graduated the first group from the Next Generation of Leaders and Managers within NSW Health program. The two-year program includes extending leadership capabilities and working with a rural local health district on a significant strategic challenge.
- Completed implementation of the NSW Health Rostering Portal to optimise rostering outcomes, with the key objectives of patient safety, staff wellbeing and organisational efficiency.
- 57 nurse and midwifery managers completed the In the Lead program, a customised leadership program to enhance skills as transformational leaders.
- Employed more than 2500 new graduate nurses and midwives.

The NSW public health system is the largest healthcare employer in Australia, with 119,784 full-time equivalent staff as of June 2019.

In June 2019, there were 12,503 full-time doctors employed within the NSW health system, representing approximately 10 per cent of the total health workforce, and 10,697 allied health professionals. A record 49,353 full-time equivalent nurses and midwives were working in NSW Health hospitals and health services as at June 2019.

Continuing professional development and education are vital for fostering new knowledge, understanding and innovative thinking. The aim is to create a skilled workforce, support for students and continuing professional development, as well as leadership and management programs.

Building and strengthening an Aboriginal workforce has been a strong focus for NSW Health for many years.

NSW Health is committed to providing a workplace culture that supports wellbeing of the workforce with a focus on the NSW Health CORE values of collaboration, openness, respect and empowerment.

A diverse and balanced skills mix is key to improving system and patient outcomes. NSW Health frequently reviews models of care and service design to identify efficiencies and opportunities to improve. This includes building an efficient mix of interdisciplinary clinical education to support patient care.

4.1 ACHIEVE A 'FIT FOR PURPOSE' WORKFORCE FOR NOW AND THE FUTURE

The *Health Professionals Workforce Plan 2012-2022* is now in its seventh year and 90 per cent of strategies and targets had been achieved or are on track for achievement.

This year saw the start of development of the *Workforce Planners' Workforce Initiative*, which aims to build the capabilities of workforce planning at the district level. Key areas of focus include:

- developing workforce planning capability and capacity in NSW Health
- introducing a consistent statewide approach to workforce planning
- driving local process improvement
- maintaining a future focus
- having a strong and engaged network of stakeholders.

> **139 rural preferential intern positions filled, building on recruitment within rural hospitals**

In 2018-19, 139 rural preferential intern positions were filled, building on recruitment within rural hospitals across NSW Health. The Rural Preferential Recruitment Program also assists interns interested in a career as a rural General Practitioner to enter the NSW Rural Generalist Medical Training Program. The Ministry has built stronger connections with the NSW Rural Doctors Network, as the rural workforce agency in NSW, and continues to work in partnership on the National Rural Generalist Pathway.

The NSW Ministry of Health has investigated opportunities to develop more strategic allied health recruitment campaigns, particularly for the rural and regional context and workforce categories in demand.

The Ministry commissioned Services for Australian Rural and Remote Allied Health to conduct a rapid review to investigate strategies for increasing allied health recruitment and retention in rural Australia.

The rollout of Recruitment and Onboarding (ROB) was completed for general recruitment, and for senior medical, dental officer and junior medical officer recruitment. In 2018-19 the development and implementation of the bulk recruitment and onboarding technology and processes for graduate nurses and midwives, postgraduate midwifery students and NSW Ambulance was completed.

The NSW Ministry of Health, in collaboration with the Health and Education Training Institute, is reviewing the current mandatory training suite for the nursing and midwifery workforce through the Behavioural Insights Mandatory Training Project. The aim of this initiative is to develop a new approach for mandatory training that is more agile. To date, a number of new modules have already been designed and piloted with key stakeholder groups.

Work has also commenced to identify the best industrial relations arrangements for delivering clinical care in the future.

Aboriginal Population Health Training Initiative

The *Aboriginal Population Health Training Initiative* supports Aboriginal people to develop and apply public health skills through three years of workplace-based training and part-time postgraduate study. In 2018-19, three new trainees started the program and one trainee successfully completed their training and achieved a Master of Public Health degree.

The Productive Mental Health Ward program

Since 2014, the Productive Mental Health Ward program has been rolled out to more than half of inpatient mental health units in NSW. In April 2019, the second phase of Productive Mental Health Ward commenced, with 22 inpatient mental health units. It will run for 12 months and build upon the foundation modules of the program and further develop processes to increase time for direct care and staff wellbeing.

Training opportunities

During 2018-19, the Health Education and Training Institute provided a range of face-to-face and blended learning opportunities and events for clinical staff (in addition to the digital resources available to all staff) to develop and support NSW Health's people and culture.

Opportunities and events for allied health professionals included:

- Inter-professional family conferencing training
- Inter-professional guardianship training
- Allied health delegation training
- Aboriginal cultural responsiveness training.

Opportunities and events for medical professionals included:

- Golden Scalpel Games
- NSW Prevocational Medical Education Conference 2019
- Medical Managers Training program

NSW RURAL HEALTH PLAN PROGRESS REPORT 2017–18

Every year in NSW, more than one million people receive care in a rural hospital.

The *NSW Rural Health Plan: Progress Report 2017-18* was released in December 2018. It is a snapshot of achievements against the directions and strategies of the *NSW Rural Health Plan: Towards 2021*, which outlines the NSW Government's commitment to ensuring that the people of regional and rural NSW receive the right care, in the right place, at the right time.

The progress report details performance against key health indicators and showcases the importance and benefits of collaboration and partnerships.

- Basic Science in Oncology course
- Basic Physician Training Masterclasses
- Emergency Medicine conference
- General Medicine Masterclass
- Medical Administration Masterclass
- Radiology courses
- Medical Education workshop for Directors of Prevocational Education and Training and term supervisors.

For nurses and midwives, a range of scholarship opportunities funded by the NSW Health Nursing and Midwifery Office were available during 2018-19:

- More than 700 scholarships were awarded to NSW Health nurses and midwives to support their postgraduate education across a broad range of specialties.
- Thirty-two scholarships were awarded to rural undergraduate nursing and midwifery students.
- Over 1000 clinical placement grants were awarded to NSW nursing and midwifery students to support placements undertaken at locations away from home.

A range of learning opportunites were provided for rural and remote staff, including:

- an annual Rural Health and Research Congress
- simulation education via the Sister Alison Bush Mobile Simulation Centre
- Rural Research Capacity Building program
- support for Aboriginal Maternal and Infant Health Service/Building Strong Foundations network staff from the Training Support Unit
- scholarships for professional development for rural staff.

Strategic recruitment campaigns

In 2018-19, the NSW Ministry of Health supported workforce recruitment through advertising campaigns aimed at recruiting junior medical officers (JMO) to regional and rural NSW. Historically, NSW Health has had consistently high vacancy rates for JMO positions in regional and rural locations, and some under-subscribed specialist roles.

2019 Enrolled Nurse Scholarships Campaign

NSW Health supports the development of the Enrolled Nurse workforce through scholarship positions that are linked to areas of workforce need.

In partnership with TAFE NSW and the NSW Health Registered Training Organisation, 239 scholarships were awarded to support students to undertake enrolled nurse training in 2019.

Aboriginal Nursing and Midwifery Cadetship and Scholarship Program

The NSW Aboriginal Nursing and Midwifery Cadetship and Scholarship Program supports NSW Health's commitment to increase the Aboriginal nursing and midwifery workforce by improving career development opportunities for Aboriginal employees working in the public health system.

In 2018-19, cadetship and scholarship applications were above set targets, assisted by an external campaign that ran from December 2018 to January 2019 across metropolitan and regional areas.

4.2 ENABLE NEW WAYS OF WORKING FACILITATED BY THE MOVE TO ST LEONARDS

With the leases of 10 NSW Health agencies set to expire in 2020, the relocation of these agencies to a building owned by the NSW Government at 1 Reserve Road, St Leonards, provides significant opportunities to leverage economies of scale and co-location to reduce costs. The co-location will bring together staff from the Agency for Clinical Innovation, the Bureau of Health Information, Cancer Institute NSW, Clinical Excellence Commission, Health Education and Training Institute, Health Infrastructure, eHealth NSW (corporate functions), HealthShare NSW (corporate functions), NSW Ministry of Health and NSW Health Pathology (Chatswood office), and strives to improve collaboration and efficacy within NSW Health more broadly. Ultimately, these improvements will benefit patients and health consumers.

The co-location on the one site provides a unique opportunity to redefine the way NSW Health employees and organisations work, and how their work spaces and technology are used to support and build an agile, flexible, connected and contemporary workplace.

Driving diversity, inclusion and wellness at 1 Reserve Road

The New Ways to Work project is leading the change to foster cultural development, enhance collaboration and drive connection. The focus areas for 1 Reserve

COLLABORATIVE LEADER OF THE YEAR DR JENNIFER ANNE STEVENS

St Vincent's Health Network

Dr Stevens leads numerous successful, inexpensive collaborative programs. Each program demonstrates her ability to bring together disparate groups to deliver positive clinical outcomes and enhanced patient safety and empower staff.

Her skill lies in connecting the collection of local baseline data, drawing together the right people across departments, health agencies and pillar organisations, and arranging innovative scalable programs. These include:

- teaching senior emergency department nurses across NSW to perform nerve blocks to reduce delirium rates

- aiding eHealth NSW in creating a physician-facing audit software tool which is now available across the state

- connecting health agencies with surgeons to reduce regional community opioid use.

Congratulations to Dr Stevens who won Collaborative Leader of the Year at the 2018 NSW Health Awards.

Photo: Brad Hazzard, Minister for Health and Medical Research; Elizabeth Koff, Secretary, NSW Health; Dr Jennifer Anne Stevens, St Vincent's Health Network; Jill Ludford, Chief Executive, Murrumbidgee Local Health District; and Prof David Currow, Chief Executive Officer, Cancer Institute NSW.

Road are accessibility, safety and wellbeing, and technology. The base build design exceeds standard compliance of access for staff with disabilities and a Connection to Country group has been established for increased awareness and understanding of Aboriginal heritage, culture and workforce.

> **Promoted flexible working in line with the NSW Government's commitment to diversity and flexibility**

Using online technology for staff communications and collaboration

Throughout 2018 and early 2019, NSW Health introduced mobile devices, Skype for Business, soft phones and a virtual private network for staff in relocating agencies, enabling them to work securely and flexibility from anywhere.

The statewide email migration across the relocating agencies was completed in 2018, bringing all health entities onto a single email platform.

Business and technology architecture

The New Ways to Work technology program team has worked closely with each of the relocating NSW Health organisations to define the future technology state for 1 Reserve Road and to facilitate a technology design for the new building. Technologies will allow staff to transform their ways of working, bringing significant benefits to staff, their organisations and the wider health community.

Our digital health workforce

eHealth NSW hosted two workforce-focused Industry Partnership Summits in 2018-19 to explore ways in which to build the future digital health workforce. Universities, peak bodies, vocational education and industry representatives presented on a range of initiatives they were implementing to build culture, skills and competencies in the workforce.

Following on from the summits, eHealth NSW established a Digital Health Workforce Implementation Group with representatives who will actively implement initiatives that will grow, develop and sustain a digital health workforce in NSW.

4.3 STRENGTHEN THE CULTURE WITHIN HEALTH ORGANISATIONS TO REFLECT OUR CORE VALUES MORE CONSISTENTLY

In 2018-19, the NSW Health Aboriginal workforce grew to 2.75 per cent of staff, exceeding the minimum Aboriginal workforce target of 2.6 per cent established for the state. NSW Health has an ongoing commitment to grow and develop the Aboriginal workforce across the breadth and depth of occupations and salary ranges.

The Respecting the Difference review commenced in 2018 and was completed in 2019. Early indicators show that NSW Health can develop the capacity of the workforce to deliver culturally safe patient-centred care. In addition to Respecting the Difference training, cultural responsiveness training has been delivered to 30 allied health professionals across NSW Health to improve knowledge and action to deliver culturally safe and appropriate services to Aboriginal people.

> **Aboriginal workforce grew to 2.75% of staff, exceeding the target of 2.6%**

The Aboriginal Workforce Unit continues to identify areas of significant need and to drive change, enhancing the Aboriginal workforce across NSW Health. In 2018-19, the Aboriginal Workforce Unit developed the *Culture Diagnostic Framework*, which seeks to identify priority areas of health service delivery against an appropriately supportive Aboriginal workforce model.

NSW Health commissioned an Aboriginal-led research team from the University of Technology Sydney (UTS) for the UTS Aboriginal Allied Health Pathways Project to investigate ways to increase the number of Aboriginal and Torres Strait Islander peoples who

CHIEF WELLNESS OFFICER APPOINTED AT SYDNEY LOCAL HEALTH DISTRICT

In an Australian first, Sydney Local Health District appointed Dr Bethan Richards as its Chief Medical Wellness Officer. Part of a statewide push to improve the wellbeing of trainee doctors, Dr Richards will also lead a new program to teach young medical staff the skills to care for their own health and manage traumatic events.

Dr Richards, the head of rheumatology at Royal Prince Alfred Hospital, said "We want to empower them to look after their wellbeing, not only during training but ideally set good patterns for the rest of their careers."

enter and remain in allied health careers. This project, including the literature review and research, commenced in 2018-19. A priority of NSW Health is to build the number of Aboriginal allied health professionals, to launch innovative initiatives. Allied health careers were showcased at multiple high school forums targeting Indigenous high school students.

Healthy Deadly Feet is an initiative to address diabetes-related foot disease in Aboriginal people, using a workforce solution. A partnership between the NSW Ministry of Health, local health districts and key stakeholders supports developing Aboriginal health practitioners who focus on foot care, to work with local Aboriginal communities, podiatry and high-risk foot services. Five districts have signed up to the Healthy Deadly Feet initiative. In 2018-19, a governance framework was developed by the multi-agency expert reference group.

The performance and complaints process

Complaint and performance processes have been mapped to create navigation tools to assist complainants, and those managing complaints.

Management and leadership opportunities

During 2018-19, the Health Education and Training Institute continued to deliver a wide range of management and leadership learning opportunities to develop effective health professional managers and leaders.

4.4 DEVELOP EFFECTIVE HEALTH PROFESSIONAL MANAGERS AND LEADERS

The Health Education and Training Institute is supporting development across NSW Health. Alongside its leadership and management development offerings, it has designed and delivered a suite of programs to enable the development of high potential staff and senior leaders, and support succession planning for critical roles.

The NSW Health Senior Executive Development Program is designed to develop NSW Health senior executives and general managers who are motivated and ready to take on a more senior leadership role within NSW Health. The program reflects contemporary leadership theories and best-practice approaches to developing senior executives. It is the premier leadership program for NSW Health and was a finalist in the 2018 Australian Psychological Society Workplace Excellence Award for Leadership Development and Coaching. The 22 participants of the third cohort of this 10-month program graduated in 2019 and join an alumni of executives who may be considered suitable for future senior executive and Chief Executive roles within NSW Health.

The Finance Executive Development program pilot ran in 2018-19 with 20 participants. The aim of the program is to equip staff in senior finance roles with the broader leadership capabilities of a future chief financial officer. As the role of senior finance executives in health is rapidly changing, this program targets the most talented individuals to prepare them for the critical role they will play in leading and transforming health organisations.

> **The Next Generation of Leaders and Managers within NSW Health program aims to discover hidden talent and develop aspiring leaders**

The Next Generation of Leaders and Managers within NSW Health program is designed for early career health managers. It aims to discover hidden talent through developing aspiring leaders who might otherwise be overlooked. It also helps local health districts better profile their emerging talent and build stronger succession plans. The first cohort of this two-year program graduated in 2019, having completed the Diploma of Leadership and Management. The cohort has also extended their

A SAFE AND HEALTHY WORKPLACE REDUCING INJURIES IN A MOBILE WORKFORCE

HealthShare NSW

The Patient Transport Service provides non-emergency transport for NSW Health patients to and from health facilities. Patients are regularly transported to and from locations such as residential homes, general practitioner surgeries, and medical imaging facilities.

In May 2017, the Patient Transport Service had a high incidence of workplace injuries. Many of the injuries were the result of manual handling tasks associated with loading and unloading patients. HealthShare NSW took a broad-ranging approach to improving workplace safety through prevention strategies, better workplace injury management and creating a culture that values safety.

These initiatives have vastly reduced safety risks to staff.

This project won the award for 'a safe and healthy workplace' at the 2018 NSW Health Awards.

Photo: Brad Hazzard, Minister for Health and Medical Research; Elizabeth Koff, Secretary, NSW Health; Dunko Grubisic, HealthShare NSW; Dr Anne Mok, HealthShare NSW; Ken Pritchard, HealthShare NSW; Heidi Blasig, HealthShare NSW; Nasim Jafari, HealthShare NSW; Michael DiRienzo, Chief Executive, Hunter New England Local Health District and Carrie Marr, Chief Executive, Clinical Excellence Commission.

leadership capabilities and worked with a rural local health district on a significant strategic challenge.

The NSW Health Rostering Portal continues to build the capability of managers to roster effectively. Implementation of the HealthRoster system is now complete. The focus for continuous improvement in rostering outcomes has shifted to developing capability among NSW Health managers to optimise rostering outcomes in terms of patient safety, staff wellbeing and organisational efficiency.

In the Lead is a customised leadership program for senior nursing and midwifery managers. It aims to enhance their knowledge and skills as transformational leaders. Fifty-seven nurse/midwifery managers completed the program in 2018-19.

4.5 IMPROVE HEALTH, SAFETY AND WELLBEING AT WORK

In accordance with the *Work Health Safety Act 2011* (NSW) and the Work Health and Safety Regulation 2017 (NSW), the NSW Ministry of Health maintains its

MORE SUPPORT FOR JUNIOR DOCTORS

Junior Medical Officers (JMOs) at public hospitals are benefiting from several new projects under a $1 million package aimed at improving their health and wellbeing.

The JMO Be Well Program has provided funding for eight new projects across the state over the next three years.

The new projects are part of a comprehensive plan to improve the training and working environment of JMOs and ensure they have a long, rewarding career in the world-class NSW public health system.

commitment to the health, safety and welfare of workers and visitors. Progress against strategic priorities for workplace health and safety included participation in the NSW Government Work Health and Safety Sector Plan led by SafeWork NSW. The plan was launched in July 2018 as part of the *Australian Work Health and Safety Strategy 2012-2022*. In April 2019, the Ministry submitted NSW Health's self-assessment report and action plan to meet a major milestone of the program, with 26 health organisations undertaking self-assessment of their work, health and safety performance. The results were aggregated into a total health cluster report and associated action plan to improve workplace safety outcomes. The three priority initiatives are set out below:

1. Implement a *Security Audit Framework*, including a standardised Security Improvement Audit Tool (SIAT). There are currently 500 security-related standards set out for NSW Health to keep people and workplaces safe.

2. Continue to develop strong safety leadership across NSW Health to ensure all levels of leadership show a practical commitment to a safe workplace and an embedded safety culture.

3. Review NSW Health Standards and Supporting Tools for Fatigue Management to improve fatigue management practices across the Health cluster leading to a reduced impact of fatigue related issues on Health cluster staff.

Our response to violence in our workplace

In November 2018, the NSW Government appointed the Hon. Peter Anderson AM to review security in NSW hospitals and to look for potential improvements to ensure our staff, patients and visitors are protected.

Mr Anderson released his interim report in February 2019. His review into security has continued in rural and regional hospitals.

The Ministry and local health districts and networks have commenced work to implement the recommendations contained in Mr Anderson's interim report.

In October 2018, the Ministry released a Security Improvement Audit Tool to be used in every hospital to assess compliance with NSW Health security standards.

Safety at work

Mr Anderson's interim report included recommendations on developing safety awareness across NSW Health. The Ministry and local health districts and networks have commenced work to implement these recommendations.

In 2018-19, NSW Health continued to work to improve work health and safety across the Ministry's premises. This included the implementation of *Work Health Safety: Better Practice Procedures* and *Injury Management and Return to Work* policy frameworks; ongoing commitment to the NSW Ministry of Health's Work Health Safety Mission Statement; and the promotion of healthy lifestyle campaigns for staff.

Strategies to improve workers' compensation and return-to-work performance included:

- a focus on early intervention to support the recovery and return to work of employees who sustain a work-related injury

- working with treating professionals to ensure that injured workers receive the best possible treatment, their family and peers get support, and factors linked to the injury are managed

- frequent claims reviews with the Fund Claims Manager to monitor recovery and return-to-work progress for individual claims and ongoing return-to-work strategies.

The Ministry has an ongoing commitment to promote risk management and injury prevention strategies, including conducting workplace assessments, making ergonomic information available on the intranet, and investigating and resolving identified hazards in a timely manner.

Junior medical officers

The second Your Training and Wellbeing Matters Survey was expanded to include Junior Medical Officers (JMOs), supervisors, JMO managers and support staff. A total of 2097 JMOs responded, representing a response rate of 24 per cent, an increase of two per cent from the 2017 survey. Where the response rate meets the threshold for reporting, the survey results are provided on a statewide, local health district/specialty health network and facility basis. Local health districts and specialty health networks are working with their junior medical officers to address issues and concerns identified in the survey.

NSW Ambulance Wellbeing Investment Program

NSW Ambulance is implementing the Wellbeing Investment Program to further support the mental health and wellbeing of staff. Enabled by $30 million in NSW Government funding over four years, the program was developed with input from stakeholders, including unions, and following an overwhelming response to the 2016 NSW Ambulance Wellbeing and Resilience Summit.

Four streams are being implemented as part of the program – well at work, safe at work, protected at work, and capable leader.

> **Wellbeing workshops are being rolled out to every staff member at NSW Ambulance**

A major feature of the program is the wellbeing workshops, which are being rolled out to every member of staff at NSW Ambulance. Run over three days, the workshops have been designed to support, empower and enhance staff health, wellbeing, safety, self-awareness and quality of life. The face-to-face education and training incorporates strategies and skills to implement in the personal and professional life of staff.

The Wellbeing Investment Program also features a major suite of initiatives to enhance support for staff including the appointment of the first chief psychologist, two occupational violence prevention officers and new occupational therapist, physiotherapist and exercise physiotherapist positions. The program is also increasing the number of peer support officers and chaplains.

PRIORITY 5

SUPPORT AND HARNESS HEALTH AND MEDICAL RESEARCH AND INNOVATION

KEY ACHIEVEMENTS FOR 2018–19

- Committed $12.05 million over four years to the Australian Genomic Cancer Medicine Program to support recruitment of more than 1250 NSW patients, enable development of innovative approaches to enhance evidence-based access to new drugs, and establish six PhD scholarships for related postgraduate research opportunities.
- Led global recruitment for spinal muscular atrophy gene therapy clinical trial.
- Committed to investing $150 million over 10 years for cardiovascular disease research.
- Committed to investing $20 million over four years for paediatric precision medicine research as part of the parents package.
- Provided more than $2.8 million to seven NSW research organisations to support research infrastructure, capability building initiatives and strategies to translate research evidence into policy and practice across NSW.
- Launched a world-first clinical trial using the cannabis medicine cannabividarin for children with Rett Syndrome who have epilepsy.
- Were gobal leaders in a trial of a cannabidiol/delta-9-tetrahydrocannibinol to manage the symptoms of vomiting due to chemotherapy.
- Led clinician support services through Australia's first Cannabis Medicines Advisory Service, providing research advice and evidence to support health professionals prescribing and dispensing cannabis medicines.
- Reviewed 17 early phase trial applications, with an average review time of 23 days.
- 70 per cent of completed round one Translational Research Grants Scheme projects positively impacted policy or practice.
- Funded seven translational cancer research centres, bringing together 1081 members, both clinicians and researchers, across 86 institutions.

5.1 GENERATE POLICY-RELEVANT RESEARCH

Through the Prevention Research Support Program, NSW Health supports research organisations that are conducting prevention and early intervention research that is aligned with NSW Health priorities. In 2018-19, more than $2.8 million in funding was provided to

seven NSW research organisations to support research infrastructure, capability-building initiatives and strategies to translate research evidence into policy and practice across NSW.

> **More than $2.8 million to support research infrastructure, capability building and strategies to translate research evidence into policy and practice**

To boost access to high-quality research evidence, NSW Health has funded the Sax Institute $1.8 million a year for five years to June 2023. These funds assist the Institute in providing research, evaluation services and training, enabling exchange between researchers, policy makers and practitioners.

In 2018-19, this funding also supported brokered evidence reviews, evaluation and research services, and research skills training sessions.

5.2 DRIVE RESEARCH TRANSLATION IN THE HEALTH SYSTEM

The Translational Research Grants Scheme funds research projects led by NSW Health clinicians that will translate into better patient outcomes, health service delivery, and population health and wellbeing. A review of completed projects from the first round found that 70 per cent of scheme-funded projects had positively impacted policy or practice.

There has been overwhelming support for the scheme across the state, particularly in regional and rural areas where there has been a substantial increase in research capacity as a result, and where 50 per cent of grant funding has been awarded to date.

The scheme provides clinicians with a pathway for incorporating research into their clinical work that no other grant scheme has been able to achieve, particularly for nursing and allied health. Other grant programs conducted within the NSW health and medical research sector have been restructured to align with this scheme.

Build capability in evaluation techniques and use of data analytics

The NSW Health Cluster Evaluation Reference Group and Population and Public Health Research Group have promoted capability-building opportunities and contributed to the development of the NSW Health evaluation capability-building program.

> **More than 200 Ministry and pillar staff attended training workshops on evaluation, study design and program logic**

Face-to-face workshops and online training resources were offered on economic evaluation and critical appraisal of research.

HEALTH RESEARCH AND INNOVATION HIGH-FLOW OXYGEN FOR BRONCHIOLITIS

Hunter New England Local Health District

Hunter New England Local Health District took out the Health Research and Innovation category at the 2018 NSW Health Awards for their high-flow oxygen for bronchiolitis project.

Bronchiolitis is the most common lung infection in infants. Usual treatment involves management of respiratory distress and hypoxia. High-flow warm humidified oxygen (HFWHO) is increasingly used, but its efficacy and safety has not been demonstrated in rigorous trials.

This project examined whether HFWHO:

- shortened the time to weaning off oxygen
- reduced treatment failure, Intensive Care Unit (ICU) transfers and length of stay
- was acceptable to parents.

A pragmatic randomised controlled trial was conducted with infants with moderate bronchiolitis. No significant difference was detected in the time to weaning off oxygen. But using HFWHO significantly reduced the number of treatment failures, length of stay in ICU and number of ICU presentations. It also improved the time to treatment failure, and was well accepted by parents. No oxygen-related adverse events occurred.

Photo: Brad Hazzard, Minister for Health and Medical Research; Andrew Searles, University of Newcastle; Adam Collinson, University of Newcastle; Elizabeth Koff, Secretary, NSW Health; Elizabeth Kepreotes, Hunter New England Local Health District; Joerg Mattes, University of Newcastle; Bruce Whitehead, Hunter New England Local Health District; Mark Kepreotes, Hunter New England Local Health District; Steven Flynn, General Manager, Baxter; and Andrew Newton, Chief Executive, Southern NSW Local Health District.

Seed funding and clinical trials

The Agency for Clinical Innovation (ACI) partnered in translational research grants and managed a seed funding process to support innovative clinical improvement projects. In 2018-19, more than $500,000 was invested across 17 projects. These projects focused on a wide variety of innovations, including a clinical analytics tool to support patient flow and streaming in NSW emergency departments and an early activation care bundle for hip fracture patients.

The ACI's Centre for Healthcare Redesign partnered with the University of Tasmania to build capability in translational research through the Graduate Certificate in Clinical Redesign. This course was awarded the

inaugural Bond University Sustainable Healthcare prize in 2018.

In 2018-19, there were 188 cancer clinical trials open for recruitment that met the Cancer Institute NSW's 'Portfolio' definition (that is, investigator-initiated and non-commercial). There were 1464 participants enrolled into these trials.

The Institute also funded seven translational cancer research centres, bringing together 1081 members, both clinicians and researchers, across 86 institutions.

5.3 MAKE NSW A GLOBAL LEADER IN CLINICAL TRIALS

Over the past 12 months, a number of key milestones for putting an early phase clinical trials framework into the NSW health system have been achieved. Expressions of interest for NSW Health's Early Phase Clinical Trials Human Research Ethics Committee (HREC) Scheme closed in September 2018. In November, NSW Health appointed two specialist HRECs to the scheme, Bellberry Limited for adult trials, and The Sydney Children's Hospitals Network for paediatrics.

Following these appointments, Bellberry and The Sydney Children's Hospitals Network began operation as NSW Health's statewide Early Phase Clinical Trials HRECs on 29 April 2019. Since then, 17 early phase trial applications have received safe and high-quality scientific and ethics reviews under the scheme, with an average review time of 23 days.

World-first clinical trials

NSW Health launched a world-first clinical trial using the cannabis medicine cannabividarin for children with Rett Syndrome who have epilepsy. In a clinical trial for the use of cannabidiol in children with tuberous sclerosis complex and epilepsy, NSW Health was a leading recruitment site. Data from NSW Health's compassionate access scheme for children with severe epilepsy using cannabidiol was also published.

NSW Health is leading the world in a trial of a cannabidiol/delta-9-tetrahydrocannibinol to manage the symptoms of vomiting due to chemotherapy. NSW has led with a trial of vaporised cannabis medicine for lack of appetite and weight loss in advanced cancer.

World-first clinical trial using the cannabis medicine cannabidivarin for children with Rett Syndrome who have epilepsy

Excellent research infrastructure, quality of clinician-researchers and transparent regulatory regime for clinical trials using these medicines has enabled NSW to continue to attract high-quality clinical trials using cannabis medicines.

NSW HEALTH STATEWIDE BIOBANK CELEBRATES FIRST ANNIVERSARY

The NSW Health Statewide Biobank celebrated its first anniversary on 13 November 2018. This facility is the largest storage bank for human biospecimens in the southern hemisphere and has the potential to improve the lives of future generations.

With capacity for over three million human samples, including DNA, tissue, blood and tumour cells, the Biobank is revolutionising medical research in Australia and is helping researchers change the way life-threatening illnesses are treated.

5.4 ENABLE THE RESEARCH ENVIRONMENT

Australian Genomics Cancer Medicine Program

In July 2018, the Federal Minister for Health announced an investment of $50 million over five years to expand NSW's Genomic Cancer Medicine Program nationally. The program, based at the Garvan Institute of Medical Research, provides treatment options for patients with cancers where standard therapies have been exhausted.

$12.05 million invested over four years to increase NSW patient recruitment in the NSW-based Australian Genomic Cancer Medicine Program

NSW is investing a further $12.05 million over four years (2019 to 2022) in a program that will support patient recruitment for at least an additional 1250 NSW residents, enable development of innovative approaches to enhance evidence-based access to new drugs, and establish six PhD scholarships for related postgraduate research opportunities.

Austrade Landing Pads fast track program

NSW Health is collaborating with Austrade to provide fast-track access for recipients of the NSW Medical Devices Fund and graduates of the NSW Medical Device Commercialisation Training Program to join the Landing Pads Program. The program helps market-

ready start-ups and scale-ups to take their business to the world. Landing Pads have been established in San Francisco, Tel Aviv, Shanghai, Berlin and Singapore. This is an initiative of the Australian Government's National Innovation and Science Agenda to stimulate innovation and entrepreneurship.

Data linkage

During 2018-19, the Centre for Health Record Linkage released around one billion linked records to support research and analytics, and scaled up data integration capability for faster and more reliable access to linked data. In 2018-19, linked data from the centre was used to support critical government priorities such as Their Futures Matter, Leading Better Value Care, NDIS evaluation and the NSW Integrated Care Strategy.

Statewide Biobank

NSW Health Pathology provided infrastructure and support to the NSW Health Statewide Biobank to help the NSW research community to undertake more high-quality research. A strategic collection and consent framework were developed to enhance consent for the collection of population biospecimens.

Develop a network of researchers to leverage new diagnostic technologies

In partnership with clinicians, NSW Health Pathology continued to grow its network of researchers to leverage new technologies in clinical diagnostic services. NSW Health Pathology partnered with universities, medical research institutes, local health districts and industry to translate new diagnostic biomarkers and put new models of service delivery into practice. Research coordinators are now working across all of NSW Health Pathology's operational areas.

ENABLE EHEALTH, HEALTH INFORMATION AND DATA ANALYTICS

KEY ACHIEVEMENTS FOR 2018-19

- Implemented secure, cloud-based infrastructure that will enable a new patient-reported measures system to support integrated, better value care across NSW Health.
- Completed implementation of Electronic Medication Management (eMeds) at 84 sites, with an additional 12 sites going live with the Electronic Medical Record (eMR) system.
- Continued deployment of the Electronic Record for Intensive Care (eRIC) to improve safety and clinical decision-making for critically ill patients.
- Worked with the Australian Digital Health Agency, to plan the National Children's Digital Health Collaborative proof-of-concept trials in Dubbo and Blacktown to test the national Child Digital Health Record.
- Designed and developed the incident management system (ims+) to replace the Incident Information Management System (IIMS). ims+ is built around current data sets and has been configured to meet NSW Health staff needs.
- Worked collaboratively with the Australian Commission on Safety and Quality in Health Care to revise the Australian Sentinel Events list.
- Completed the Rural eHealth Program, giving 17,000 rural and remote clinicians digital access to patient information.
- Completed the integration of NSW diagnostic imaging reports from all local health districts and the Sydney Children's Hospitals Network, enabling NSW Health to share available information to My Health Record.
- Developed Analytics Assist to help NSW Health staff find and use statewide data and information to improve health outcomes and health system performance.

6.1 IMPLEMENT INTEGRATED PAPER-LITE CORE CLINICAL INFORMATION SYSTEMS

eHealth NSW has implemented secure, cloud-based infrastructure that will enable a new patient-reported measures (PRM) system to scale, to support integrated, better value care across NSW Health.

eHealth NSW's Radiology Information System and Picture Archive and Communication System (RIS-PACS) Program completed its proof-of-concept and procurement phases to update the medical imaging systems of 11 participating NSW Health organisations. The program has transitioned its focus to the statewide design, including input from more than 200 clinical

stakeholders. The first implementation projects have commenced with Western Sydney and Nepean Blue Mountains local health districts.

> **Electronic Medical Records (eMR) systems are live in 177 hospitals, supporting safer care for 1.8 million patient admissions annually**

Deployment of the Electronic Record for Intensive Care (eRIC) continued to support the delivery of improved safety and better clinical decision-making for critically ill patients in ICUs. eRIC is now live in 19 hospitals in NSW. Work to integrate eRIC with adjacent clinical systems is also underway.

By June 2019, the eMR Connect program had implemented eMeds at 84 sites, with an additional 12 sites going live with the eMR system. eMeds is now live at 122 sites in NSW.

ims+

In partnership with clinical governance committees, eHealth NSW designed and developed ims+ to replace Incident Information Management System. The new system accommodates current data sets and configured to meet NSW Health staff needs. Its improved reporting capability will help NSW Health staff to make more effective decisions and drive continuous improvements in safety.

The Clinical Excellence Commission has worked collaboratively with the Australian Commission on Safety and Quality in Health Care to revise the Australian Sentinel Events (ASE) list, and with eHealth NSW to design the data sets for ims+, ensuring the capability to monitor and report ASEs.

Other initiatives

The Clinical Excellence Commission's Quality Improvement Data System (QIDS) assists local health districts and specialty health networks with data and improvement tools that monitor and reduce 16 hospital-acquired complications.

Led by NSW Health, in partnership with the Australian Digital Health Agency, the National Children's Digital Health Collaborative planned proof-of-concept trials in Dubbo and Blacktown to test the national Child Digital Health Record. The record will enable the tracking of key health interactions, including baby health checks, immunisations, growth charts and development milestones.

The Rural eHealth Program – a four-year program was completed in 2018-19. The program implemented secure and reliable ICT infrastructure that delivers 'anywhere, anytime' access to patient records and gives 17,000 rural and remote clinicians digital access to patient information.

6.2 FOSTER EHEALTH SOLUTIONS THAT SUPPORT INTEGRATED HEALTH SERVICES

eHealth NSW continued to drive a digitally enabled,

ANALYTICS ASSIST

The NSW Ministry of Health developed Analytics Assist to help NSW Health staff find and use statewide data and information to drive improved health outcomes and health system performance. The focus of Analytics Assist is to:

- connect NSW Health staff to statewide data and information
- provide guidance on how to use data and information for the questions at hand
- provide referrals for setting up the required teams and partnerships
- provide advice on projects that use statewide data.

patient-centred and integrated public health system.

eHealth NSW joined forces with industry partners on two proof-of-concept projects. At Wagga Wagga Base Hospital, eHealth NSW and Murrumbidgee Local Health District are investigating how critical test results can be shared securely and in real time via mobile devices to support enhanced clinical decision-making. A second project 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 while protecting patients' privacy.

The Northern NSW Local Health District's Service Registration Assistant Project is enhancing the quality of health provider information contained within the district's patient administration systems. It aims to improve the delivery rate of referral letters by providing digital health information to external parties such as GPs.

NSW Health Pathology continued its work to deliver more public pathology results into HealtheNet for the majority of NSW local health districts. This is helping to reduce duplication of procedures, allowing for more immediate patient treatment and ultimately reducing costs.

Pathology results are now shared with the national My Health Record system, making NSW the first state or territory in Australia to share pathology results on this platform.

In June 2019, eHealth NSW completed the integration of NSW Diagnostic Imaging Reports from all local health districts and The Sydney Children's Hospitals Network, enabling NSW Health to share available information to My Health Record.

> **eHealth NSW continued to deploy collaborative ICT solutions across NSW Health**

eHealth NSW has continued to deploy collaborative ICT solutions across NSW Health. Developments in video-conferencing solutions in 2018-19 include:

- greater capacity for web- and mobile-based technology, with 3000 virtual meeting rooms,

2170 pieces of video infrastructure and approximately 250 over-bed cameras statewide

- development of new web-based patient waiting room functionality for clinical and interpreter video consults
- facilitating approximately 22,290 web- and mobile-based calls, 16,500 video calls from room-based systems and integrating 5600 audio calls into video calls each month.

Shared Care Planning

In 2018-19, eHealth NSW continued to explore options for a statewide Shared Care Planning tool. Shared Care Planning enables patients and their care team to access and edit their care plan in a flexible and online environment that is appropriate to their needs. The tools can be used by patients, general practitioners, medical specialists and other members of a patient's care team, and encourage integration and collaboration across health systems and other care clusters.

The Integrated Care Implementation team has supported local development of mental health recovery planning and care planning for people receiving palliative care.

6.3 SYSTEMISE ENHANCED ACCESS TO DATA AND INFORMATION THROUGH IMPROVED PLATFORMS

During 2018-19, eHealth NSW progressed the design of a prototype platform that aims to replicate raw production system data (such as from the eMR) in a secure and centralised analytics platform. This will allow large volumes of information-rich data to be shared from production systems in an appropriately governed manner.

eHealth NSW also implemented StaffLink procurement information data discovery to enable staff to order the products that best meet their needs through instant search results and inbuilt business intelligence, while saving money through highlighting more cost-effective options.

eHealth NSW successfully developed a new workforce executive reporting pack that is informing the development of a statewide dashboard for health organisation chief executives and directors of workforce.

Real-time data

The NSW Ministry of Health provides rapid surveillance in near-real time of ambulance, emergency department, mortality, and drug and alcohol intelligence to inform policy, program development and research. The Public Health Rapid Emergency and Disease Syndromic Surveillance system operates seven days a week to enable a rapid response to emerging public health issues and provide timely advice and support during emerging public health incidents.

VOLUNTEER OF THE YEAR
JANETTE DU BUISSON PERRINE

Hunter New England Local Health District

For over 20 years, Janette has significantly contributed as a volunteer to improve services and facilities for people with a mental illness and their carers in South Western Sydney. She has demonstrated outstanding leadership as Chair of the Mental Health Consumer, Carer, Community Committee since 2014. She was personally commended during the accreditation Periodic Review Survey for her leadership in integrating consumer/carer participation into the governance of the Mental Health Service.

Janette's skills and effective leadership of the committee have been pivotal in ensuring that its work achieves significant long-lasting benefits.

Congratulations Janette for winning Volunteer of the Year at the 2018 NSW Health Awards!

Photo: Elizabeth Koff, Secretary, NSW Health; Brad Hazzard, Minister for Health and Medical Research; Janette Du Buisson Perrine, South Western Sydney Local Health District; Kay Hyman, Chief Executive, Nepean Blue Mountains Local Health District; and Daniel Hunter, Deputy Secretary, Finance Services and Asset Management.

NSW Ambulance invested over $40 million in improved mobile communications and patient medical data

The Agency for Clinical Innovation has continued to work with pillar organisations, local health districts, specialty health networks and primary care providers to embed the routine collection and use of patient-reported measures into business-as-usual activity.

Data linkage

The Centre for Health Record Linkage (CHeReL) is dedicated to helping researchers, planners and policy makers access linked data about people in NSW and the ACT. In 2018-19, CHeReL undertook data linkage, collected over 25 years for key NSW Government projects.

Primary Care Data Linkage Project

Work on the scaled-up primary care linkage program, Lumos, is underway. Lumos securely links encoded data from general practices to other health data in NSW, including hospital, emergency department and mortality data. Lumos creates a unique anonymised data asset that provides a comprehensive view of the patient journey across health settings and is the first of its kind at scale in Australia.

Lumos builds on the ethically approved pilot GP Data Linkage Project, which has generated insights from 400,000 patient journeys across 40 NSW general practices. Partnership agreements with all 10 NSW primary health networks are now in place to support the statewide expansion of Lumos. In 2018-19, resources were developed that included GP information packs and information cards to streamline discussions between primary health networks and GPs.

Work is also underway with eHealth NSW to develop a cloud solution, the Secure Analytics Primary Health Environment, for secure data storage and sharing.

Edward Business Implementation Program

The Edward Business Implementation Program is making notable progress towards the establishment of EDWARD (Enterprise Data Warehouse for Analysis Reporting and Decisions). It is also preparing for the transition that will make EDWARD NSW Health's principal clinical data source for performance monitoring, health service purchasing and funding, health service planning, epidemiology and research.

A forum to support project managers, the EDWARD Community of Practice, and a collaboration space has been established. The Community of Practice has identified strategic data sources to incorporate into EDWARD and a structure is being established for finance data.

6.4 SYSTEMISE AND EXPAND THE INTEGRATION OF DATA TO DRIVE GREATER INSIGHTS

In 2018-19, eHealth NSW created end-to-end data integration standards by developing a data reference model to foster the sharing and reuse of data across NSW Health.

The Health Education and Training Institute has implemented an enterprise-wide operational planning and project management software solution to provide greater insight and visibility across all operations. It has been integrated with NSW Health's human resources system and recent additions of risk and audit modules provide a comprehensive and integrated data set for decision-making.

The NSW Health inaugural Data Governance Framework was published in March 2019. The NSW Ministry of Health is also providing advice to pillar organisations and branches in relation to their data governance.

6.5 ENHANCE DECISION-MAKING BY SUPPORTING INSIGHTS AND ACTIONING

eHealth NSW completed technical implementation for a trial of a risk trigger monitoring tool to support patient safety. The tool captures combinations of events within the Electronic Medical Record (eMR), allowing for rapid feedback on the effectiveness of quality and safety initiatives. A trial of the risk trigger monitoring tool is underway at Blacktown and Prince of Wales Hospitals in conjunction with the Agency for Clinical Innovation (ACI) and the Clinical Excellence Commission.

eHealth NSW also established the Safety and Quality Oversight Committee to develop safety and quality metrics that will provide actionable insights to ensure continuous monitoring of safe practices. eHealth NSW will continue to work closely with the Clinical Excellence Commission to ensure eSafety across the NSW public health system.

The ACI worked with local teams to collect comparative data and information about key elements of care in respiratory, cardiac, paediatric and other Leading Better Value Care initiatives, supporting evidence-based audit and feedback processes in 40 different sites across 12 local health districts and specialty health networks.

Over the past year the ACI and the CEC have developed monitoring and evaluation plans and produced quarterly monitoring reports on each Leading Better Value Care initiative in every local health district and specialty health network.

New reporting and analytics functionality added to My Health Learning

The Health Education and Training Institute (HETI) has worked collaboratively with eHealth to improve and add new reporting and analytics functionality for My Health Learning. The result is improved learning analytics, standard and compliance reports are now available. HETI has also successfully integrated Google Analytics into one of its learning modules, which allows for monitoring and analysis of the behaviour flow of learners, as well as device use and actions performed by learners.

In 2018-19, HETI, eHealth NSW and the University of Sydney partnered to develop a Massive Open Online Course – Using Clinical Health Data for Better Healthcare.

MORE SOPHISTICATED DATA AND ANALYTICS HELP US TO DELIVER THE BEST CARE FOR EACH INDIVIDUAL

Value Based Health Care and the importance of patient reported measures

Using timely patient experience information to inform how care is provided

Linked data is powerful

Patient experience information is vital to co-designing services

This combination leads to better care for our patients.

The NSW Ministry of Health has developed a data literacy framework, aligned with the Public Sector Capability Framework to drive an uplift in understanding data and its insights across the health system.

NSW Health continues to improve workforce reporting and analytics through a number of ongoing approaches including:

- Refining accuracy and reliability of workforce data through partnering with health agencies to ensure ongoing quality of data.
- Improved access to workforce data and ongoing analysis of workforce data including the development of additional dashboards from new data sets including rostering, recruitment and learning and development data.
- Alignment of workforce, finance, clinical data and other data sets to identify opportunities for the alignment of data and reporting to provide cross health insights for improved decision making.

6.6 ENHANCE PATIENT, PROVIDER AND RESEARCH COMMUNITY ACCESS TO DIGITAL HEALTH INFORMATION

eHealth NSW is part of a national initiative to develop a framework for the use of mobile health applications (mHealth apps).

eHealth NSW has implemented a pilot solution to deliver the Health Information Exchange at Northern Beaches Hospital. The exchange receives eMR data from the Northern Beaches Hospital and the Northern Sydney Local Health District, making the data visible to clinicians through a single source. The solution is designed to enable the safe transfer of patient records between public and private facilities.

eHealth NSW has broadened the scope of its Clinical Engagement and Patient Safety directorate by incorporating human-centred design processes into the build of NSW Health's digital health tools. This provides NSW Health with a range of human-centred design functions, including user research, co-design, and user experience and usability analysis, to create technology that fits with the way people think, work and behave.

In 2018-19, eHealth NSW developed a framework for engaging consumers in the design and build of eHealth solutions.

The Research Ethics and Governance Information System (REGIS) was fully implemented on 1 April 2019. The platform is set to improve management of ethics and site governance approvals of human health and medical research projects in NSW and ACT public health organisations.

Collaboration with the NSW Health Statewide Biobank

The Centre for Health Record Linkage is a dedicated data linkage centre for health and human services. In 2018-19, it collaborated with the NSW Health Statewide Biobank to create a new service that can store and process millions of biospecimens, and link the data. The service will be a vast and accessible resource for health and medical research.

DELIVER INFRASTRUCTURE AND SYSTEM CAPABILITY

KEY ACHIEVEMENTS FOR 2018-19

- Delivered 26 infrastructure projects across NSW on time and on budget*.
- Completed construction of eight ambulance stations as part of the $122.1 million Rural Ambulance Infrastructure Reconfiguration Program; four multipurpose centres as part of the $304.9 million Multipurpose Service Program; and six paramedic response points/superstations as part of the $184 million Sydney Ambulance Metropolitan Infrastructure Strategy Program*.
- Completed construction of the $91.5 million Forensic Medicine and Coroners Court Complex at Lidcombe.
- Enhanced the NSW Ministry of Health's strategic and governance oversight role across NSW Health to optimise the procurement of goods and services, and refine the approach for commissioning and contestability.
- Established the Medical Asset Management Program to support a whole-of-life approach to medical equipment.
- Progressed a new approach to commissioning and providing hospital networking infrastructure as a service.
- Established a reliable clinical-grade network for NSW Health through the Health Wide Area Network program.
- Delivered a Disaster Recovery Policy and Disaster Recovery Framework to ensure that disaster recovery plans are developed, implemented, tested and maintained.
- Participated in working groups with the Greater Sydney Commission to support better integration between local and state governments and to help guide future planning of local strategic planning statements.
- Drove collaboration between health, academia and industry to further existing health and education precincts and create synergies for economic growth.

7.1 DELIVER AGREED INFRASTRUCTURE ON TIME AND ON BUDGET

Clinical service planning

Robust service planning underpins NSW Health's annual capital program. The Health Service Planner Capability Development Strategy has been in place since October 2017 and remains a key tool in supporting improved health service planning capability across the system.

Key capability initiatives put into practice in 2018-19 include the Planners Intensive Program pilot – an intensive capability development program focused on three of the core capabilities for service planners identified in the Strategy.

A Job Shadowing Guide was piloted and launched in 2018 as well as a Communities of Practice portal to allow information sharing, networking and discussion among planners.

Clinical service planning analytics

The CaSPA portal (Clinical Services Planning Analytics Portal) is a resource for local health districts to support evidence-based service planning. CaSPA continues to be developed and regular training was provided to teach planners how to use the analytical tools hosted on the CaSPA portal throughout 2018-19.

An updated preliminary cost benefit analysis template was developed to support health districts, specialty health networks, NSW Ambulance, eHealth NSW and NSW Health Pathology for use with future asset strategic plans.

In 2018-19, NSW Health was active in the Common Planning Assumptions Group, made up of senior representatives across NSW Government.

Capital works infrastructure

Across NSW, 26 infrastructure projects were delivered on time and on budget including:

- $30 million Broken Hill Health Service Redevelopment
- $91.5 million Forensic Medicine and Coroners Court Complex
- $21.5 million Muswellbrook Hospital Redevelopment
- $348 million Gosford Hospital Redevelopment and associated $39 million multi-storey car park.

> **Completed $348 million Gosford Hospital Redevelopment and associated $39 million multi-storey car park**

A number of key program milestones were also delivered:

- Construction was completed at Bathurst Ambulance Station, Bay and Basin Ambulance Station, Berry Ambulance Station, Griffith Ambulance Station,

---

* Note These figures refer to construction complete milestones and may include reference to individual components of larger infrastructure projects and programs that may not be recognised as officially complete.

Hamlyn Terrace Ambulance Station, Kiama Ambulance Station, Pottsville Ambulance Station, Toukley Ambulance Station and Wauchope Ambulance Station, as part of the $122.1 million Rural Ambulance Infrastructure Reconfiguration Program*.

- Construction was completed at Bonalbo Multipurpose Service, Coolah Multipurpose Service, Culcairn Multipurpose Service and Rylstone Multipurpose Service, as part of the $304.9 million Multipurpose Service Program*.

- Construction was completed at Bonnyrigg Paramedic Response Point, Caringbah Superstation, Haberfield Superstation, Leppington Paramedic Response Point, Roselands Paramedic Response Point and Quakers Hills Paramedic Response Point, as part of the $184 million Sydney Ambulance Metropolitan Infrastructure Strategy Program*.

- Construction was completed on the $19.8 million Hornsby Hospital Car Park and $26 million Nepean Hospital Car Park, as part of the Sustainable Hospital Car Park Investment Program*.

- The business case for the $700 million Statewide Mental Health Infrastructure Program was submitted*.

ICT infrastructure

In 2018-19, eHealth NSW progressed a new approach to commissioning and providing hospital networking infrastructure as a service. The Health Grade Enterprise Network Pilot at Westmead Redevelopment Precinct was designed to ensure NSW Health's foundational information and communication technology infrastructure is robust, resilient and future-ready for the state's public hospitals to provide the best possible health care.

The NSW Government Data Centre Reform Strategy was ongoing in 2018-19. All eHealth NSW-hosted systems are now operating out of the government data centres. Migrations have started for Cancer Institute NSW and NSW Ambulance, and preparations are underway for the migration of Northern Sydney, Central Coast and Western Sydney local health districts, and the Health Professional Council Australia.

eHealth NSW made significant progress in maturing its information and communication technology disaster recovery capability in 2018-19. It delivered a Disaster Recovery Policy and Disaster Recovery Framework to ensure that disaster recovery plans are developed, implemented, tested and maintained in support of the reliability and availability of key systems and infrastructure. It also expanded the transition of services to production to include associated disaster recovery assessments, plans and appropriate due diligence.

A statewide integration and interoperability strategy and integration platform have been developed to improve the seamless sharing of information across multiple systems.

The Health Wide Area Network program has established a reliable clinical-grade network for NSW Health and 702 links have been rolled out to date. Deployment to metropolitan local health districts is progressing, and migrations of 250 NSW Ambulance

sites have increased to 84 per cent complete. Remaining works are planned for completion by the end of 2019-20 when the program will close.

7.2 UNDERTAKE INTEGRATED PLANNING WITH OTHER AGENCIES

In 2018-19, NSW Health continued to support integrated planning with other NSW Government agencies led by the Greater Sydney Commission on a number of initiatives, including various collaboration areas, development of infrastructure compacts, and Greater Parramatta Olympic Peninsula strategic business case.

In March and April 2019, NSW Ministry of Health and local health district representatives participated in working groups with the Greater Sydney Commission to support better integration between local and state governments and to help guide future planning of local strategic planning statements.

Integrated planning with other agencies enabled plans on health and education precincts to progress including:

- The $1 billion Nepean Redevelopment. Schematic designs were completed and enabling works started.
- Planning for the $780 million John Hunter Health and Innovation Precinct
- The $740 million Liverpool Health and Academic Precinct. The master plan was endorsed and schematic designs commenced.
- Completion of detailed designs for the $720 million Randwick Campus Redevelopment and approval for the State Significant Development Application. Site establishment and early works began on the Prince of Wales Hospital Acute Services Building.

BIO 2019 International Convention

In June 2019, a NSW delegation showcased the state's world-class clinical trial capabilities at the BIO 2019 International Convention in Philadelphia.

The showcase was a collaboration between NSW Health and NSW Department of Industry in conjunction with AusBiotech who hosted the Australian Pavilion. The showcase aimed to raise the profile of NSW's medtech and biotech industries and seek opportunities to attract clinical trials to NSW.

Note: The above refers to construction complete milestones and may include reference to individual components of larger infrastructure projects and programs that may not be recognised as officially complete.

Health and education precincts

NSW Health is facilitating collaboration between health, academia and industry to support precincts and create synergies for economic growth, using a whole-of-system approach to maximise the benefits of the State's significant investment in precincts. The Office for Health and Medical Research has analysed key research precincts in NSW including Camperdown, Liverpool, Randwick, Western Parkland City and Westmead focusing on areas of research strength and opportunities.

> **Faciliated collaboration between health, academia and industry to support precincts and create synergies for economic growth**

7.3 BUILD ASSET MANAGEMENT CAPABILITY

In 2018-19, NSW Health continued to build asset management capability and implemented a statewide reform of asset management.

The ongoing development of a statewide asset management system will see the implementation of new policy and standardisation of data to facilitate the development of NSW Health asset management capability.

External cladding remediation works addressed the presence of Aluminium Composite Panel (ACP) cladding at public hospitals. More than 4600 NSW Health sites were reviewed across NSW with 13 sites identified as requiring cladding remediation. NSW Health invested over $19 million on ACP remediation works to date. In addition, Health Infrastructure supported health organisations in the development of long-term ACP management plans for low-risk sites, which are now being administered and maintained by the respective health organisations.

> **More than 150 projects underway as part of the $500 million Asset Refurbishment and Replacement Program**

The Medical Asset Management Program was established to support a whole-of-life approach to medical equipment and achieve fit-for-purpose, safe and optimised public health assets. More than 150 projects are underway as part of the $500 million Asset Refurbishment and Replacement Program. Health Infrastructure delivered future-focused, critical maintenance programs for existing facilities across the state, including audits and rectification works pertaining to the long-term remediation and management of aluminium composite panel cladding and holistic fire safety improvements.

7.4 OPTIMISE PROCUREMENT AND SUPPLY CHAIN

HealthShare NSW established a program during the 2017-18 financial year to deliver a procurement strategy and approach to accelerate and increase procurement efficiencies and recurrent savings. The program has a target to deliver recurrent annual savings of $100 million by 2020-21. In 2018-19, in-year cash savings of $24.9 million were achieved as a result of the program.

There were a number of successful contractual outcomes under this program during 2018-19, including the new cardiovascular prostheses contract. Working with clinicians, HealthShare NSW Procurement developed a new and innovative way to contract suppliers, creating additional benefits for hospitals and patients.

A 12-month pilot to introduce, measure and test initiatives to improve efficiency opportunities in the medical consumables supply chain was another project HealthShare NSW progressed.

Optimising the supply chain for medical consumables

Improvements in the ability of the supply chain to provide medical consumables at the right time, volume and location minimise a local health district's financial costs associated with the ordering, receipting and physical delivery process. This reduces the time clinical staff spend on administrative supply chain tasks with a matching increase in time spent on patient care.

Royal North Shore Hospital and the Northern Sydney Local Health District have been working collaboratively with HealthShare NSW throughout the various stages of the program. At the end of the pilot, a formal evaluation will determine whether the initiatives will be rolled out to other hospitals and local health districts across NSW.

Improved procurement strategies

Various procurement savings initiatives focused on optimising value across NSW Health in 2018-19, including the implementation of greater statewide contracts through competitive tender processes.

The NSW Ministry of Health has refined procurement strategies and contracts to optimise long term capital lease replacement programs for medical imaging categories with an aim to ensure optimal patient treatment at the best possible cost. The long term benefit will be realised to staff and patients with a well-designed clinical environment, reduced downtime, improved patient turnaround times coupled with investment in modern technology, offering patients high-quality medical services.

These long-term strategic procurement initiatives will provide more sustainable and efficient hospital operations that in turn will enable the local health districts to provide high-quality, innovative and future-proofed standard of care to the community.

PEOPLE'S CHOICE
EGGSPECTATION

The Sydney Children's Hospitals Network

The Sydney Children's Hospitals Network won People's Choice at the 2018 NSW Health Awards for an integrated oncofertility service providing equitable and timely oncofertility care. The team developed the first public oncofertility service driven by consumer targeted initiatives.

Results show:

- a 63 per cent increase in access to oncofertility care in the last five years
- 100 per cent of adolescent and young adult patients received information about fertility risk and options in the last 12 months
- 91 per cent of patients are seen within 24 hours of referral.

The team successfully developed and lead a change in practice giving all NSW adolescent and young adult cancer patients equitable and timely access to oncofertility care.

Photo: Front: Dr Antoinette Anazodo, Sydney Children's Hospitals Network; Dr Michael Bertoldo, University of NSW. Back: Brad Hazzard, Minister for Health and Medical Research; Elizabeth Koff, Secretary, NSW Health; Fiona Maguire, Sydney Children's Hospitals Network; Brigitte Gerstl, Sydney Children's Hospitals Network; Prof. Robert Gilchrist, University of NSW; Cath O'Dwyer, Sydney Children's Hospitals Network; Marianna Stolzenhein, Sydney Children's Hospitals Network; Dr Christopher Nicol, Sydney Children's Hospitals Network.

7.5 DELIVER COMMERCIAL PROGRAMS

In 2018-19, NSW Health carried out initiatives focused on delivering sustainable outcomes to support the delivery of patient care and the system.

Work was done in 2018-19 across the system to support the implementation of the new accounting standards which became effective from 1 July 2019. The introduction of accounting standard AASB 16 Leases will see operating leases treated in the same manner as a finance lease with the majority of all leases becoming on balance sheet - a significant change.

New accounting standards became effective from 1 July 2019

The NSW Ministry of Health worked with NSW Health entities to identify operating leases which meet the AASB 16 definitions. All NSW Health entities completed reviews into their operating expenses, identified operating leases and completed detailed lease registers. The information sourced from these reviews was collected and consolidated for transitional impacts and submitted to NSW Treasury.

NSW Health upgraded an existing IT system which was compliant with AASB 16 Leases so that all payment schedules, reporting and accounting were available for NSW Health entities to use. The upgrade of the system was completed in mid-June 2019, with all leases now contained within one IT system. This improvement has greatly assisted in providing full transparency of all leases, opportunity for informed asset management decisions (including buy versus lease decisions) and establishing better maintenance budgets based on the current asset portfolio.

A leasing pilot program was established with the successful leasing of medical equipment by Sydney Local Health District through TCorp. A master leasing head agreement between Health Administration Corporate (HAC) and TCorp was achieved in December 2018. The head agreement will enable any HAC entity to lease medical equipment via TCorp in the future.

Commissioning

The NSW Ministry of Health's strategic and governance oversight role across NSW Health is to optimise the procurement of goods and services. There was significant effort throughout 2018-19 to refine the approach for commissioning across NSW Health.

Commissioning for Better Value Care supports the delivery of value-based healthcare across NSW Health by shifting the focus of services that support patient care from outputs to outcomes, therefore improving the experience, effectiveness and efficiency of care provided. This results in overall better health outcomes for patients.

Commissioning for Better Value Care was put into practice across a number of procurement initiatives in 2018-19.

Specimen transport service

NSW Health Pathology is redesigning its statewide specimen transport service. This will provide more agile, safe and efficient transport of pathology specimens and laboratory consumables across the state, and better value for money. In 2018-19 network data was digitised and potential new routes were developed.

BUILD FINANCIAL SUSTAINABILITY AND ROBUST GOVERNANCE

KEY ACHIEVEMENTS FOR 2018–19

- In 2018-19, NSW Health's budget included $25.1 billion recurrent and capital to invest in hospitals and better health services including providing for more emergency attendances, elective surgeries and non-admitted patient services. This also included investment in the major capital program for new health facilities, upgrades and redevelopments.

- Developed and implemented a range of financial innovation projects including the Faster Close Oracle General Ledger Project and the roll out of the statewide Clinician Billing Portal.

- Continued to transition to Outcome Budgeting and reporting for the NSW Health cluster.

- Established the Tuning Governance and Accountability Program to identify and address aspects of governance where approaches can be improved and where greater clarity of roles, responsibilities and relationships can be achieved.

- Delivered a series of engagement forums for NSW Health board chairs and members which culminated in the hosting of the 2018 Board Member Conference.

- Completed the first stage of costing studies for four of the Leading Better Value Care initiatives to monitor the economic impact of the program and support development of an economic model to assess sustainability over the longer term.

- Established linked data assets through the ROVE system (Register of Outcomes, Value and Experience) to support sophisticated analyses.

- Developed the NSW Health Financial Capability Pathway to upskill staff in the current finance and health environment.

8.1 SECURE A LONG TERM SUSTAINABLE FINANCIAL POSITION

NSW Health is focussed on providing financial leadership including sustainable resource allocation across the system. In 2018-19, the NSW Ministry of Health continued to work closely with NSW Treasury to develop a strategic financial view, incorporating revenue, expense and savings strategies over the forward estimates period.

The Ministry internally scopes projects to improve processes that support the delivery of its finance functions. As part of this, it has developed and implemented a range of financial innovation projects including the faster close of the Oracle General Ledger to allow more timely and accurate financial reporting. In 2018-19, this project has seen the general ledger

close move from three business days down to two business days with the expectation that this will reduce even further in 2019-20. The faster close allows more time for analysis, improves the accuracy of reporting and allows the financial teams to focus on strategic priorities.

To assist with all aspects of financial reporting, NSW Health has started the journey to transform the NSW Health Chart of Accounts. The first phase of the process was completed in 2018-19, which identified a number of dormant and outdated segments within the NSW Chart of Accounts compared to industry best practice.

The Clinician Billing Portal is NSW Health's own web-based application used by Staff Specialists and visiting medical officers to capture Medicare Benefits Schedule activity. It automatically sends Medicare Benefits Schedule activity for chargeable patients to the billing system, removing the need for manual billing sheets. It can also be used to capture Medicare Benefits Schedule items for non-chargeable patients as a quick and easy way of recording activity. In 2018-19 three local health districts successfully completed pilots for the Clinician Billing Portal. Upon completion of implementation resources and governance models, statewide rollout of the Clinician Billing Portal commenced in mid-2019 and will continue in 2019-20.

In 2018-19, NSW Health and NSW Treasury commenced a broad revenue review. Stage 1 of the review, which was completed in early 2019, resulted in adjustments to NSW Health's revenue budget to reflect declines in Australian Government funding for Department of Veterans' Affairs patients and the changing private health insurance environment.

During the year, NSW Health also undertook a comprehensive realignment of revenue budgets for each entity in the Health cluster. The realignment process was based on principles of transparency and equity and was undertaken with wide consultation across NSW Health. The realignment was finalised in early 2019 and has led to improved accountability in revenue budgeting.

The NSW Health Purchasing Framework supports the aim of the NSW Government to keep people healthy, provide care that people need, deliver high-quality services, and manage services well. The framework was reviewed in 2018-19, to better align with value-based healthcare programs, to more clearly articulate the purchasing methodology for greater transparency, and build capability in the NSW public health system.

In 2018-19, the NSW state price per national weighted activity unit remained stable and consistently below the national efficient price for Australian public hospital services. This stability provided the right environment to review growth funding arrangements for NSW local health districts and specialty health networks.

Growth in health service demand resulting from population and ageing is calculated for each local health district and specialty health network using NSW Department of Planning and Environment population growth estimates (developed from ABS census data), which are then adjusted for the relative health usage of different age groups and sexes.

Equity growth is allocated where the per capita consumption of hospital services by the local health district/specialty health network population is lower than the NSW average. This incorporates adjustments to account for the population's age and sex and socio-economic factors that can influence the quantity of services needed by the population.

Australian Government – NSW Government health funding arrangements

NSW Health continues to support integration and sustainability through negotiation of the next National Health Reform Agreement 2020–2025. NSW is advocating for this agreement to provide sustainable health funding that builds on existing activity based funding principles, whilst embedding flexibility for NSW Health to innovate and fund the models of care that deliver outcomes that matter to patients.

To support this, NSW continues to collaborate with the Australian Government and other states and territories to develop and implement a suite of long term reforms that will transform the system and provide NSW the resources it needs to plan and provide value-based healthcare, with a focus on patient experience.

Establishing the economic impact of the Leading Better Value Care Program

The Leading Better Value Care program is one way that NSW Health is achieving value-based healthcare. Leading Better Value Care started in 2017 with eight clinical initiatives providing best practice models of care.

Leading Better Value Care aims to improve health outcomes and patient, carer and clinician experiences of receiving and providing care. Leading Better Value Care aims to increase the effectiveness and efficiency of care and support future sustainability of the health system.

> **Leading Better Value Care aims to increase the effectiveness and efficiency of care and support future sustainability of the health system**

A number of foundational activities were developed to begin monitoring the economic impact of the initiative, including:

- completion of the first stage of costing studies for four initiatives that represent a significant departure from usual care (osteoporosis refracture prevention, high risk foot services, osteoarthritis chronic care program and renal supportive care). Outputs of the costing study will be used to align funding to costs of care and in the economic evaluation
- ongoing monitoring of economic benefits and utilisation of resources to measure against business as usual projections and to assess early impact
- development of an economic model to assess sustainability over the longer term.

The efficiency and effectiveness achieved by implementing Leading Better Value Care is key to determining sustainability. This information has also presented an ongoing opportunity to discuss repurposing and reinvesting any freed up (net) capacity to other patient care priorities within the budget allocation.

Analytics and measurement to support value based decision making

The NSW Ministry of Health worked collaboratively with local health districts, specialty health networks and pillars to lay the foundations of a comprehensive approach to analyse and measure the impact of Leading Better Value Care initiatives. This supported and informed decision making about healthcare interventions focusses on improving patient outcomes, patient carer and clinician experience of receiving and providing care, together with achieving enhanced sustainability for the healthcare system.

This work has included:

- implementing the Measurement Alignment Framework to refocus measurement on what matters to patients
- development of monitoring and evaluation plans for each Leading Better Value Care initiative
- establishment of linked data assets through the ROVE system (Register of Outcomes, Value and Experience) to support sophisticated analyses
- analyses of linked and stand-alone patient experience data and the provision of data to local health districts and specialty health networks
- implementing various economic models to support and determine sustainability
- providing resources to support the transition of services to patient focussed models of care.

8.2 ENSURE HEALTH'S DELIVERY ON THE FINANCIAL MANAGEMENT TRANSFORMATION PROGRAM

With the successful implementation of the Financial Management Transformation Program, NSW Health continued to transition to Outcome Budgeting and reporting for the NSW Health cluster in 2018-19.

> **Continued to transition to Outcome Budgeting and reporting for the NSW Health cluster**

In December 2018, NSW Treasury released Treasury Policy 18-09 Outcome Budgeting (TPP 18-09). Outcome Budgeting seeks to align financial and performance reporting with governance and decision making from a whole-of-government perspective. Outcome Budgeting changes the way the government makes budget decisions and how agencies manage their resources, with an increased focus on performance outcomes. NSW Health has been working

closely with NSW Treasury and the Department of Premier and Cabinet to improve and refine outcome based reporting across both financial and non-financial performance elements.

The Financial Management Transformation Program also introduced new legislation to redefine public financial management laws that had not been updated in more than 30 years.

The Act introduced a greater focus on performance, accountability and efficiency with respect to financial management in the government sector. The Act is being implemented in stages which commenced on 1 December 2018, and applies to all government sector agencies. A collaborative approach was undertaken with NSW Treasury in development of the legislation and the underlying policies and procedures as sections of the Act became effective.

Work to implement the Act will continue as new sections become effective. NSW Health will continue to work closely with NSW Treasury to ensure policies and procedures are consistently developed and applied. Further review and update of impacted policies and procedures is expected throughout the implementation period, which will continue into 2021.

8.3 DRIVE IMPROVED FINANCIAL CAPABILITY TO SUPPORT FISCAL SUSTAINABILITY

NSW Health is working to enhance financial sustainability by developing the capability of finance staff from entry level to executive, to provide the necessary skills to create value and support decision making in a rapidly evolving workplace.

The NSW Health Financial Capability Pathway was developed in 2018-19 to ensure that skills development was relevant to the current finance and health environment. The Pathway aligns with NSW Treasury's Financial Capability Strategy and provides a suite of initiatives for finance staff to continuously enhance capabilities and to develop reciprocal relationships within government by transferring knowledge and skills.

Finance teams across NSW Health have worked together to contribute to the Healthcare Financial Management Association NSW Chapter, which included contribution towards the 2018 Healthcare Financial Management Association NSW Conference and opportunities for knowledge sharing and contributing to the national finance agenda.

> **Launched the NSW Health Finance Executive Development program**

The Health Education and Training Institute (HETI) also launched the NSW Health Finance Executive Development program, to build the leadership and strategic skills required to support a complex healthcare environment. HETI also offers other learning opportunities to drive improved financial capability to support fiscal sustainability.

STAFF MEMBER OF THE YEAR
JENNY MCKENZIE

Murrumbidgee Local Health District

One of NSW's first palliative care nurse practitioners, Jenny McKenzie has led and championed palliative care in the district for over 20 years. Jenny has been the clinical lead for a palliative care service providing quality care to patients living in rural and remote NSW. She has driven the expansion of this service, allowing wider access to palliative care in rural NSW.

Jenny has mentored generations of doctors, nurses and allied health professionals in providing excellence in palliative care. She looks beyond the normal boundaries of clinical care, ensuring a home death is possible for Murrumbidgee Local Health District's rural and remote patients.

Congratulations to Jenny who won staff member of the year at the 2018 NSW Health Awards.

Photo: NSW Health; Brad Hazzard, Minister for Health and Medical Research; Jenny McKenzie, Murrumbidgee Local Health District

Recognised Employer Partnership with CPA Australia

In 2018-19, NSW Health was formally welcomed into a Recognised Employer Partnership with Certified Practicing Accountants (CPA) Australia. All CPA Australia members who work for NSW Health are now able to claim professional development conducted at work towards their Continuing Professional Development requirements.

This positive step continues to affirm NSW Health's commitment to professional learning and skill development.

NSW Health is continuing to discuss further opportunities with other professional organisations about how their members who are working in NSW Health can access similar benefits.

8.4 DELIVER EFFECTIVE REGULATORY, GOVERNANCE AND ACCOUNTABILITY

Cross sector leadership of accounting standards implementation

In line with other private and public companies, NSW Health has been impacted by some of the most substantial accounting standard changes in a number of years. To ensure NSW Health is well prepared, the NSW Ministry of Health participated in whole-of-

government working groups to implement the new accounting standards across NSW Government agencies.

To ensure all NSW Health stakeholders have the relevant guidance and information, the Ministry updated and published the NSW Health Accounting Policy, and the Accounts and Audit Determination Manual on the NSW Health website.

To implement the new accounting standards effective in 2018-19, and to be prepared for the accounting standards effective for the 2019-20 financial year, a Project Governance Group was established with an experienced project manager to lead the implementation. Working groups with key stakeholders were developed to determine the impact of adopting each of the new standards and then to develop business processes, rules and controls that would allow a smooth transition to the new standard.

Established Tuning Governance and Accountability Program to improve system-wide governance

The Tuning Governance and Accountability Program was established by the Ministry to identify approaches to governance that can be improved and provide greater clarity of roles, responsibilities and relationships where this can be achieved. The program focuses on engaging with a range of stakeholders to discuss challenges, good practice and system-wide solutions for implementation. During 2018-19 board performance evaluation and chief executive performance review and development planning were explored.

A series of tools and resources have been developed to strengthen NSW Health's approach to evaluating the performance of our boards and executive and for identifying opportunities for development.

The NSW Ministry of Health delivered a series of engagement forums for NSW Health board chairs and members over 2018-19. This included hosting a series of Council of Board Chairs' forums, attended by the Minister for Health and Medical Research, the Secretary, NSW Health and all NSW Health Deputy Secretaries and Board Chairs. The 2018-19 forum program culminated in the hosting of the 2018 Board Member Conference which focused on the theme of strengthening governance and accountability.

Incorporate investment decisions into individual performance plans

Executive Performance Agreements were amended in 2018-19 to include relevant key performance indicators for those working on developments and to monitor compliance, specifically the requirement to deliver relevant infrastructure projects on time and within budget. This requirement will be included in individual Service Agreements for future years.

Education and training governance

The Health Education and Training Institute (HETI) now uses an online system to manage accreditation for hospitals who employ junior medical officers, delivering significant efficiencies to the process. During 2018-19, 11 hospitals completed an accreditation visit.

Higher Education accreditation

HETI has maximum accreditation as a higher education provider to 2023 at which time it will seek re-accreditation. HETI manages its higher education governance process in line with the Australian Government's regulatory framework for higher education. This involves the management of academic and corporate governance including a range of stakeholders to assure the Australian Government of the standards of education and the meeting of responsibilities as a higher education provider.

In 2019 the Australian Government's Tertiary Education Quality and Standards Agency (TEQSA) undertook an initial provider registration follow-up on HETI's progress over its first two years as a higher education provider. TEQSA reported to its Commission that HETI's progress was satisfactory and congratulated HETI on its achievements to date.

HETI Higher Education governance structures include a consumer representative on the Governing Council and student representatives on its Academic Board.

The HETI Higher Education Strategy 2019-21 was developed and aligned to the corporate HETI Strategic Plan 2018-20.

Registered Training Organisation

The NSW Health Registered Training Organisation (RTO) achieved reaccreditation with the Australian Skills Quality Authority (ASQA) for the maximum seven year period to 2025.

8.5 DRIVE SYSTEM-WIDE CONSISTENCY IN USE OF HEALTH SHARED SERVICES

NSW Health continued to drive system-wide consistency in the use of shared services with a focus on roles and value for money benefits.

HealthShare NSW is a shared service provider to NSW Health and one of the largest shared services providers in Australia. HealthShare NSW is the primary custodian for delivery of the following services to NSW Health entities:

- Food and patient support services
- Linen services
- Procurement
- Human resource services, such as payroll, employee support and recruitment
- Financial services, such as accounts payable and receivable, accounting and reporting
- Non-emergency patient transport services
- Assistive technology through Enable NSW, for people with disability.

Continued to drive system-wide consistency in the use of shared services

HealthShare NSW uses a combination of competitor benchmarking, customer engagement and surveys to monitor how value is being delivered. Competitive benchmarking has shown many HealthShare NSW services are performing by either matching or exceeding comparator organisations. HealthShare NSW is seeking to improve overall customer satisfaction scores by 25 per cent from 2016 to 2020. Customer satisfaction with HealthShare NSW increased by 17 per cent from 2016 to 2018.

To drive system-wide consistency in the use of shared services, HealthShare NSW undertook an audit to understand which entities use HealthShare NSW's shared services. The audit identified opportunities to increase NSW Health's consistency in the use of shared services. HealthShare NSW will work with the NSW Ministry of Health, local health districts and specialty health networks to progress this in 2019-20.