

SECTION 2

Performance

Priority 1:

Keep people healthy

In a year like no other, we faced drought, devastating bushfires and the COVID-19 pandemic.

The NSW health system responded to these unprecedented emergencies to keep NSW citizens safe and to minimise the harm caused by these events. At the same time, we continued to tackle major health issues that impact our community, from supporting pregnancy and the first 2000 days of life, to improving the health of children, reducing tobacco, alcohol and other drug use, and improving the health and wellbeing of Aboriginal people. Our goal is to keep our community healthy through public health programs, campaigns and initiatives to prevent disease, reduce injuries and encourage healthier choices.

Our priorities

- 1.1 Implement policy and programs to increase healthy weight in children
- 1.2 Ensure preventive and population health programs to reduce tobacco use
- 1.3 Embed a health system response to alcohol and other drug use and work across government agencies
- 1.4 Reduce the impact of infectious disease and environmental impacts on the community
- 1.5 Embed Aboriginal social and cultural concepts of health and wellbeing in programs and services
- 1.6 Support pregnancy and the first 2000 days

Key achievements

To **respond to the COVID-19 pandemic**, the Public Health Emergency Operations Centre coordinated the public health response, supporting more than 24,000 contacts to self-isolate and minimise community transmission, and issuing 22 new COVID-19 Ministerial public health orders by 30 June 2020.

Reducing tobacco use was prioritised by implementing the NSW Health Tobacco Strategy Work Plan 2019-2021 and investing \$17.3 million in tobacco controls, including public education campaigns, smoking cessation support, programs for vulnerable communities, and enforcement of smoke-free and tobacco retailing laws.

To deliver culturally safe and tailored health services, \$27.9 million was provided to Aboriginal Community Controlled Health Services and 42 health-related organisations for healthy lifestyle programs, prevention and management of chronic disease, oral health, and drug and alcohol prevention and treatment.

More than 700 health workers across all districts, the Justice Health and Forensic Mental Health Network and the Medically Supervised Injecting Centre trained to supply take home naloxone to help people who may be opioid dependent.

More than 11,700 pregnant women received support through the Get Healthy in Pregnancy Program, to help achieve healthy gestational weight, meet nutrition and physical activity requirements, quit smoking (through referral to cessation services), and abstain from alcohol.

Keeping people healthy by responding to emergencies

The 2019-20 year commenced with NSW Health providing mental health support to drought affected communities, including funding for Rural Adversity Mental Health Coordinators, counselling support and mental health research. In December 2019, NSW Health played a major role in the public health response to the bushfires, activating the NSW HEALTHPLAN to coordinate the health response with local health districts under emergency management arrangements. The Health Incident Management Team was embedded in the State Health Emergency Operations Centre, working alongside NSW Ambulance to coordinate the evacuation of health facilities within fire-affected districts, while public health professionals provided advice and education on air quality, asthma and mental health services, and HealthShare NSW coordinated the delivery of P2 masks. Teams from less-affected local health districts mobilised to support the delivery of health services in fire-affected areas, with staff caring for patients in emergency departments and temporary evacuation centres.

In January 2020, the Public Health Emergency Operations Centre was established to lead the public health response to the COVID-19 pandemic, supported by teams of contact tracers, planners and epidemiologists. The State Health Emergency Operations Centre was re-established in March 2020, to enact, operationalise and implement public health orders including establishing statewide COVID-19 testing clinics, increasing intensive care unit capacity and staff training, and working to quadruple the number of available ventilators in NSW public hospitals.

The best possible start in life

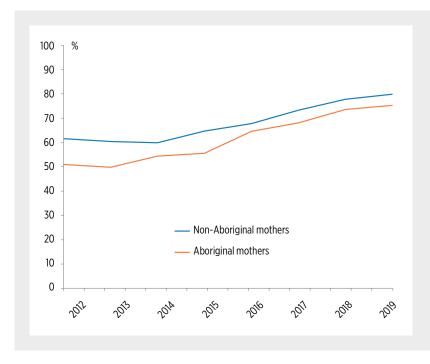
The first 2000 days is a critical time for physical, cognitive, social and emotional health, and has been shown to have an impact throughout life. Driving awareness of the First 2000 Days Framework, which outlines the importance of the first five years of a child's life and the actions required across the health system to ensure the best start in life, continued by:

- delivering 56 presentations to 2848 health professionals at weekly sessions across the state
- convening a Child and Family Health Community of Practice to ensure essential child and family health services are delivered using these service models
- co-chairing a whole of NSW Government First 2000 Days Cross Agency Steering Committee.

The Steering Committee:

- promoted cross-agency understanding of the First 2000 Days Framework through presentations, events and workshops
- mapped consumer experience of the first 2000 days of life
- encouraged participation in child health checks.

During the pandemic, antenatal care and child and family health services were increasingly delivered virtually, with districts and networks combining telehealth with face-to-face visits, ensuring early identification of risk factors. To support fathers, \$2.4 million was allocated under the Commonwealth Health Innovation Fund to offer new dads parenting information and ways to improve their emotional wellbeing in the perinatal period, and provide pathways into care if required.



First antenatal visit before 14 weeks by Aboriginal and non-Aboriginal mothers

In NSW, pregnant women are encouraged to have their first antenatal visit before 14 weeks' gestation. In 2019, the proportion of Aboriginal mothers who attended their first antenatal visit before 14 weeks was 75.3 per cent, up from 73.6 per cent in 2018, and for non-Aboriginal mothers it was 79.9 per cent, up from 77.8 per cent in 2018. Early antenatal visits monitor the health of the mother and baby, provide advice, and identify antenatal complications so that appropriate intervention can be provided.

Programs to keep our kids healthy

A range of statewide programs help kids stay active and healthy.

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 supports health eating and physical activity

from birth to five years

- 3522 (87%) centrebased childhood education and care facilities participated
- 94 (58%) family day care services participated.

Live Life Well at School

- creates environments which enable children to eat healthily and be physically active
- 2144 (83%) schools participated.

Go4Fun

- a program for children aged seven to 13 years who are above a healthy weight
- 1641 children and their families helped to adopt a healthier lifestyle.

Finish with the Right Stuff

- supports clubs to provide healthy food and drink options to their players and patrons.
- 64 junior community sporting clubs participated.

Keeping mums healthy during pregnancy

To care for pregnant women and provide their babies with the best possible start, the statewide Get Healthy in Pregnancy Program provided 11,778 women (an increase of 34 per cent on 2018-19) with free telephone health coaching and resources to help achieve:

- ✓ healthy gestational weight gain
- ✓ nutrition and exercise requirements
- quitting smoking (through referral to smoking cessation services)
- ✓ abstinence from alcohol.

Enhancements to the Get Healthy Information and Coaching Service included online health professional referral forms and the inclusion of support information and electronic referral within NSW Health maternity electronic management systems.

To provide holistic antenatal care to women who smoke during pregnancy, referral to smoking cessation services was integrated into the Get Healthy in Pregnancy Program, part of the NSW Get Healthy Information and Coaching Service. Support for women to stop smoking was also embedded into routine antenatal care in 2020 as part of the NSW Safer Baby Bundle National Collaboration program, which recognises reducing smoking in pregnancy as one of five important elements for reducing stillbirths.

Alleviating substance use in pregnancy

The NSW Drug Package increased support for families, and significantly expanded Substance Use in Pregnancy and Parenting Services. A key target of these services was to expand the role of home visiting for mothers once the baby is born.

Achievements included:

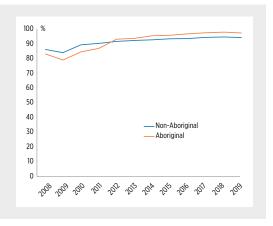
- ✓ all newly funded services conducted home visits
- ✓ 386 new clients accepted
- ✓ 1366 clients received assessment, consultation, counselling, case management, withdrawal management and home visiting.

Saving the date to vaccinate

To remind parents when their child's vaccination is due, the refreshed 'Save the Date to Vaccinate' social marketing campaign continued, with the phone app downloaded more than 63,000 times, while the campaign provided key messages about the importance of on-time vaccinations. By age one, 94.5 per cent of children were fully vaccinated and by age five, 97.2 per cent of Aboriginal children and 94.3 per cent of non-Aboriginal children were fully vaccinated.

Aboriginal and non-Aboriginal children fully vaccinated at five years of age

Immunisation coverage has improved significantly for Aboriginal and non-Aboriginal children in NSW since 2012. The Aboriginal Immunisation Healthcare Worker Program uses targeted interventions to improve the timely vaccination of Aboriginal children which has closed the gap in coverage rates, and resulted in Aboriginal children having higher coverage than non-Aboriginal children.



Keeping People Healthy

Supporting Delivery of Safer Music Festivals

NSW Ministry of Health

To keep festivalgoers safe, the team at the NSW Ministry of Health coordinated the Ministry's response to severe drug related harm over the 2018-19 summer festival season in NSW. This included promotion of safe behaviours, supporting safer festival environments, and enhancing the onsite medical response. The team worked closely with festival organisers, onsite medical providers and harm-reduction services to implement a harm-reduction approach comprising advice, support, surveillance, and toxicological testing, which was used to improve both policy and service response. The team won the Keeping People Healthy category of the 2019 NSW Health Awards for their efforts.



Back row: Anthony Cooke, Mick Bray, David Koop, Daniel Madeddu, Caren Friend, Graeme Loy, Chief Executive, Western Sydney Local Health District, Jill Ludford, Chief Executive, Murrumbidgee Local Health District, Robin Auld, Santiago Vaszquez, Catherine McDonald. Middle row: The Hon. Brad Hazzard MP, Minoister for Health and Medical Research, Elizabeth Koff, Secretary, NSW Health, Sergei Bidny, Shanmugam Banukumar, Vanessa Shaw, Laura Changizi, Michelle Cretikos, Claire Harper, Lauren Mason, Sophie Tyner, Anna Do. Front row: Dr Kerry Chant, NSW Chief Health Officer, Gary Tall, Sarah Coombes, Deb Welsby, Caroline Sharpe, Kavita Varshney, and Andrew Dawson.

Keeping kids healthy

Improving healthy weight in children to tackle childhood overweight and obesity is a NSW Health Strategic Priority. The NSW Healthy School Canteen Strategy, a collaboration between the Ministry and the education sector, enabled 1535 NSW schools to increase availability of healthy food and drink options in school canteens; 1432 of these were public schools representing 86 per cent of all NSW public schools with a canteen.

The pro.healthykids.nsw.gov.au website continued to support health professionals to care for children above a healthy weight, with 282,785 unique visitors to the website during 2019-20, and resources downloaded or viewed 13,201 times; a five per cent increase in visitors to the site, and a 53 per cent increase in downloads from 2018-19.

The Ministry supported local health districts to increase the availability and promotion of healthy food and drink options and decrease the availability of unhealthy options, including removal of sugar-sweetened drinks, across all 953 food outlets in 160 NSW Health facilities.

Keeping people healthy by reducing tobacco use

Tobacco use is the leading contributor to the burden of illness and deaths in Australia. The Ministry prioritised reducing tobacco use by implementing the NSW Health Tobacco Strategy Work Plan 2019-2021 and investing \$17.3 million in tobacco controls, including public education campaigns, smoking cessation support, programs for vulnerable communities, and enforcement of smoke-free and tobacco retailing laws.

Supporting our citizens to quit smoking

Cancer Institute NSW continued to drive awareness of smoking cessation services and quit support with the social marketing campaign 'You Quit, You Win' and launched a quit smoking chatbot, Quitly, to provide support to people trying to quit using digital channels.

Consumers engaged 620,899 times with iCanQuit.com.au while Quitline worked with the Get Healthy Information and Coaching Service to:

- ✓ improve integration of digital communication channels to reduce tobacco use
- ✓ enhance referral pathways between the two services
- offer brief interventions to participants who want to quit.

The Institute also implemented the Smoking Cessation Framework in NSW cancer services, including training health professionals to integrate smoking cessation interventions into routine clinical practice.

Empowering Aboriginal communities to quit smoking

NSW Health worked with the Commonwealth-funded Tackling Indigenous Smoking program to better align services and share approaches to reduce smoking rates in Aboriginal communities. The Centre for Aboriginal Health supported the Aboriginal Health and Medical Research Council of NSW to provide access to smoking cessation activities and interventions, including free nicotine replacement therapy, for smokers attending one of 42 NSW Aboriginal Community Controlled Health Services.

The Cancer Institute NSW invested \$500,000 in provision of nicotine replacement therapy to support the quit attempts of Aboriginal people who smoke, including pregnant women, by eliminating cost of treatment, which was a barrier.

Reducing tobacco use for people with mental illness

The Ministry worked in partnership with Cancer Council NSW to conduct a tackling tobacco trial to improve smoking cessation for people with mental illness in community-supported living programs. These programs; Housing and Accommodation Support Initiative (HASI), HASI Plus, and Community Living Supports, are funded by NSW Health. Work continued to embed a range of strategies, including quit support and offering smoking cessation training for staff while results from the trial were finalised.

Improving compliance with tobacco legislation

The Ministry developed a statewide Public Health Information Management System to improve data collection, monitoring and reporting of tobacco compliance activity.

Health inspectors continued to monitor and observe high compliance levels (of 90 per cent and above) with tobacco legislation. Inspectors visited 127 retailers to enforce electronic cigarette laws, seizing more than 7600 bottles of illegal liquid nicotine. Five retailers were successfully prosecuted.

Support for quitting in the workplace

The Get Healthy at Work program supports the development of healthy workplaces and aims to reduce chronic disease risk among workers. About 11 per cent of registered workplaces accessed telephone support, digital communication and online tools and resources to support workplace initiatives focused on reducing tobacco use.

Support to reduce alcohol and other drug use

The Alcohol and Drug Information Service (ADIS) and Family Drug Support continued to provide telephone and online information, support and referrals, to support NSW citizens to reduce alcohol consumption, and launched its online chat function as an adjunct to the existing ADIS telephone services.

Get Healthy at Work registered workplaces also accessed tools and resources to support workplace initiatives focused on reducing alcohol use, with the program's referral pathway integrated with the Get Healthy Service, which includes an alcohol reduction program.

The Centre for Alcohol and Other Drugs' Stay OK social marketing campaign educated music festival goers on the signs and symptoms of drug-related harm via social media, stayok.nsw.gov.au, and by providing educational materials at 18 festivals for the first time in 2019-20. The campaign evaluation showed significant potential to positively influence festivalgoers' behaviour.

Opioid Treatment and Take Home Naloxone programs

To better assist people with opioid dependence, the Opioid Treatment Program introduced a new formulation of long-acting injectable buprenorphine (depot). A total of 1305 clients were prescribed depot, more than 700 clinicians participated in training, while the publication of guidelines for its use, commissioning training workshops, and hosting webinars for general practitioners, supported the program.

In response to the COVID-19 pandemic, the program introduced:

- physical distancing
- surge planning for community pharmacies, prescribers and public clinics
- options to safely minimise the requirement for daily dosing based on clinical risk assessment.

More than 50 per cent of clients on the Opioid Treatment Program received treatment at a community pharmacy. A partnership with the community pharmacy sector produced a self-audit tool to support Ministry audits and inspections, and delivered an education program to build communication skills for pharmacist-led discussions with patients.

The Take Home Naloxone program provides naloxone medication kits to people at risk of a potential opioid overdose. More than 700 health workers from across all districts, the Justice Health and Forensic Mental Health Network and the Medically Supervised Injecting Centre were trained to supply take home naloxone. Services were also supported to obtain naloxone medications for eligible people, and the community pharmacy sector was engaged to support the program.

Special Commission of Inquiry into the drug 'Ice'

In January 2020, the Special Commission of Inquiry into the Drug 'Ice' made 109 recommendations in a report from Professor Dan Howard SC to the NSW Government on a broad range of health, social and criminal justice issues regarding the prevalence and impact of crystal methamphetamine and other illicit stimulants, and the adequacy of existing measures to target these substances.

The NSW Government issued its interim response in February 2020 and committed to providing a final response by the end of 2020. Throughout 2019-20 NSW Health organisations delivered programs to address methamphetamine-related harm, such as stimulant treatment services in Sydney and regional NSW. NSW Health also supported regionally-based non-government drug and alcohol services.

Volunteer of the Year

Isabelle Wilson

South Eastern Sydney Local Health District

For more than three years, Isabelle Wilson has been a consumer representative for Headspace Bondi Junction and a member of the Youth Reference Group since its inception. She is an inspiring young leader who has maintained active involvement with the group for its duration. Isabelle has provided leadership to South Eastern Sydney Local Health District by participating in consumer forums and providing ideas for the Youth Mental Health First Aid project, including training as a facilitator.



Elizabeth Koff, Secretary, NSW Health, the Hon. Brad Hazzard MP, Minister for Health and Medical Research, Isabelle Wilson, Rebecca Wark, Chief Executive, Health Infrastructure, and Amanda Larkin, Chief Executive, South Western Sydney Local Health District.

Screening for cognitive impairment to assist treatment

Cognitive impairment is prevalent among people accessing drug and alcohol treatment, and is a barrier to good treatment outcomes. The Agency for Clinical Innovation developed a suite of resources, including a screening tool, executive function assessment tool, and a cognitive remediation program, designed to screen for, assess and respond to cognitive impairment. A study with 527 participants in 10 residential rehabilitation treatment services trialled and evaluated the tools and resources.

Keeping people healthy by reducing the impact of infectious diseases

NSW Health organisations continued to make progress towards the virtual elimination of HIV transmission in NSW, with 12 per cent fewer citizens diagnosed with HIV than the previous five-year average. The Centre for Population Health continued the NSW Dried Blood Spot program for HIV and hepatitis C testing at home, and also ensured access to pre-exposure prophylaxis (PrEP) for those at risk of HIV.

The elimination of hepatitis C as a public health concern by 2028 remains a priority. The Centre for Population Health continued to focus on access to testing and curative treatment for vulnerable populations including peer-led programs in alcohol and other drugs settings, and enhanced access to testing and treatment by engagement with Aboriginal Controlled Community Health Services.

The Ministry also supported the work of the Hepatitis C Strategy Clinical Action Group, to enable access to hepatitis C treatment for Aboriginal people and support the uptake of GP-prescribed antivirals.

Delivering culturally safe and tailored health services

The Ministry provided \$27.9 million (an increase of \$1.4 million from 2018-19) to Aboriginal Community Controlled Health Services and 42 health-related organisations to deliver culturally safe and tailored health services for Aboriginal communities. This included:

- support for healthy lifestyle programs
- prevention and management of chronic disease
- · oral health services
- · drug and alcohol prevention and treatment.

The Centre for Aboriginal Health released the Aboriginal Cultural Engagement Self-Assessment (Audit) Tool on the Quality Audit Reporting System, to embed a culturally safe and inclusive organisational culture within existing reporting mechanisms across NSW Health. The Centre also strengthened the use of the Aboriginal Health Impact Statement across the health system, to ensure the needs of Aboriginal people are fully considered in all new policy and program initiatives, and to improve consultation with authoring branches. In addition, the NSW Aboriginal Health Governance and Accountability Framework was progressed, supporting system reform to deliver improved Aboriginal health outcomes.

Priority 2:

Provide world-class clinical care where patient safety is first

Improving patient care and safety, and delivering outcomes and experiences that matter to patients and our community, is of primary importance to NSW Health.

The Ministry collaborates with pillar agencies to:

- lead system-level strategy to drive value based healthcare
- transform the way health services are provided
- enhance the experiences of patients and carers
- ensure timely and equitable access to appropriate care across the lifespan of our consumers, from birth to end of life care.

Staff in local health districts and networks put these strategies into action, to provide exceptional care to the citizens of NSW.

Our priorities

- 2.1 Continue to embed quality improvement and redesign to ensure safer patient care
- 2.2 Continue to move from volume to value based healthcare
- 2.3 Improve the patient experience and further engage with patients and carers
- 2.4 Ensure timely and equitable access to appropriate care
- 2.5 Use system performance information to drive reform to the system

Key achievements

Under the Mental Health Patient Safety Program, the Clinical Excellence Commission supported five districts and networks to commence safety programs, delivering quality improvement training to 83 clinical leads and 51 improvement coaches to support 73 frontline mental health teams in safety and quality improvement projects.

NSW Health provided pasteurised donor human milk to support vulnerable infants in neonatal intensive care units. through a partnership with the Australian Red Cross Lifeblood Milk Bank. These infants include preterm, very low birth weight and others at risk of necrotising enterocolitis — a serious gut illness.

In collaboration with the Nursing and Midwifery Office, the Clinical Excellence Commission supported development and implementation of local district improvement plans for comprehensive care for older people; seeing a sustained reduction in the number of falls resulting in serious harm.

The Agency for Clinical Innovation, the Ministry and eHealth NSW are partnering to develop the Health Outcomes and Patient Experience (HOPE) IT system to support collection and reporting on patient-reported measures to drive a more patient centred healthcare system.

A partnership between the Ministry, local health districts, Service NSW, Healthily and the Pam McLean Centre, improved the Emergency Department Patient Experience Program to provide world-class customer service for people attending emergency departments.

Moving from volume to value based healthcare

Value based healthcare is a way of organising healthcare to maximise value, where value is defined as the outcomes and experiences that matter most to the people receiving and delivering care, relative to the costs of achieving those outcomes. To support shared understanding, the Ministry published the conceptual framework for value based healthcare and helped shape a range of national work including key reforms in the 2020-2025 National Health Reform Agreement. Highlights included:

- ✓ Publication of the article Implementing value-based healthcare at scale: the NSW experience by Elizabeth Koff and Dr Nigel Lyons, in the Medical Journal of Australia
- ✓ Launching the inaugural Secretary's Award for Value Based Healthcare at the 2019 NSW Health Awards.
- ✓ Hosting the first NSW Health Value Based Healthcare Forum for more than 400 delegates from districts, pillars, primary health networks, consumer groups, medical colleges, and other jurisdictions.
- ✓ Delivering digital content, tools and resources about value based healthcare initiatives. By June 2020, the digital newsletter for Leading Better Value Care reached more than 400 clinicians and stakeholders across Australia.

Leading Better Value Care

The Ministry, Agency for Clinical Innovation, Clinical Excellence Commission, Cancer Institute NSW and local health districts and networks, collaborated on the Leading Better Value Care program, which continued to scale and embed Tranche 1 initiatives, and implement Tranche 2 initiatives.

The program achieved several milestones during the year to improve care for people with chronic conditions:

✓ The Standards for Wound Management was released to improve clinical practice and capabilities, optimising outcomes and experiences for patients with chronic wounds.

- ✓ The NSW Colonoscopy Categorisation Clinical Practice Guide was produced to support clinicians and managers to appropriately triage referrals for colonoscopy services and support the success of the direct access colonoscopy initiative.
- Supporting analyses was finalised for the diabetes case for change, the electronic medical records business case, and the osteoporotic refracture prevention longitudinal analysis.
- ✓ To support a more coordinated approach to diabetes management, a joint statewide initiative with the Integrated Care Team and the Agency for Clinical Innovation commenced.

To continue to improve and support patient outcomes, the Agency for Clinical Innovation completed five formative evaluations informing a review of approaches and opportunities for districts to further embed the Tranche 1 initiatives, and published organisational models for all initiatives.

Leading better value care by reducing unwarranted clinical variation

Reducing unwarranted clinical variation (i.e., variation that can only be explained by differences in health system performance) is critical to ensure patients receive the safest, highest quality care. The Agency for Clinical Innovation supported efforts to reduce unwarranted variation across a range of clinical areas, with a focus on bronchiolitis and chronic heart failure. User-friendly audit tools and feedback processes were developed from an audit and feedback review and scan of international approaches, in order to reduce unwarranted clinical variation and deliver meaningful practice change.

Leading better value care for older people

The Clinical Excellence Commission's Older Persons Patient Safety Program worked with the Nursing and Midwifery Office to support the development of local district improvement plans for comprehensive care for older people. The plans used a combined approach to:

- reduce falls
- reduce pressure injuries
- improve nutrition
- improve cognitive function
- improve medication safety
- · improve end of life care.

The Leading Better Value Care initiatives

Tranche 1



Osteoarthritis chronic care



Osteoporosis Re-fracture Prevention



Chronic heart failure



Diabetes high risk



mellitus



in hospital



Chronic obstructive pulmonary disease



Renal Supportive Care

Tranche 2



Hip fracture care



wound management



Bronchiolitis



Hypofractionated radiotherapy for early stage breast cancer



Direct access colonoscopy

The 40-team Falls Improvement Collaborative saw a sustained reduction in the number of falls resulting in serious harm. To embed and scale this work, the Commission provided ongoing support to districts, including:

- quality improvement training
- · coaching and site visits
- workshops.

eHealth NSW enhanced the electronic medical record to enable clinicians to improve outcomes for patients with osteoarthritis and osteoporosis.

Leading better value cancer care

The Cancer Institute NSW worked with clinicians to implement Tranche 2 direct access colonoscopy and breast cancer hypofractionation initiatives, establishing two clinical reference groups to oversee the development of a direct access colonoscopy model of care and baseline data collection methodology, including patient-reported experience measures. The model of care includes recommendations and requirements for implementing services across NSW, with 15 districts and networks completing baseline data collection.

For women with early-stage breast cancer undergoing radiation therapy, the Institute delivered a workshop to co-design resources and conducted qualitative research to understand barriers and enablers to uptake of hypofractionated radiotherapy.

Commissioning for Better Value

Commissioning for Better Value is a key initiative in ensuring world-class care and patient safety. After establishing key concepts and methodology, the Ministry tested the approach of Commissioning for Better Value across a range of clinical and non-clinical projects in medical imaging services, pathology, radiation oncology services and wound management products. The Ministry developed resources, including:

- ✓ program logic workshops
- ✓ presentations
- ✓ videos and a booklet
- ✓ a business case practice guide.

These resources were shared with districts to support capability development to commission for better value.

Ensuring safer patient care and quality improvement

The Clinical Excellence Commission continued to build capacity within NSW Health to improve patient safety and quality of care, including training frontline teams in quality improvement, and developing tools to support improvement programs.

The Quality Improvement Data System (QIDS) provided tools and resources for district clinicians and managers to monitor hospital-acquired complications data and improve safety for patients.

The Commission worked in collaboration with eHealth NSW on system preparedness for coming legislative changes on serious incident management, and the introduction of ims+ incident management system.

In partnership with the University of Technology Sydney and the Sax Institute, the Clinical Excellence Commission designed evidence-based changes to investigation methodologies for serious incidents.

In addition to chairing policy development to prevent and minimise seclusion and restraint, leading to the release of the NSW Health Seclusion and Restraint Policy in March 2020, the Mental Health Patient Safety Program supported:

- ✓ five districts to commence work on safety programs
- ✓ quality improvement training for 83 medical and clinical leads
- ✓ training of 51 improvement coaches to support 73 frontline mental health teams in safety and quality improvement projects.

In the area of board governance, the Commission conducted annual workshops for district and network boards on safety and quality, enabling boards to prioritise patient safety monitoring and assurance.

The Commission contributed to exploring and testing reliable mechanisms for measuring and monitoring patient safety culture; collaborating to establish safety culture indicators:

- locally with clinical teams supporting the use of safety attitudes questionnaires
- across NSW partnering with the NSW Ministry of Health Workforce Planning and Development division
- nationally contributing to the Australian Commission on Safety and Quality in Health Care's work on safety culture measurement.

Commissioning for Better Value in medical imaging: The Northern NSW experience

Northern NSW Local Health District, in partnership with the Ministry, adopted a Commissioning for Better Value approach to optimise their current model for medical imaging services. The District consulted with clinicians, service managers and industry providers to identify recommendations to improve outcomes, patient and clinician experiences, efficiency and effectiveness. As a result, the District released an optimised request for tender for a single-provider radiologist services model to maximise value.

Secretary's Award for Value Based Healthcare

My Aching Joints

Northern NSW Local Health District

Providing timely and seamless access to care, evidence-based interventions, and patient empowerment through better understanding of osteoarthritis and joint pain was a goal of this District, which cares for a large aging and retiree population. The Tweed Knee and Hip Arthritis Service targets modifiable health and lifestyle factors contributing to joint pain and functional decline, and supports immediate and ongoing self-management. For two years the service has received a consistent flow of referrals from specialists and GPs, and won the Secretary's Award for Value Based Healthcare at the 2019 NSW Health Awards.



Elizabeth Koff, Secretary, NSW Health, Dr Brett Lynam, Evan Bryant, Chris Hanna, and the Hon. Brad Hazzard MP, Minister for Health and Medical Research.

Establishing indicators to support patient safety

The Ministry initiated a project to make use of available feedback data as part of continuous improvement, as a way of identifying opportunities to enhance patient experience and increase patient safety and quality of care. Exploring options to analyse emergency department clinical incidents was one of the recommendations of the project.

The Ministry commenced the emergency department data triangulation project with the Clinical Excellence Commission. The project aimed to assess the feasibility of measuring variation in performance and service delivery in emergency departments, identify potential adverse outcomes, and optimise safety intelligence.

NSW Health, in partnership with the Australian Red Cross Lifeblood Milk Bank, supported 668 vulnerable infants, including preterm, very low birth weight, and others at risk of necrotising enterocolitis, by providing pasteurised donor human milk.

Quality improvement in surgery

The Agency for Clinical Innovation led improvements to surgical quality by implementing Phase Three of the National Surgical Quality Improvement Program (NSQIP) across 17 public hospitals; governed and managed by a newly established multidisciplinary committee.

To improve patient care, the Agency supported assessment of unwarranted variation in surgery using a framework detailing elements contributing to low-value surgery.

This provided:

- · a robust basis to explore research
- literature and available experiential evidence
- identification of priority areas for further reduction of unwarranted variation.

The Agency also partnered with Cancer Institute NSW to reduce variation in low-volume, high-complexity cancer surgery and improve long-term patient outcomes. This was achieved by:

- examining case volume and surgical outcome relationships for six cancer streams
- identifying strategies to improve cancer mortality rates and long-term outcomes for people living with cancer.

Improving cancer care and cancer outcomes

Informing system performance and identifying areas for improvement, the Cancer Institute NSW delivered its ninth *Reporting for Better Cancer Outcomes* report, providing an expanded suite of local and statewide cancer information to more than 600 health staff.

The Institute included three additional cancers (penile, neuroendocrine and peritoneal) in the public reporting of specialist centres for surgery in NSW, and 41 centres across 14 cancer types, with information on surgical effort published on its websites.

Revolutionary cancer therapy available in NSW

NSW led global research efforts into the development of novel cell and gene therapies. This year two centres at Royal Prince Alfred Hospital and Sydney Children's Hospital Randwick were established to deliver commercial CAR T-cell therapy, a revolutionary cancer treatment that uses a patient's own immune cells to find and kill cancer cells.

Kymriah®, the first commercial CAR T-cell therapy available in Australia is changing lives, with two young people already treated and more identified. Further treatment centres for CAR T-cell therapy are planned at the Westmead Hospital Campus.

Patient Safety First

Walking the Milky Way

Northern Sydney Local Health District

The Walking the Milky Way program aimed to improve the nutrition of preterm infants and reduce dependence on intravenous nutrition. Implemented by the Royal North Shore Hospital, the program assessed infant tolerance of milk feeds, improved early expression of mothers' breast milk, and introduced pasteurised donor human breast milk. Results showed a significantly decreased risk of infection, allowed for the early provision of milk for all infants, and proved to be safe, scalable, sustainable and highly cost effective. The program was awarded the Patient Safety First category of the 2019 NSW Health Awards for the Northern Sydney Local Health District.



The Hon. Brad Hazzard MP, Minister for Health and Medical Research, Elizabeth Koff, Secretary, NSW Health, Cameron Priest, Emily MacNaught, Abbey Van Vuuren, Karen Lawrence, Eveline Staub, Kay Hyman, Chief Executive, Nepean Blue Mountains Local Health District. Stewart Dowrick, Chief Executive, Mid North Coast Local Health District.

Understanding take own leave from hospital

Take own leave occurs when a patient leaves hospital care prior to being discharged by their treating doctor. To build understanding of take own leave rates for Aboriginal people, which are 2.5 times greater than for non-Aboriginal people, the Clinical Excellence Commission in partnership with the Centre for Aboriginal Health, released the Diagnostic Report: Understanding contributing factors for Take-Own-Leave in NSW Health organisations.

The report captured issues from consultation with the NSW Health workforce, consumers and industry, and identified 10 main themes, providing a basis for further work to reduce harm and improve care of Aboriginal people in NSW hospitals.

Improving patient experiences

Keeping patients safe during the pandemic

The Clinical Excellence Commission continued to work with the Agency for Clinical Innovation, consumers, and the Ministry to ensure a collaborative, consistent approach to delivering safe, high quality healthcare. The Commission provided guidance (as part of the joint Agency for Clinical Innovation-Clinical Excellence Commission Consumer Council) to the Clinical Communities of Practice supporting the COVID-19 pandemic response, on developing plans and delivering quality health services.

The Agency also provided resources to support the use of telehealth for care delivery during the pandemic, including development of a pulmonary rehabilitation virtual model and delivering Pexip videoconference software training to more than 2400 staff across the health system.

Capturing patient experience to improve services

To improve patient experience across the health system, the Ministry contributed to, and aligned work on, the Patient Reported Measures Analytics Guide, the Patient Experience Strategy, and approaches at a national level.

More than 60,000 patient experience surveys linked into the Registry of Outcomes Value and Experience (ROVE) allows for patient experience to be monitored for new ways of providing services; actioned at a service, district or system level. ROVE brings together multiple datasets to provide a more complete picture of a patient's journey in the health system, including outcomes and experiences of healthcare.

Patient experiences are captured by the NSW Patient Survey Program, which gave voice to more than 87,000 patients about their experiences of the NSW health system, and used sophisticated data and analytic methods to deliver insights into health system performance and support improvement. Results are published on bhi.nsw.gov.au.

Developing a patient centred healthcare system

The goal to develop a more patient centred healthcare system saw the Agency for Clinical Innovation, the Ministry and eHealth NSW commence a partnership to develop the Health Outcomes and Patient Experience (HOPE) system; to collect and report on patient-reported measures.

The system trial consisted of:

- ✓ 126 services measuring outcomes
- ✓ 97 services measuring experiences
- ✓ 23 workshops to co-design the system.

Supporting improved emergency performance

To support hospitals to meet emergency key performance indicators (KPIs), the Ministry facilitated the KPI Recovery Program, assisting 14 districts and 25 hospitals to identify barriers to emergency performance, including opportunities for improvement and integration of improvement strategies into business as usual processes. The Ministry also shared successful strategies with other participating hospitals.

Improving engagement with Aboriginal consumers

To address cultural safety across the health system, the Centre for Aboriginal Health worked with districts and networks to develop a suite of resources and tools including the Aboriginal Cultural Engagement Self-Assessment (Audit) Tool to improve Aboriginal health outcomes and support accreditation of NSW Health facilities.

The Agency for Clinical Innovation established an Aboriginal Health Working Group to review data collection, use and implementation of existing patient-reported measures, to ensure cultural relevance and appropriateness for Aboriginal people.

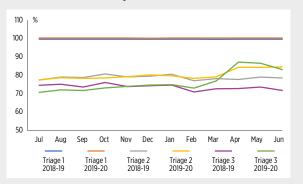
Following consultation with Aboriginal groups, the Clinical Excellence Commission updated a purposedesigned REACH flyer to improve communication and engagement with Aboriginal consumers.

These activities aligned with, and embedded:

- the six strategic directions of the NSW Aboriginal Health Plan 2013-2023
- recommendations from the mid-term evaluation of the above plan
- six Aboriginal-specific actions from the National Safety and Quality Health Service Standards.

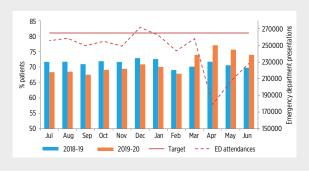
Percentage of emergency department patients treated within benchmark times across three triage categories

More than 2.9 million patients presented to a NSW public emergency department in 2019-20, approximately 56,000 less than 2018-19. Most of this reduction occurred due to the pandemic, while a marked improvement in time to treatment was recorded towards the end of the year for categories two and three. Category one targets were met for the whole year.



Emergency treatment performance - percentage of patients in emergency departments less than four hours

Against a target of 81 per cent, in 2019-20, 70.7 per cent of patients who presented to a NSW emergency department left the department within four hours following treatment.



Enhancing patient and carer experiences of emergency departments

The Improving the Emergency Department Patient Experience Program improved individual experiences of emergency departments by creating an environment that helped patients, carers, and their families feel welcome, safe and empowered. The project, a partnership between the Ministry, local health districts, Service NSW, Healthily and the Pam McLean Centre, won the 2019 Premier's Award for World Class Customer Service. It involved:

- introducing patient experience managers
- onhancing waiting room facilities
- providing multilingual digital patient information
- ocaching staff to understand patient and carer experiences.

The Hon. Brad Hazzard MP, Minister for Health and Medical Research, announced an \$8.6 million extension of the program in May 2020, enabling an additional 86 patient experience staff at 50 emergency departments and COVID-19 clinics across NSW to combat the additional stress and pressure on patients, their carers and emergency department staff. Kiosks collected real-time feedback which showed:

- ✓ patient satisfaction improved by an average of 30 per cent over the first six months
- the program had a positive impact on first impressions, reducing anxiety for patients and carers.

Enabling consumers to improve care

The Agency for Clinical Innovation held four webinars as part of the Consumer Enablement Spotlight Series. More than 100 people attended each webinar to learn about consumer enablement and explore approaches to health literacy and shared decision making.

The Agency launched the Guide to Building Co-design Capability, which outlines the skills and knowledge required for co-design across the system, particularly in mental health services, and progressed a toolkit to provide hands-on tools and tips to include people's lived experience in building a better experience of care. The Agency also launched an online 'collaborative cultures' resource supporting the implementation of strategies to strengthen collaborative practices in mental health services.

Improving patient nutrition to enhance care

HealthShare NSW completed a nutritional standards operational implementation review, which led to the development of a new model endorsed by all stakeholders. This was followed by engagement with local health districts to identify a suitable pilot site to implement the new model.

The NSW Nutrition and Food Strategic Steering Group endorsed a program of work targeting food allergen and texture modified food management. This includes the phased roll out of the International Dysphagia Diet Standardisation Initiative framework for texturemodified diets and the development of allergy diets by the Diet Specifications Reference Group.

Supporting community healthcare

The Whole of Health Program provided support for hospitals and health services across the regional and metropolitan setting, and focused on:

- · improving access to inpatient beds
- discharge planning
- managing inpatient length of stay
- optimising alternatives to emergency department care.

Integrated Care is leading the Premier's Priority to improve outpatient and community care, with a target to reduce preventable hospital visits by five per cent by caring for people in the community.

Care in the community improves patient experience and outcomes by enabling local agencies, service providers and clinicians to work together to better meet patients' needs and support patients' access to care outside the hospital.

By February, 52,241 patients were enrolled in one of six integrated care initiatives targeting vulnerable populations including patients with complex and chronic conditions.

NSW Ambulance, as part of the pandemic response. participated in a secondary triage initiative led by the Ministry, aimed at treating residents of aged care facilities in their homes.

Additionally, NSW Ambulance:

- developed the Alternate Referral Destinations and Frequent User program to meet patients' needs in the community through local supports, rather than via emergency departments
- consolidated the Resuscitation Academy's 10 key steps into an out-of-hospital cardiac arrest strategy
- implemented a new high-performance CPR paramedic training package to improve patient outcomes.

Improving access to appropriate and timely care

Increasing access to stroke diagnosis and treatment for rural and regional patients

The NSW Telestroke Service launched at Port Macquarie and Coffs Harbour hospitals in March 2020, offering people living in regional and rural areas increased access to life saving stroke diagnosis and treatment. The service connects local doctors in emergency departments to specialist stroke physicians from the Prince of Wales Hospital via video consultation. The NSW Government is providing \$21.7 million in funding over three years, including \$9.4 million from the Australian Government for this initiative, which will expand to provide support for up to 23 rural and regional hospitals across NSW.

Implementing health genomic strategies

Understanding genomics and gene sequencing helps improve clinical care and patient safety. NSW Health organisations collaborated to deliver the NSW Health Genomics Strategy Implementation Plan (2018-20). Achievements included establishing the NSW Health Pathology Clinical Genome and Exome Sequencing Service, developing genomic health career videos, and initiatives to understand the genomic data sharing landscape and the education needs of consumers and the health workforce.

Improving access to critical care

Access to intensive care is a critical part of the clinical care NSW Health provides. The Agency for Clinical Innovation worked in partnership with the Ministry across 18 sites, to identify and implement strategies to optimise intensive care capacity; completing a pilot and first phase of a three-phase project.

Phase 1 included 10 sites while Phase 2 commenced in November 2019 at four sites. Pilot sites reported improvements in ICU exit block and ICU access block. as strategies were embedded into business as usual processes. Site project teams completed the diagnostic phase before the project was paused in March due to the pandemic.

Increasing bookings of fixed wing transport

HealthShare NSW completed a review into fixed wing transport options and developed three initiatives to be piloted to improve patient transfer to facilities. The Ministry implemented the northern zone pilot with Northern NSW, Mid North Coast, Hunter New England, Sydney, Northern Sydney and South Eastern Sydney local health districts.

The completed pilot showed:

- ✓ average use of primary provider increased by 18 per cent
- communication increased between districts and HealthShare NSW
- ✓ improved visibility of flight plans by fixed wing providers
- ✓ a 12 per cent increase in the multiloading rate
- ✓ reduction of same day cancellations
- ✓ positive feedback from consumers.

System redesign to provide timely and appropriate maternity care when complications arise

The Maternal Transfers Redesign program strengthened the eight tiered Perinatal Networks across NSW and the ACT to ensure more women with complex pregnancies are cared for closer to home and family support. Senior obstetric staff and midwives worked together in small teams to ensure women within their networks received the most appropriate and timely care, whether this was a consultation, referral or urgent transfer to a higher level facility.

As part of this Maternal Transfers Redesign Initiative, the Ministry developed:

- ✓ supporting policy documents
- ✓ clinical guidance
- ✓ governance structures
- ✓ access to real time data.

Early results showed more appropriate transfers, improved service culture and workforce satisfaction, and increased stakeholder partnerships.

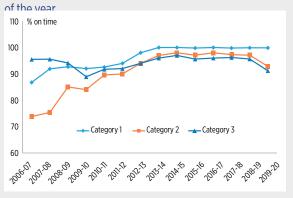
Improving on-time elective surgery performance

Reducing waiting times and increasing on-time admissions for planned surgery continued to be a priority. The Ministry worked closely with local health districts to monitor strategies to reduce the number of overdue elective surgery patients and improve on-time performance via the Elective Surgery Access Monitoring and Recovery Support program, which targets facilities with high numbers of overdue and semi-urgent elective surgery patients and poor on-time performance.

The decision of National Cabinet in March to pause all non-urgent surgeries due to the pandemic delayed some categories of elective surgery, but enabled preparation of both public and private hospitals' intensive care unit capacity and supplies of personal protective equipment.

Elective surgery patients admitted within clinically recommended times

Elective surgery activity and performance was impacted by the pandemic, with restrictions placed on non-urgent and semi-urgent elective surgery for a substantial part



Using system performance information to drive reform

Board reports

The Ministry developed standardised board reports, containing key indicators from Service Agreements. These reports aimed to ensure all district and network boards were provided with local information benchmarked against state results. Reports are delivered quarterly.

Lumos practice report

Lumos is a NSW Health led initiative, in collaboration with Primary Health Networks (PHN), extracting patient level records from general practices and linking them with other health-related data in NSW, in the Centre for Health Record Linkage.

A cornerstone of the Lumos program is giving data and information back to the health system. Regular program-level tracking, updating and reporting are crucial to ensure that healthcare stakeholders remain informed and engaged.

This year, customised general practice reports were developed and distributed to participating GPs.

The reports — containing descriptive results about the characteristics of patients, and their interactions with the health system — have been iteratively refined to reflect GP and PHN feedback. The reports provide GPs with access to information to better understand their patients and how they compare to other practices in their region and across the state. Providing relevant and timely insights from Lumos provides a foundation for continuous improvement across the continuum of care.

Participating practices have reported that the information supported improvements in:

- data quality
- care planning
- service planning.

Priority 3:

Integrate systems to deliver truly connected care

Integrated care connects people with the right service, and together with the systems to enable connectivity of data and information across the health system, our programs are keeping NSW citizens healthy.

With a focus on supporting people with disability or mental ill health, and those who are at risk of harm or at the end of their life, our community receives care that is high quality and safe.

Our priorities

- **Drive system integration** through funding and partnership agreements
- 3.2 Deliver mental health reforms across the system
- 3.3 Strengthen integrated approaches to frailty, ageing and end of life care
- 3.4 Support people with disability within the health sector and between agencies
- **3.5** Support vulnerable people within the health sector and between agencies
- 3.6 Share health information to enable connected care across the system

Key achievements

Reduced unnecessary hospital visits for more than 52,200 people who received care in the community, helping them live healthier and longer lives.

Provided around the clock support to people experiencing domestic and family violence through a 24-hour crisis service which integrated responses to violence, abuse and neglect.

Refurbished or redeveloped 86 mental health units to enhance care for mental health consumers as part of the \$20 million Therapeutic Environments Minor Capital Works Program.

Improved end of life care with investment in 100 additional palliative care nurses and refurbishment of 34 palliative care facilities across local health districts and networks.

Supported clinical, personal and home care, and home modifications for people with disability through the NSW Safe and Supported at Home Program.

Delivering Integrated Care

Creating Healthy Homes and Neighbourhoods

Sydney Local Health District

The Creating Healthy Homes and Neighbourhoods program transformed the delivery of care for patients, improved health and wellbeing, and minimised the cost of fragmented care across hospital, community, primary health, education, justice and social care sectors. The program delivered a reduction in preventable hospitalisation, emergency department visits, admissions and length of stay, and demonstrated improved client outcomes. The District established a cross-agency coordinated care network to assist vulnerable families navigate the care system, which identified, monitored and evaluated outcomes for individuals and families, coordinated care, engaged with general practice, and implemented initiatives to support family health improvement. This innovative project won the Delivering Integrated Care category at the 2019 NSW Health Awards.



Back row: The Hon. Brad Hazzard MP, Minister for Health and Medical Research, Anne Dudley, Elizabeth Koff, Secretary, NSW Health, Biljana Milosevic, Erin Miller, Kevin Brown, Bronwyn Smith, Kristy Allworth, Raymond, Tracey McCosker, Chief Executive, NSW Health Pathology, Carrie Marr, Chief Executive, Clinical Excellence Commission. Front row: Paula Caffrey, Suzanne Ratcliff, and John Eastwood.

Connected care in the community

Five integrated care initiatives received \$68 million in investment to strengthen care in the community, improve patient experience, and keep people healthy in the long term.

The initiatives supported vulnerable and at-risk populations and people with complex health and social needs, with 52,241 people given the opportunity to live healthier lives for longer, manage their own care in more appropriate settings such as primary and community care, and reduce unnecessary hospital visits.

The Ministry also provided 26,300 Out of Hospital Care packages to patients, facilitating safe and early discharge of eligible patients from hospital, by providing access to a short-term package of care (such as assistance with personal care, domestic assistance, transport and social support).

These included:

- 16,499 community care (ComPack) packages
- 8101 safe and supported at home (SASH) packages
- 1700 last days of life (palliative care) packages.

Strengthening care coordination for Aboriginal people

To improve system integration and enhance the health outcomes and healthcare experiences of Aboriginal people, NSW Health organisations established performance frameworks and clinical networks with local health districts and specialty health networks.

Key initiatives included:

- ✓ an Aboriginal health program of work established within clinical networks including the Aboriginal Chronic Conditions Network and the Cardiac
- ✓ implementation of clinical redesign and integrated care projects. Several projects were evaluated and achieved good outcomes, including the 48 Hour Follow Up program, which reduced emergency department presentations within 28 days of discharge
- ✓ collaborations with Aboriginal Community Controlled Health Services, which included the Bila Muuji Tele Home Monitoring project, the Building Brighter Grins program and the Mehi Integrated Care program.

Integrated Care: Local health district achievements

- Six districts implemented the Emergency
 Department to Community Initiative, providing tailored intensive case management and specialist care in the community.
- Four districts implemented the Residential Aged Care Initiative, supporting vulnerable patients to receive appropriate care in their place of residence.
- Three districts implemented the Better Care Connected Initiative, providing care coordination to families who require health and social care support.
- Four districts implemented the Specialist Outreach in Primary Care Initiative and one district implemented the Paediatrics Network Initiative.

Excellence in the Provision of Mental Health Services

PACER — Police, Ambulance, Clinical, Early, Response

South Eastern Sydney Local Health District

A program reducing emergency department presentations and decreasing the demand on agencies, including police, won top honours at the 2019 NSW Health Awards. Called PACER, the program offered on-scene and telephone assistance in the community and provided trauma-informed care for people experiencing a mental health crisis, including early links to community and welfare services, alternative care pathways and early de-escalation. Implemented within the St George Mental Health Service, the team won the Excellence in the Provision of Mental Health Award.



Elizabeth Koff, Secretary, NSW Health, the Hon. Bronnie Taylor MLC, Minister I Mental Health, Christopher Hay, Dr Kevin Clarke, Daniella Taylor, Felicity Cox, Bradley Spinks, Fiona l'Anson, Stacey Maloney, Sonja Krcalovic, and Ange Karooz, Front row: Danielle Coppleson and Denise Cupina.

Focusing on mental health

Towards Zero Suicides Premier's Priority

The Towards Zero Suicides Premier's Priority, to reduce the suicide rate in NSW by 20 per cent by 2023, moved into the implementation phase, with:

- the co-design process commencing at a district level for Alternatives to Emergency Department Presentations, Suicide Prevention Outreach Teams and Zero Suicides in Care initiatives
- twelve Aboriginal-led projects commencing for the Building on Resilience in Aboriginal Communities initiative
- a recruitment processes commencing for the Enhancement to Rural Counselling initiative
- a total of 634 Service NSW staff trained through Suicide Prevention Training for the Systems Outside of Mental Health initiative
- more than 550 people trained through Community Gatekeeper Training
- drafting of guidelines for Suicide Prevention Collaboratives
- scoping conducted for the Local Suicide Alert System initiative
- requests for proposals developed for community response packages.

New forensic mental health legislation and a strategic framework for mental health

To improve clinical practice and patient quality of life, the Ministry developed the NSW Strategic Framework and Workforce Plan for Mental Health to achieve a consistent and coordinated approach to strategic action in mental health. Implementation of the plan focused on consumer engagement, workforce training and new approaches to service delivery. It included cross-agency collaboration between health services and schools to focus on the needs of vulnerable children and young people.

In June, NSW Parliament passed the *Mental Health and Cognitive Impairment Forensic Provisions Act 2020* to replace the *Mental Health (Forensic Provisions) Act 1990*. The new act has updated language, and changes to make the forensic mental health system more efficient, transparent and clear.

An added boost for mental health facilities

To improve care and deliver mental health care reform, the \$700 million Statewide Mental Health Infrastructure Program is providing modern and contemporary mental health facilities. Local health districts and specialty health networks completed 86 projects as part of the \$20 million Therapeutic Environments Minor Capital Works Program, enhancing the therapeutic environments of acute mental health facilities. Construction also commenced on the Older Persons and Medium Secure Rehabilitation units at Campbelltown Hospital.

Seclusion and restraint prevention

A focus on seclusion and restraint prevention in emergency departments and mental health units aims to reduce harm and improve clinical care.

The Clinical Excellence Commission's NSW Mental Health Patient Safety Program supports mental health services to lead safety and improvement work aligned to the needs of staff and consumers. The Commission provided training to 50 Mental Health Improvement Coaches, quality and safety training for Local Leaders and Medical Leaders to 70 mental health staff, and delivered training on the Quality Improvement Data System (QIDS) to frontline staff leading quality improvement on the physical health of older people in mental health services.

This year:

- all districts and networks developed seclusion and restraint prevention action plans in partnership with consumers and carers
- seclusion indicators were included in quarterly board reporting

- the Commission chaired development of the Seclusion and Restraint in NSW Health Settings Policy, available on the NSW Health website
- the Agency for Clinical Innovation completed guidelines for the safe seclusion and restraint of people in emergency departments, published on the NSW Health website.

The Mental Health Living Longer Project

Detecting self-harm presentations is one project helping to support the Premier's Priority to reduce the rate of suicide deaths in NSW. This project implemented enhanced methods for detecting self-harm presentations in emergency department data, and examined life expectancy and potentially preventable hospitalisations in consumers of mental health services. The dataset currently includes anonymised data on more than 9.1 million people, including nearly one million people who had contact with a mental health service.

Improving mental health through policy and planning

Improving care provided to our Aboriginal community is a priority. The Ministry accepted the recommendations of the 2019 Audit Office of NSW's report titled *Mental health service planning for Aboriginal people in New South Wales* and commenced extensive consultations with stakeholders and Aboriginal communities to inform revision of the NSW Aboriginal Mental Health and Wellbeing Policy. Building the workforce, strengthening performance monitoring, and improving management and accountability are key focus areas to achieve better mental health outcomes for our Aboriginal communities.

To strengthen local partnerships and referral pathways to create culturally safe services, the Ministry continued to work with Aboriginal Community Controlled Health Services, to build capacity to respond to people with mental health issues. The Ministry also provides funding for Aboriginal clinical leaders and trainee positions in local health districts, the Justice and Forensic Mental Health Network and the Aboriginal Mental Health Statewide Coordination Unit, to support these programs.

Acute Mental Health Unit seven-day follow-up rate

More mental health consumers who are discharged from an Acute Public Mental Health Unit are being seen by a Community Mental Health Team within seven days. In 2019-20, performance increased by 2.7 percentage points to 76.9 per cent, exceeding the 75 per cent target.



Caring for our older people

In June, the Australian Government implemented the Comprehensive Palliative Care in Aged Care measure which secured \$10 million for NSW to improve specialist palliative care for people in residential aged care facilities. The NSW Government contributed \$10 million to support this objective.

Funding to districts and networks to improve choice and access to palliative care provided:

- ✓ 100 additional palliative care nurses over four years
- ✓ nine new full-time equivalent palliative care Aboriginal Health Workers
- ✓ refurbishment of 34 palliative care facilities over two years
- more support in regional and rural NSW through expansion of telehealth.

The Ministry also developed the Wellness and Reablement in Aged Care Policy Directive and completed consultation with local health districts, which streamlined their aged care assessment models to enable faster assessment for aged care services.

A Frailty Taskforce, formed by the Agency for Clinical Innovation in late 2019, comprised 30 members from a diverse range of sectors, including carers. With the aim to improve care for people living with frailty or at high risk of becoming frail, work focused on:

- ✓ care settings
- ✓ shared decision making
- ✓ screening and identification of frailty
- evidence-based interventions such as nutrition, medication and physical activity.

The Agency also established a Nutrition Working Group in late 2019 and completed a rapid evidence review on nutrition for older people to inform approaches to food and nutrition in hospitals.

Recommendations from the 2019-20 independent review of the Last Days of Life Program included a new end of life model of care and a statewide procurement strategy. The new model will include additional nursing resources for districts, and new end of life packages to replace the last days of life (palliative care) packages, supporting patients to avoid preventable hospital admissions.

People's Choice Award

Aunty Roma's — An Aboriginal and Torres Strait Islander-specific Falls Prevention Program

South Western Sydney Local Health District

Falls are the leading cause of injury-related hospitalisation in older Aboriginal people in NSW. The District took a multidisciplinary and culturally-specific approach to address the risk of frailty and falls in older Aboriginal people in South Western Sydney. The program reviewed falls prevention interventions and their efficacy, and adapted an intervention approach that was culturally appropriate for the population. The program achieved a 75 per cent reduction in falls incidence, along with significant improvement in patient engagement, confidence and physical activity. This program won the People's Choice Award at the 2019 NSW Health Awards.



The Hon. Brad Hazzard MP, Minister for Health and Medical Research, Maria Pron, Elizabeth Koff, Secretary, NSW Health, Winona Raynard, Minh Pham, Paul Crowe, Katrina Sing, Christina Eagleton, and Jola Swierczynski.

Support for people with disability

Supporting people with intellectual disability is part of NSW Health's commitment to providing connected care. In response, the Ministry launched the new statewide specialised intellectual disability health service which provides:

- a health assessment and care plan for eligible people with complex care needs and intellectual disability
- advice, information and training to build the skills, confidence, and knowledge of NSW Health staff in providing care to people with intellectual disability.

Specialised intellectual disability health teams located in Hunter New England, Western NSW, South Western Sydney, South Eastern Sydney, Northern Sydney and Sydney local health districts provide a service in their district and an outreach service to the other nine districts.

To support NSW Health staff to deliver quality care to people with intellectual disability, a specialised intellectual disability nurse or senior allied health officer will provide expert advice and assistance in all nine outreach districts. The Ministry has commissioned an evaluation of this enhanced service model.

Keeping consumers safe and supported at home

Clinical, personal and home care, and home modifications for people with disability unable to access the National Disability Insurance Scheme (NDIS) were provided by NSW Health's Safe and Supported at Home (SASH) Program.

The Ministry also worked to resolve issues for NDIS participants, addressed disparities in access for underrepresented groups and enhanced the discharge process for NDIS participants from hospital by:

- ✓ establishing an accommodation register
- ✓ implementing new escalation pathways
- ✓ engaging closely with NDIS providers

- ✓ securing endorsement from the Disability Reform Council (DRC) for a national action plan
- ✓ securing DRC endorsement of funding for disabilityrelated health supports
- ✓ improving data analysis.

NDIS participants were supported by NSW Health during the pandemic via:

- NDIS Hospital Liaison Officers in local health districts to assist safe discharge
- translation of public health orders into easy read formats
- provision of disability-related public health messaging via webinars, websites, teleconferences, frequently asked questions and Q&A sessions.

Combating sexual and physical abuse

Preventing and responding to problematic and harmful sexual behaviours

The Ministry is leading the development of the NSW interagency framework for the prevention and response to children and young people with problematic and harmful sexual behaviours. The concept plan for the framework was developed and the program of work commenced. The framework is being informed by available evidence and co-designed with key stakeholders including children, young people, families and communities. Its focus is on the prevention of problematic and harmful sexual behaviours, early intervention and improved pathways into support, and therapeutic interventions.

The key components of the framework include:

- a case for change for NSW
- agreed principles and definitions
- an improved policy and legislation model with clear access and referral pathways

- a common assessment and case management approach to support engagement with children, young people and their families and promote multiagency collaboration
- a prevention action plan.

NSW Health is increasing access to specialist assessments and therapeutic services for children and young people with problematic and harmful sexual behaviours and their families. The New Street Services, for 10 to 17 year olds, are being rolled out across the state. NSW Health also commenced development of a new program for children under the age of criminal responsibility, which includes prevention and early intervention initiatives and specialist tertiary responses.

Responding to violence, abuse and neglect

A key initiative of the Violence, Abuse and Neglect (VAN) Redesign Program is strengthening delivery of integrated responses to violence, abuse and neglect.

This included developing:

- the Integrated Prevention and Response to VAN
 Framework: an overarching, strategic response
 platform with detailed guidance to strengthen NSW
 Health's response to violence, abuse and neglect
- the Integrated VAN Statistics and Research Project, providing information to help workers understand and communicate statistics and research, and dispel myths, mistakes and misinformation
- publication of the Responding to Sexual Assault (Adult and Child) Policy and Procedures to guide the response of sexual assault services and NSW Health
- a 24-hour integrated model for crisis responses to people who have experienced domestic and family violence.

Expansion of the NSW Health Pathway Program improved assessment, review and care coordination for children and young people in out-of-home care who have complex and unmet health needs. The program also developed a framework to support the provision of integrated, trauma-informed healthcare to improve the experiences of clients, their families and carers, and service providers.

As part of the NSW Health response to the Royal Commission into Institutional Responses to Child Sexual Abuse, South Eastern Sydney and Mid North Coast local health districts are piloting a service for adult survivors of child sexual abuse, providing integrated specialist trauma counselling, mental health, drug and alcohol, and community support services. Action research is underway which will inform a statewide rollout.

The Prevention and Response to Violence Abuse and Neglect (PARVAN) team led work to pilot domestic violence routine screening in emergency departments and out-of-home care pathways. The Agency for Clinical Innovation undertook community and other stakeholder consultation to inform development of a draft Framework for Integrated Trauma Informed Care for Vulnerable Children, Young People, Their Families and Carers. In June 2020, the draft Framework and Implementation Plan were transferred to the Ministry.

Enabling connected care across the health system

Delivering truly connected care requires robust data and integrated IT systems to generate reports that support the provision of care. The following projects provided this support.

Lumos data linkage program statewide rollout

Lumos, in its pilot phase, demonstrated that the secure extraction and linkage of a patient's primary care record with NSW hospital data was possible. The program is being expanded across the state with all 10 Primary Health Networks (PHNs) and 250 GP practices participating, providing a growing collection of systemwide data. The Lumos Team explored the relationships between primary care and activity, along with outcomes, in other parts of the health system. Early insights identified links between diagnosis in primary care settings and better management of disease.

The Lumos dataset is a first of its kind in Australia and will be made available to PHNs and districts to support local analysis of the interface between acute and primary care. The data provides an evidence base to inform the design, implementation and evaluation of models of care to improve system integration and drive value based care in NSW.

Supporting data insights for palliative care

The Palliative Care Data, Monitoring and Evaluation Working Group was established to provide expert advice to define, improve and support data collection for palliative care. The group commenced an end of life and palliative care monitoring plan, which will provide end of life and palliative care activity, quality and service capacity insights over time, and will support work to redesign delivery of palliative care.

Establish governance to evaluate the Leading Better Value Care program

The Leading Better Value Care (LBVC) program is a major part of the reform to shift the health system from a volume to a value based approach. To evaluate the LBVC program, the Ministry played a significant role in establishing a register of outcomes, value and experience (ROVE), consisting of comprehensive linked datasets, and managed the data governance arrangement to enable access to ROVE. ROVE supports the aim of collecting data once and using it for multiple purposes.

Evaluation of HealthOne NSW

HealthOne NSW aims to create a stronger and more efficient primary health care system by bringing Commonwealth-funded general practice and state-funded primary and community healthcare services together. Evaluation of HealthOne NSW was completed and a report produced outlining its role in supporting the delivery of value based care in NSW. The Ministry commenced planning activities to implement the recommendations of the report and align the HealthOne NSW strategy with NSW Health strategic objectives.

Priority 4:

Develop and support our people and culture

Our staff are our most important asset. It is our people who are on the front line in hospitals and health services, ensuring the acute and chronic care, and physical and mental wellbeing of the citizens of NSW, as well as in supporting roles, developing and managing our critical workforce.

Their commitment and dedication to excellence is what sets the NSW Health system apart. During the COVID-19 pandemic, planning for the expected demand on the healthcare system was critical. More than 2300 nurses upskilled to increase intensive care capacity, while the Public Health Emergency Operations Centre surged from a team of 33 to a pool of 520 within eight weeks, supported by staff from across NSW Health and a variety of NSW Government agencies, and a dedicated online portal received more than 1200 clinical and non-clinical applications. We continued to support our staff through the pandemic, providing regular workforce updates and offering a dedicated staff counselling service. We focused on building effective leaders, listening to feedback, and using technology to improve practices.

Our priorities

- 4.1 Achieve a 'Fit for **Purpose' workforce for** now and the future
- 4.2 Undertake whole system workforce analysis
- 4.3 Enable new ways of working facilitated by the move to St Leonards
- 4.4 Strengthen the culture within health organisations to reflect our CORE values more consistently
- 4.5 Develop effective health professional managers and leaders
- 4.6 Improve health, safety and wellbeing at work

Key achievements

More than 2300 nurses undertook intensive care upskilling from March to June 2020 to plan for a projected increase in intensive care demand, and increase clinical capacity to respond to the pandemic.

To support the annual medical graduate recruitment, 1025 **intern positions were filled** including 145 rural preferential intern positions, 11 positions were filled via the Aboriginal medical workforce pathway, and 12 interns commenced in a mid-year intake to support the medical workforce surge strategy. Work also commenced to support the newly created Assistant in Medicine role to be filled by final year medical students.

Managing issues arising from the pandemic, including staff health and safety, saw the Ministry establish a dedicated enquiries team to provide work health and safety advice to NSW Health organisations and unions.

To enhance the student clinical experience, **more than 600** clinical placement grants were awarded to support nursing and midwifery clinical placements across rural and metropolitan areas, and more than 220 scholarships were awarded to support enrolled nurse training.

The Health Education and Training Institute worked with the Ministry on the 'Focus on the Future Workforce' initiative to scope development of a training and talent strategy for a digitally-enabled and digitally-responsive workforce to support the future health strategy.

Supporting the workforce during the pandemic

Supporting an unprecedented global health crisis presented numerous challenges to workforce planning, including rapid deployment of staff, extending shift work across seven-day-a-week operations, establishing expert teams for contact tracing, data analysis and infection control, and rapidly recruiting for COVID-19 testing clinics. Some of the challenges faced during the pandemic included maintaining safe patient care, while simultaneously planning for large increases in patients with COVID-19. To overcome these challenges, workforce strategies were developed to support the pandemic response. These included:

- establishing a well-resourced contact tracing team supporting more than 24,000 people to self-isolate
- developing workforce surge plans and capacity within the system in collaboration with local health districts
- setting up an Exemptions Unit to process more than 8000 exemptions to Public Health Orders
- collaborating with NSW Government agencies and non-government agencies (e.g. universities) to secure the rapid deployment of staff
- rapidly onboarding suppliers to establish new supply and logistics chains for personal protective equipment
- quadrupling ICU capacity from 500 to 2000.

To support staff mental health and wellbeing, COVID Connexion, an independent and professional wellbeing advice line for health workers was launched in June 2020, and the Pandemic Kindness Movement was established to support clinicians with peer-reviewed resources.

Achieving a fit for purpose workforce

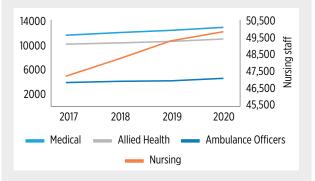
A fit for purpose workforce able to rapidly respond to community needs, is a priority of NSW Health. To assist in meeting this goal, a scan of innovative industrial arrangements in similar jurisdictions in Australia and internationally was completed, with the aim of developing a framework of analysis and options.

Enhancing the workforce to meet the needs of the community

The Health Professionals Workforce Plan 2012-2022 ensures NSW Health achieves a fit for purpose workforce to meet the needs of the community and provide a quality health service to NSW citizens. A total of 1025 intern positions were made available this year, and as part of the COVID-19 medical workforce surge strategy, a new Assistant in Medicine role was created. More than 2600 graduate nursing and midwifery positions were made available through the statewide GradStart program and more than 200 MidStart positions were offered to support registered nurses through post-graduate midwifery training.

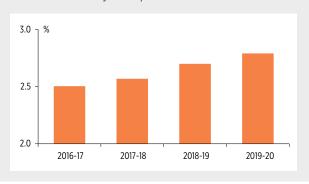
Full time equivalent health staff 2017-2020

Clinical staff numbers have grown across four key categories since 2017, to support the care of NSW citizens.



Percentage of Aboriginal staff as a proportion of total staff

Growth in Aboriginal staff has increased steadily since 2017 and is currently at 2.8 per cent of the total workforce.



To ensure final-year health students met their graduation and registration requirements, and to mitigate the impact on the health workforce pipeline, clinical placements continued in NSW Health facilities and affiliated organisations during pandemic restrictions. Students also formed part of the workforce response for COVID-19 surge planning.

Building pathways for Aboriginal employees

Employing Aboriginal staff within the health system is vital to ensure that culturally appropriate care is provided to Aboriginal people. To improve employment and career opportunities, the Ministry completed:

- ✓ the Aboriginal Health Practitioner Clinical Framework Project report and commenced the process of consultation
- ✓ the Aboriginal Allied Health Workforce Pathways scoping project
- engagement with statewide workforce planners to include Aboriginal workforce planning.

The Ministry supported employment of Aboriginal people further by:

- ✓ placing 11 Aboriginal interns through the Aboriginal Recruitment Pathway
- awarding 93 Aboriginal nursing and midwifery cadetship positions; an increase of more than 40 per cent from 2018-19. More than half went to people in regional and rural areas

- awarding 50 undergraduate and 12 postgraduate
 Aboriginal nursing and midwifery scholarships
- ✓ increasing the number of Aboriginal Allied Health Cadets from 10 to 20
- ✓ supporting the Aboriginal Medical Pathways Project, accepting all 14 applications for the 2020 clinical year.

Improving the rural and remote health workforce

NSW Health continued to support and grow the workforce where it is needed most. To enhance the workforce to provide better care for rural and regional citizens, the Ministry:

- awarded \$3000 scholarships to rural generalist trainees commencing their advanced skills training year
- ✓ filled 145 rural preferential intern positions to support the rural medical workforce
- explored tertiary and vocational education opportunities for rural school students to follow careers in health, in partnership with Far West Local Health District.

The Nursing and Midwifery Office supported improved rural and regional services by:

- coordinating the recruitment process, with more than 25 per cent of graduate nursing and midwifery positions located in regional and rural health services
- supporting 14 registered nurses from seven districts to take part in a metro-rural exchange, working for six months in a rural or remote facility
- ✓ awarding more than half of Aboriginal cadetship positions, and more than a quarter of 700 scholarships supporting postgraduate specialties, to people in rural and remote areas
- funding 10 rural postgraduate midwifery student scholarships.

Rural undergraduate students received 37 scholarships, and more than 600 clinical placement grants were awarded to support nursing and midwifery clinical placements across rural and metropolitan areas.

Developing the allied health workforce

Allied health provides important clinical and community health services to our citizens. To ensure workforce sustainability now and in the future, horizon scanning and scenario projects were developed for:

- · Allied Health Mental Health
- · Orthotic and Prosthetic
- Orthoptists
- · Nutrition and Dietetics.

Research into Orthotic and Prosthetic suggested an opportunity for this workforce to reconfigure the production process, realise economies of scale, reduce the cost of production, and be involved in the future of bionic limbs and prosthetics. Orthoptists research identified that orthoptist-led clinics reduced ophthalmologist waitlists by up to two years.

Growing the genomics workforce

Performing genetic mapping helps clinicians understand disease. To support the growth of a world-class genomics workforce, the Ministry:

- ✓ strengthened workforce capability and capacity of various genomics roles in NSW Health
- ✓ supported the education and development of the existing genomics workforce, including co-design of resources and presentations to support genomics testing which was made available under Medicare from 1 May 2020
- developed marketing materials to encourage a career in genomics.

For more on the NSW Health workforce, see page 69.

New Ways to Work

To facilitate interconnection between the Ministry and NSW Health agencies, approximately 2500 staff from 10 NSW Health entities were readied for relocation to purpose-built, government owned premises at 1 Reserve Road, St Leonards. The New Ways to Work program ensured a smooth transition by providing comprehensive training for managers to support teams through change, and promoting flexible working and outcomes-based management. The Health Education and Training Institute designed and facilitated a 'leading change and growing trust' workshop for the agencies moving to the new premises.

A pilot group successfully relocated in June and flexible work practices increased by 60 per cent. The premises feature extensive conferencing capabilities to support a flexible, collaborative and mobile workforce.

Managing talent and increasing capability

Supporting staff to improve care and services to NSW citizens is a high priority. To enable this, the Ministry worked with local health districts, networks and pillars to establish a strategic vision for talent management across NSW Health to achieve a fit for purpose workforce.

The 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 in local health districts and part-time postgraduate study. In 2019-20, five new trainees commenced the program and four trainees graduated with a Master of Public Health.

Developing workforce talent

NSW Health is committed to developing workforce leadership capability. To build the Aboriginal workforce across all roles and grades in all NSW Health organisations, the Ministry continued engagement and nomination of Aboriginal staff into initiatives such as the Next Generation of Leaders and Managers, and the NSW Public Service Commission's Aboriginal Career and Leadership Development Program.

In addition, more than 20 Directors of Nursing (DON) from across NSW Health completed the DON Mentoring Program, supporting executive leadership development.

A Safe and Healthy Workplace

Psychological Claims Management Pathway

Hunter New England Local Health District

To improve earlier return-to-work outcomes for workers who sustain a psychological injury in the workplace, the District implemented a new Psychological Claims Management Pathway. Staff were supported with entitlements while being educated about the benefits of recovery at work and their role in the process. Staff also attended case conferences and collaborated on a tailored return-to-work plan. The process improved return-to-work outcomes for people with a psychological injury and reduced the financial impact on the District. For their work, the District won the Safe and Healthy Workplace category of the 2019 NSW Health Awards.



James Angelou, QBE, Elizabeth Koff, Secretary, NSW Health, Gemma Murphy, QBE, the Hon. Brad Hazzard MP, Minister for Health and Medical Research, Nick Filippou, QBE, Natalie Coake, Andrew Folwell, Amanda Brown, Vanessa Breckenridge, Kim Ford, Frances Johnson, Hayley Robb and Patricia Robertson, Carmen Rechbauer, Chief Executive, Health Share NSW, and Margot Mains, Chief Executive, Illawarra Shoalhaven Local Health District.

Increasing the skills and capabilities of our workforce

The NSW Health Workforce Forum 2019 provided more than 350 delegates with the opportunity to share ideas on designing and delivering 21st century healthcare through fit for purpose workforce programs and discuss emerging workforce priorities in culture, talent and technology.

Additionally, more than 120 students and midwives participated in phase one of Exploring Student Midwife Experience, a collaborative research project by the Ministry's Nursing and Midwifery Office, Western Sydney University and four local health districts, to investigate the factors impacting clinical learning, with the objective to enhance student and registered midwives learning experience.

To increase capability in economics, business case development and evaluation, districts and networks undertook tailored learning sessions and applied findings from a skill gap assessment in several key areas, including the NSW Government Evidence Bank and economic and evaluation methodologies.

The Public Health and Biostatistics Training Programs

The Public Health and Biostatistics Training Programs offer three years of supervised workplace based training across a range of settings within NSW Health. Achievements in 2019-20 included:

- five new Trainee Biostatisticians commenced the Biostatistics Training Program
- six trainees graduated with a Master of Biostatistics from the University of Sydney
- eight new Trainee Public Health Officers started the Public Health Training Program
- three trainees graduated with a certificate of completion.

A Pandemic Kindness Movement for Australian health workers

The Pandemic Kindness Movement was created to support the physical and psychological health and wellbeing of Australian health workers. Senior clinicians from NSW, Queensland, Victoria and South Australia collaborated to curate respected, evidence-informed resources and links to valuable wellbeing services.

The team used Maslow's hierarchy of needs to organise resources, and adapted the pyramid of needs to reflect the potential challenges and impact of the COVID-19 pandemic on the health workforce. The Pandemic Kindness Movement was hosted on the Agency for Clinical Innovation's website and has been viewed more than 67,900 times from its launch in April to 30 June.

The project, supported by NSW Health, the Commission on Excellence and Innovation in Health South Australia, Safer Care Victoria and Queensland Government, can be found at aci.health.nsw.gov.au/covid-19/kindness



Building allied health workforce capability

To grow and support the allied health workforce in mental health services, the Ministry investigated opportunities for a multidisciplinary allied health workforce. Extensive consultation was undertaken to identifying opportunities for:

- workforce wellbeing
- · training and research
- learning and development
- recruitment and retention.

To assist hospital inpatients, 65 allied health staff participated in a virtual workshop exploring the 'untapped value of allied health in preventing hospital acquired functional decline' and 'allied health leading best practice to reduce patient deconditioning'.

The NSW Directors of Allied Health participated in 'achieving a high performing health system with the NSW allied health workforce' to explore the changes required to culture and system structure.

Education and training for technologyenabled healthcare

The Health Education and Training Institute, eHealth NSW and the Ministry conducted a baseline analysis of the complexity of a technology-enabled healthcare system. Early planning commenced:

- with the Australian Digital Health Agency to study the digital readiness of targeted workforce groups
- for masterclasses to strengthen leadership capabilities in supporting workforce development in technology-enabled care.

The Focus on the Future Signature Project is a partnership between the Institute and the Ministry that intends to ensure the workforce is prepared for, and can adapt to changes in the system caused by technology disruption. To ensure a digitally-enabled workforce, the Institute and the Ministry led a range of stakeholder engagement activities to inform the development of a training and talent strategy.

The project has successfully delivered:

- ✓ three workforce and technology muster events
- ✓ monthly internal and external newsletters
- ✓ four research papers on the future of work, emerging technologies, and technology in rural health.

The University of Sydney, eHealth NSW and the Institute collaborated on a Digital Health and Data Analytics Massive Open Online Course, producing digital health learning resources to assist staff working in health data and analytics. The course, consisting of four modules, was published on My Health Learning in July 2019.

Workforce signature projects

To attract and encourage a skilled workforce, several key signature projects were implemented, including:

- · a framework for workforce talent development
- improved governance and accountability arrangements for districts, networks and their boards
- simplified complaints and grievance resolution processes
- a suite of strategies to attract and encourage training, professional and leadership development. and recruitment and retention of staff in rural and regional areas.

Aggression is never OK

From 2 December 2019 to 28 January 2020, NSW Health ran the 'Aggression is never OK' public awareness campaign to remind the NSW community that aggression against hospital staff and paramedics is not acceptable. The paid social media campaign ran across Facebook and Instagram, timed to coincide with the Christmas, New Year and Australia Day holiday period.

Featuring NSW Health doctors, nurses, paramedics, and security staff from metropolitan and regional hospitals, the campaign urged the public to support paramedics and hospital staff by maintaining respectful behaviour. The paid campaign was also supported by local health districts and NSW Government agencies on their digital and social channels.

Supporting action to combat occupational violence, NSW Ambulance implemented the Body Worn Camera trial at Sydney Ambulance Centre in Eveleigh, Liverpool Superstation and Hamilton Station. Two hours of footage captured nine incidents of violence against paramedics, and this footage has assisted in several successful convictions.





Supporting our People

Care Partners — Changing the Language and Culture of Care

Mid North Coast Local Health District

To improve the relationship between aged care residents and staff, and increase resident wellbeing and quality of life, this District reinvented aged care nursing. The change to a multipurpose service workforce required a comprehensive knowledge base, multiple skill sets and ability to manage competing priorities every shift. The changes produced a culture of care, devolved decision making, improved relationships and enabled person-directed care. It engaged staff in a positive and supportive work environment which resulted in increased accountability and improved collaboration and productivity. The District won the Supporting our People category of the 2019 NSW Health Awards for their achievement.



The Hon. Brad Hazzard Mr., Minister for Health and Medical Research, Elizabett Koff, Secretary, NSW Health, Cassie Mila, Dianne Young, Lynn Forsyth, Wayne Jones, Chief Executive, Northern NSW Local Health District, Fiona Flynn, and Deborah Willcox, Chief Executive. Northern Sydney Local Health District.

Developing staff financial capability

Leveraging the NSW Health Financial Capability Pathway, the Ministry continued to build staff financial capability via cross-sector and intra-health secondment programs and workplace rotations. This provided staff from entry level to executive with new professional experiences and the skills to support decision making in a rapidly evolving workplace.

The Finance Executive Development Program pilot improved leadership, strengthened relationships, and increased staff confidence. Evaluation was undertaken to strengthen the program, while ensuring value was delivered to stakeholders.

Using data to improve decision making

HealthShare NSW completed a data analytics strategy review to determine how the organisation can best use data to support and inform decision making. Recommendations focused on improving HealthShare's analytics capabilities in a staged approach, compatible with eHealth NSW's analytics vision for NSW Health, to ensure improved services are available sooner for NSW Health consumers.

Improving health and wellbeing and strengthening culture for staff

Improving workplace health and safety

Keeping our staff safe at work is a significant focus. To progress safety priorities, the Ministry participated in the NSW Government Work Health and Safety Sector Plan led by SafeWork NSW, and in October 2019, participated in the plan's peer review program, partnering with the Department of Communities and Justice to review performance of seven agencies.

The COVID-19 pandemic produced additional health and safety issues which were managed by a dedicated enquiries team, with the Ministry providing specific work health and safety advice to NSW Health organisations and unions.

NSW Ambulance prioritises support of its staff and their families, by providing health and wellbeing program including:

- health and fitness
- staff psychology services
- chaplaincy
- peer support.

To provide additional care, a family support network, including domestic violence referral officers, a transition to retirement program, and a consolidation of the Legacy program was introduced.

Strengthening culture to reflect CORE values

NSW Health strives to make continuous improvements to workplace culture, embodying the CORE values of collaboration, openness, respect and empowerment. To strengthen the culture that reflects these values, the Ministry commissioned, completed evaluation, and identified recommendations for, the Respecting the Difference program, with a refresh of the policy scoped for review. The Ministry also held the NSW Health and Specialist Medical Colleges Roundtable at the Royal Australasian College of Physicians, to review improvements to medical culture since signing of the Statement of Agreed Principles on a Respectful Culture in Medicine.

Community engagement

Hospital Open Days were held across the state from October 2019 to February 2020. The Open Days were an opportunity for local residents to visit their hospital and find out more about facilities, programs and future plans, and an opportunity for students, graduates and residents to find out more about career options in health.

Priority 5:

Support and harness health and medical research and innovation

NSW Health values, supports and promotes innovative health and medical research. We lead the way in clinical trials and driving and strengthening opportunities for translational research – building on current scientific research to create new therapies, medical procedures and diagnostics.

NSW Health is focused on securing funding for research, leveraging national and international research opportunities, and facilitating research by enabling the research environment through data sharing. This focus on research supports innovation in healthcare to ultimately improve health services and clinical care for the people of NSW.

Our priorities

- 5.1 Drive the generation of policy-relevant translational research
- 5.2 Drive research translation in the health system
- 5.3 Make NSW a global leader in clinical trials
- 5.4 Enable the research environment
- 5.5 Leverage research and innovation opportunities and funding

Key achievements

The Cancer Institute NSW enrolled approximately 2500 people in all available clinical trials and **opened 115 early-phase cancer clinical trials for recruitment**.

Investment of \$29.7 million from the Office for Health and Medical Research for multiple clinical scientists and senior researchers, strengthened research capacity in cardiovascular disease.

The Agency for Clinical Innovation are among the principal investigators in a \$1.5 million Medical Research Future Fund project to evaluate the approaches used in Leading Better Value Care initiatives.

The Healthcare Innovation Venture Enablement (HIVE) initiative, led by the Agency for Clinical Innovation and eHealth NSW, built strong partnerships and is enabling high quality, sustainable healthcare innovation.

The NSW Government's commitment to invest \$25 million to establish an advanced viral vector manufacturing facility at the Westmead Health Precinct was informed by the Office for Health and Medical Research.

Maximising opportunity for translational research

In response to the pandemic, priority projects were rapidly funded to provide information for public health action. COVID-19 in educational settings was investigated, with findings used to inform decisions on school closures. The Co-Creating Evidence Using High Value Public Health Data pilot successfully generated insights into access to pacing services after arrhythmias to improve outcomes for cardiac patients.

Health sustainability research

To continue delivering excellent healthcare in an evolving environment, the future sustainability of the health system needs to be ensured. To support this, NSW Health actively participated in a range of NHMRC Partnership Centre for Health System Sustainability activities. These included:

- membership of the Governance Authority, which oversees and approves the Partnership Centres' annual workplan
- involvement in workshops and forums that bring together researchers and system partners
- participation in specific streams of research as co-investigators or advisors.

Supporting research led by and benefiting Aboriginal people

In support of culturally appropriate research activities with Aboriginal people, the Centre for Aboriginal Health:

- assisted 42 Aboriginal Community Controlled Health Services (ACCHS) to undertake continuous quality improvement processes across their organisations, to improve program and service delivery to Aboriginal people
- supported the Aboriginal Health and Medical Research Council of NSW to deliver training and development to ACCHS staff, including approved continuing professional development training for general practice
- developed, published and promoted a quick guide and comprehensive educational module to enable an increase in culturally safe and appropriate NSW Health-led research with Aboriginal people and organisations.

The Agency for Clinical Innovation is among the principal investigators in a \$1.5 million Medical Research Future Fund project led by Macquarie University, called Harnessing implementation science, complexity science and evidence-based care to keep Australians out of hospital: leveraging seven natural experiments in NSW. This project brings together teams from the Ministry and the Agency to evaluate implementation approaches used in Leading Better Value Care initiatives.

Positioning NSW to attract research funding and collaboration

Funding is integral to support NSW Health to undertake high quality research. The Office for Health and Medical Research informed the NSW Government's commitment to invest \$25 million to establish an advanced viral vector manufacturing facility at the Westmead Health Precinct, and developed a prospectus highlighting NSW's globally-recognised leadership in gene and cell therapy, to attract further investment in this state-of-the-art facility.

A new Investigator Development and Synergy Seeding Grants program supported NSW-based cardiovascular researchers to advance projects and improve their competitiveness for National Health and Medical Research Council funding. NSW cardiovascular researchers were also successful in securing more than \$17 million (almost 60 per cent of available funding) in the first round of the Medical Research Future Fund's Cardiovascular Health Mission.

The Office promoted the state's key research strengths to international health and medical research communities, supporting the health stream of the 27th NSW-Guangdong Joint Economic Meeting, and connecting Australian and international researchers to the NSW health system through the Research Concierge service. Many COVID-19 related queries triaged through this service helped support the Office's pandemic response.

Funding and support to maximise research opportunities

Supporting research ultimately enables environments that produce innovative and higher quality care. To provide research services and connect decision makers with research evidence, the NSW Government provided \$1.8 million to the Sax Institute to develop a guide to *Setting Research Priorities*, which outlines a process for NSW Health to maximise the benefits of research investment. To assess the benefits of research investment, 114 evaluations of Ministry and agency programs were reported to NSW Treasury as part of the Health Cluster Evaluation Schedule.

Funding for precision medicine and cardiovascular research

The Ministry funded the Australian Genomic Cancer Medicine program and the Paediatric Precision Medicine program as part of funding for precision medicine research.

An investment of \$29.7 million strengthened research capacity in cardiovascular disease across two rounds of grant funding, including:

- ✓ two research leadership grants
- ✓ two elite postdoctoral researcher grants
- ✓ 10 clinician scientist grants
- ✓ 10 senior scientist grants
- ✓ 13 senior researcher grants
- ✓ 22 early-mid career researcher grants.

Facilitating high impact research

The Ministry launched round five of the Translational Research Grants Scheme including value based healthcare as a priority, to enable better patient outcomes and build research capability.

A key dimension of value based healthcare is clinician experience. The Ministry commissioned an evidence review to define and measure the experience of clinicians in providing healthcare which is being used to develop a system-wide approach to measuring and acting on clinician experience.

eHealth NSW developed a faster, single entry point for researchers from districts, universities and industry to request support for data, solution design and strategic guidance.

Connecting industry innovation and research

The Agency for Clinical Innovation and eHealth NSW led development of the Healthcare Innovation Venture Enablement (HIVE) initiative with the Ministry and industry partners, and developed an options paper to inform a future operating model.

The initiative aims to build stronger partnerships across the public and private sector to:

- contribute to high quality, sustainable healthcare innovation
- support clinicians and patients
- encourage health research
- create new business investment opportunities.

Critical Intelligence Unit established to inform pandemic decisions

The Critical Intelligence Unit, established by the Secretary, NSW Health, provides rapid, evidencebased advice to support and inform decision making during the COVID-19 pandemic. Its operations focus on systems intelligence, clinical intelligence and evidence integration.

The unit, led by Dr Jean-Frederic Levesque, Chief Executive of the Agency for Clinical Innovation, is supported by staff and data provided by the Agency, the Ministry, eHealth, Cancer Institute NSW and other NSW Health pillars.

The Unit publishes a daily summary of new evidence and reports from international sources, and rapid reviews outlining available evidence on a topic relating to the COVID-19 pandemic. This information is published at aci.health.nsw.gov. au. For more on the unit, see page 45.

Driving translational research

Translational research involves applying discoveries generated during laboratory research and in preclinical studies, to the development of trials and studies in humans. The second area of translational research is aimed at enhancing the adoption of best practices in the community.

To drive translational research forward, the Office for Health and Medical Research:

- engaged the Hunter Medical Research Institute to apply a Framework to Assess the Impact of Translational Health Research to the Translational Research Grants Scheme program
- commenced evaluation of round one and two Translational Research Grant Scheme projects
- commenced development of a governance approach to promote and scale up successful scheme projects
- worked with the Agency for Clinical Innovation to identify key success factors in the scale up of research grant projects; strengthening partnerships with advanced health research and translation centres

The Agency for Clinical Innovation developed health services research capability through the establishment of a governance group and roundtable to set priorities for future work.

The Ministry contributed to, and promoted, the Research and Evaluation Capability Building Program, consisting of:

- ✓ 10 face-to-face training workshops attended by 287 NSW Health staff
- ✓ workshop topics covering evaluation, economic evaluation and program logic
- ✓ online evaluation training modules and a research design guide.

Health Research and Innovation

Achieving Targets — Children with Type 1 Diabetes

Hunter New England Local Health District

Prior to 2005, more than 80 per cent of children attending the John Hunter Children's Hospital Diabetes service failed to meet international targets for glycaemia, dramatically increasing the risk of early diabetic complications. In response to this issue, the District developed a ground-breaking diabetes management program called Succeed with Integrated Insulin Management (SWiiM). Through SWiiM, 83 per cent of children achieved target glycaemia compared to 30 per cent previously. The program's novel interventions have been adopted nationally and internationally, and the team continue to achieve the best glycaemic outcomes in Australasia. For their results, the District won the Health Research and Innovation category of the 2019 NSW Health Awards.



The Hon. Brad Hazzard MP, Minister for Health and Medical Research, Elizabeth Koff, Secretary, NSW Health, Megan Paterson, Michelle Neylan, Anne McCrea, Sharlene Dauber, Helen Phelan, Ethan Dawber, Carmel Smart, Tobi Wilson, Chief Executive, South Eastern Sydney Local Health District, Patricia Crock, and Dr Teresa Anderson AM, Chief Executive, Sydney Local Health District. Front row: Don Anderson and Bruce King.

Leading the way in clinical trials

Conducting clinical trials provides important opportunities for both NSW researchers and citizens to be a part of the development of innovative medical treatment. ClinicaltrialsNSW enables clinical trial capacity, capability and collaboration across the state, supporting NSW as a global leader in clinical trials. The team developed a suite of services and tools to support the health system and the clinical trials sector including:

- Clinical Trial Connect a personalised concierge service to assist, establish and conduct clinical trials, connecting local and international sponsors to the right sites and services to help establish a trial in NSW
- Clinical Trials Triage a central portal for researchers, sponsors and administrators to contact clinicaltrialsNSW team to facilitate clinical trial issues and bottlenecks.
- The Clinical Trial Toolkit offering centralised, standardised resources to support high quality trial conduct, and is available to anyone working in clinical trials.

The Cancer Institute NSW:

- opened 115 early-phase cancer clinical trials for recruitment that met portfolio parameters (investigator-initiated, non-commercial)
- enrolled 2519 participants into all trials (commercial and all phases)
- went live in October 2019 with an updated clinical trial search function on cancer.nsw.gov.au, which includes a more comprehensive and user-friendly search, and shows both recruiting and soon-to-berecruiting trials.

The development of the NSW Clinical Trials Prospectus showcased NSW Health's strengths and provided insights on the state's capabilities and assets that make NSW an attractive location to run clinical trials.

Linking data to enable research

Enabling the storage and processing of biospecimens

The Centre for Health Record Linkage (CHeReL) is a dedicated data linkage centre for health and human services. The CHeReL developed a new data linkage service (Biolink) for users of the NSW Health Statewide Biobank. Together, the Statewide Biobank and the CHeReL enable the storage and processing of millions of biospecimens linked to longitudinal data from NSW Health, providing a vast and accessible resource for health and medical research.

While COVID-19 impacted upon biospecimen accrual and projects arising from the Biospecimen Collection Grants, the CHeReL expanded data collections available for linkage under the grants and released 2.4 billion linked records to support broader research and analytics projects.

Enabling access to data

The Cancer Institute NSW developed the Enduring Cancer Data Linkage (CanDLe) initiative to enable researchers to access linked health data in a timely way. CanDLe has a streamlined governance model and researchers were invited to apply to be part of CanDLe via an expression of interest.

The Agency for Clinical Innovation commenced scoping the minimum data requirements of existing prioritised registries, which will provide guidance and pathways for migrating other registry platforms in future. The shift to electronic feeds of data into clinical quality registries will improve data availability in real time and on a longitudinal basis.

Priority 6:

Enable eHealth, health information and data analytics

This year saw a rapid increase in the uptake of virtual care for the delivery of health services. Use of telehealth and videoconferencing systems has been a focus of NSW Health for a number of years. To mitigate the impact of the COVID-19 pandemic, the rate at which this occurred increased markedly.

Information technology played an integral role in evolving the ways in which NSW Health provided care, from deploying new systems, to supporting integration, enhancing health analytics and access to digital health information, and improving infrastructure and security.

A consistent foundation was built through expansion of key systems, as well as integrating and enhancing systems to improve insights and analysis. Streamlining access to health data was key to enabling our clinicians, support workers and management make clear, informed and data-driven decisions about the healthcare of NSW citizens.

Our priorities

- **6.1** Implement integrated paper-lite key clinical information systems
- **6.2** Foster eHealth solutions that support integrated health services
- **6.3 Enhance systems and tools** to improve workforce and business management
- 6.4 Develop and enhance health analytics to improve insights and decision-making
- 6.5 Enhance patient, provider and research community access to digital health information
- **6.6 Enhance system** infrastructure, security and intelligence

Key achievements

Critical Intelligence Unit developed, and data intelligence function formed to deliver rapid wholeof-system reporting and analytics on COVID-19.

Pilot and production of the virtual clinical waiting room myVirtualCare, connected patients with clinicians online, and ensured continuous care throughout the pandemic.

Patient safety improved by the electronic medication management system being implemented at 73 sites, and now available across 21,200 beds at 195 NSW Health sites.

Improved Quality Improvement Data System (QIDS) capacity and capability, generated around 15,000 reports each month and achieved a 500 per cent increase in users.

The electronic record for intensive care (eRIC) went live in 21 intensive care units (ICU), with \$5 million in funding to extend eRIC to 11 neonatal and paediatric ICUs, making it Australia's first statewide ICU clinical information system.

Deploying new information technology systems across NSW Health

To support patient care across NSW Health, eHealth NSW deployed a new radiology information system, and a picture archive and communication system at Auburn, Blacktown, Mt Druitt and Westmead hospitals; the first of 58 hospitals. It also implemented the electronic medication management system at 73 sites; increasing coverage to 21,200 beds across 195 sites.

The electronic record for intensive care (eRIC) went live in 21 intensive care units (ICU), with \$5 million in funding to extend eRIC to 11 neonatal and paediatric ICUs, making it Australia's first statewide ICU clinical information system.

Establishing virtual care and videoconferencing capacity

In response to the COVID-19 pandemic, eHealth managed unprecedented growth in demand for web and mobile-based videoconferencing software and associated technical support, with:

- a ten-fold increase in virtual clinics and virtual meetings, peaking at 303,824 across NSW Health in May 2020
- ✓ the virtual clinical waiting room, myVirtualCare, moving from pilot to production, connecting patients and clinicians online
- ✓ the development of a Video Conferencing ICT Platforms Guideline to provide advice and recommendations to staff on use of platforms.

The Agency for Clinical Innovation continued to build telehealth capability across NSW via the Telehealth Strategic Advisory Group, Telehealth Collaborative, clinical networks and districts, to promote safe and effective use of virtual care, and implemented initiatives to improve readiness and knowledge of telehealth across the health system to support its rapid uptake and assist access to healthcare during COVID-19. This resulted in a significant increase in demand for telehealth services. The Ministry, through the purchasing model, incentivised the use of telehealth by providing incentive funding for outpatient and community services delivered via audio-visual modalities.

Improving the Electronic Medical Record

eHealth completed a feasibility study to integrate a genetics system within the electronic medical record (eMR) and launched four new digital products:

- Managing Deterioration Version 4
- Clozapine Management
- Opioid Management
- · Insulin Management.

eHealth also improved the eMR by:

- deploying at eight sites, increasing coverage to 22,260 beds across 186 sites
- completing an architecture review of hospital-based eMR systems to determine the functional needs of ICT infrastructure for NSW Ambulance patient care and patient handover management
- migrating more than 27,000 eMR accounts from Sydney and South Western Sydney local health districts to centralised authentication
- migrating eMR domains to NSW Government Data Centres.

This work provided paramedics with better access to hospital-based eMR systems, improved patient handover management and clinical governance, and defined a fit for purpose, future-state ICT landscape.

Sepsis risk app

eHealth collaborated on an app which flags patients most at risk of sepsis and fast-tracks their admission, to help clinicians identify sepsis in emergency departments.

Using ims+ for incident reporting

The Clinical Excellence Commission collaborated with eHealth on system preparedness for the commencement of legislative changes for serious incident management, and the introduction of ims+ to transition current paper-based reporting of work health safety and corporate incidents to the new online system, improving speed and reliability of data transfer.

Electronic monitoring of patient transfer

NSW Ambulance developed significant operational, clinical and workforce business intelligence systems, and shared daily activity data with the NSW Health Transfer of Care reporting system (emergency department data). This enabled performance monitoring of patient transfer of care and the level of ambulance patient acuity to emergency departments, to ensure appropriate destinations and systems of care.

Violence, Abuse and Neglect (VAN) service event form and progress note

eHealth and the Ministry developed the VAN service event form and progress note for Cerner eMR; tools that enable trauma-informed care, and consistent collection of clinically relevant data to improve patients' experiences of receiving integrated care. eHealth commenced development of accompanying reports to support the implementation, and three local health districts are at various stages of piloting these solutions.

Supporting integrated health services and information sharing

To improve clinicians and patients experience of care and their health outcomes, NSW Health organisations commenced planning for the design and development of an eHealth solution to Shared Care Planning. This supports the safe sharing of health information across health services and systems.

Supporting maternal and child health

eHealth continued to lead the National Children's Digital Health Collaborative, in partnership with the Sydney Children's Hospitals Network and the Australian Digital Health Agency, with policy support provided by the Ministry. The Child Digital Health Record 0-4-year-old trial went live in Western NSW and Western Sydney local health districts, with GP and child and family health assessments sent to the patient's mobile phone.

Monitoring medications

eHealth completed the requirements, cost and benefit estimates for a Real Time Prescription Monitoring solution that supports clinical decision making and assists to identify and reduce non-medical use of prescription Schedule 8 drugs. The implementation of the Rural Formulary Project created a transparent and accountable medicines evaluation process to improve quality use of medicines, equity of access, and efficiency in procurement and inventory.

Patient identification data improved

The Enterprise Unique Identifier is a patient state health identifier. It is a critical component for developing patient journey analysis by linking patient records across care settings and providing information on health-related patient outcomes and experiences. This will drive improvement and integration of healthcare across NSW, including clinical practice and quality of life, identifying excellence and driving system-wide improvements. The Ministry improved Identifier data this year by applying a purchasing adjustor, incentivising improvements in data processes and capture by NSW Health entities.

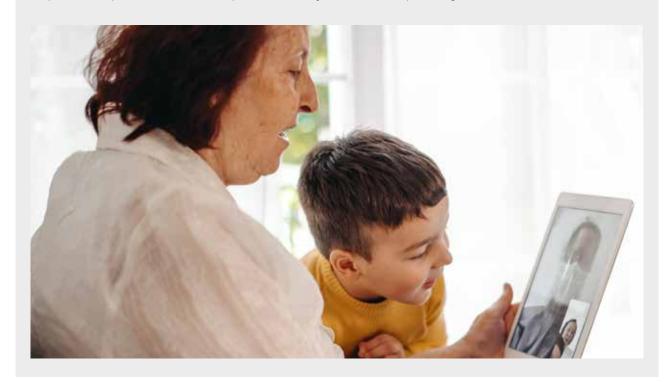
myVirtualCare

The Ministry, Agency for Clinical Innovation and eHealth NSW, with support from local health districts and specialty health networks, built a clinical videoconferencing portal to support virtual care. The portal, myVirtualCare, enhances existing videoconferencing infrastructure with additional features to embed virtual care as an effective and safe option.

For the first time, this portal enables NSW Health to distinguish how videoconferencing is used to support patient care.

The portal includes a virtual waiting room that mimics the physical workflow of a patient presenting for an appointment, and the ability to connect other participants with two-way chat features. The portal is secure, easy to access, and consistent for patients and clinicians to use.

The portal was trialled from February to May 2020 before moving to production. During this period, 92 per cent of patients and carers reported that they would use the portal again.



Enhancing health analytics to improve insights and decision-making

Development of the Critical Intelligence Unit

eHealth played a key role in development of the Critical Intelligence Unit and the formation of a data intelligence function to deliver rapid whole-of-system reporting and analytics on COVID-19, bringing together data and reports across NSW Health. This facilitated:

- ✓ fast and unified reporting of quality data and analytics
- ✓ rapid and more accurate responses to the evolving situation
- ✓ support to the NSW Government and to Service NSW for the COVID-19 application
- rapid consolidation of workforce data and visualisation of that data in the Patient Flow Portal and executive dashboards.

For more on the establishment of the Critical Intelligence Unit, see page 40.

New ICT projects and platforms

eHealth delivered three new ICT projects:

- Stage 2 of the Community Health Information Reporting Project (CHIRP), which provides clinicians with better quality and more timely community health data, enabling them to better manage their resources in support of better patient care
- the Automated Migration of Registries initiative, including an approved strategy and scoping of four registries
- a rapid Data Ingestion Platform proof of concept project delivered on a commercial cloud platform which has capacity to hold petabyte-size clinical information; providing the potential to forecast events, cure disease and increase preventative care.

Development of quality improvement data

The Clinical Excellence Commission continued to develop the Quality Improvement Data System (QIDS) capacity and capability, adding a morbidity and mortality meeting module to provide a secure platform for clinical teams. The Commission worked with eHealth to facilitate reporting of incident data through the system.

By June 2020, the system had:

- more than 29,000 users (an increase of almost 500 per cent year on year)
- ✓ more than 800 improvement projects
- ✓ around 15,000 reports generated every month.

Piloting automated migration of registries

A Registry Steering Committee was established to lead development of a statewide approach to implementing virtual Clinical Quality Registries (CQRs) that enable routine data capture, analysis and care insights. The Committee approved scoping of approaches to collect data for CQRs via the electronic medical record (eMR) and provided a forum to influence the national CQR agenda. The Agency for Clinical Innovation developed a strategy paper outlining the principles to support a mature approach for registries, enabling real-time data access and decreased collection burden for clinicians.

EDWARD implementation

The Enterprise Data Warehouse for Analysis, Reporting and Decision support (EDWARD) Business Implementation Program worked collaboratively with local health districts, the Ministry, pillar agencies, and eHealth NSW in readiness for transition from the current Health Information Exchange. This included the establishment of a responsive solution design to meet the evolving requirements of health now and for the future. To support this, the warehouse will use cloud architecture to increase the timeliness and reliability of data.

EDWARD will be NSW Health's single source of truth for performance monitoring, health service purchasing and funding, health services planning, epidemiology and research.

Financial dashboards

To further develop the Financial Data Governance model, the Ministry worked with eHealth to develop financial dashboards facilitating drilldown to account balances within the reporting system. This improved understanding of financial data while enhancing decision making and accuracy of financial information.

Enhancing community access to digital health information

Enhancing HealtheNet and the My Health Record

This year, the option of virtual healthcare has never been more important. eHealth began developing a Virtual Care Strategy for 2020 to 2025, which outlines new models of care, and prioritises use and benefits of care models for the health system, clinicians, patients, and carers.

eHealth significantly enhanced the HealtheNet clinical portal, making it easier for clinicians to access patient information, including:

- NSW Health Pathology test results
- patient allergies, medications, advanced care plans and other critical information.

The HealtheNet Clinical Document Delivery Service enabled rapid and cost-effective sharing of key clinical documents from district eMR systems to primary care clinicians and patients via My Health Record.

Transforming Patient Experience

Oncology Telephone Helpline

Northern Sydney Local Health District

The Northern Sydney Local Health District established a person-centered service for people living with cancer. The helpline aimed to empower patients, reduce emergency department (ED) presentations and admissions, and aid shared decision making.

The helpline received 337 phone calls from 157 patients over six months. Of these patients, 38 were referred for immediate review within 24 hours. Almost half reported that they would have called the hospital services in the absence of a helpline. The service demonstrated a significant impact on access, quality of life and reduce ED presentations for people living with cancer. The District won the Transforming Patient Experience Award for the project at the 2019 NSW Health Awards.



Elizabeth Koff, Secretary, NSW Health, the Hon. Natasha Maclaren-Jones, MLC, Parliamentary Secretary for Health, Professor Margaret Fry, School of Nursing and Midwifery, University of Technology Sydney, Meredith Oatley, Clinical Nurse Consultant Oncology, Northern Sydney Local Health District, and Susan Pearce, Deputy Secretary, NSW Health.

Ensuring the safe use of My Health Record

NSW Health understands the privacy concerns of NSW citizens. To ensure privacy of health records remained a priority, the Clinical Excellence Commission collaborated with eHealth to enable proactive monitoring and safe use of My Health Record by clinicians. The Commission provided regular reports to identify trends or areas of concern, reviewed by the Safety and Quality Oversight Committee and participated in investigations and improvement projects supporting clinicians safe use of My Health Record.

Publicly available data from NSW Health

In March 2020, the Ministry launched the NSW Health Open Data website, enabling consumers to find and access publicly available data from:

- NSW Health
- · Cancer Institute NSW
- HealthStats NSW
- Bureau of Health Information.

More than 12,500 people accessed the website, with more than 60 per cent of users returning to the site.

The CHeReL provided more than one billion linked records to multiple government agencies and supported key cross-agency data linkage projects, including the Palliative Care and Mental Health Social Impact Investment projects. The CHeReL also provided 26 linked datasets to support the response to COVID-19. For more on the CHeReL, see page 41.

Enhancing patient survey information

Digital access to useful analysis of patient survey results is critical to facilitate improvement to services. The Bureau of Health Information enhanced methods of reporting on hospital performance by standardising comparisons of patient survey results, accounting for differences between hospitals for factors including:

- · age and gender
- education
- language spoken in the home
- cancer type (for the Outpatient Cancer Clinics Survey).

The Bureau also piloted a shorter-form emergency department patient survey, with high priority questions identified by districts and key stakeholders, and undertook census sampling of all adult Aboriginal admitted and maternity patients, as part of the three-year Aboriginal Patient Experience Program.

The Agency for Clinical Innovation enabled email and SMS functionality on the patient-reported measures program, allowing clinicians to send surveys to their patients. This made it easier for patients to provide feedback in their own time, and at home, which led to an increased rate of survey completion.

New platforms and systems

eHealth launched three new online systems to support employees of NSW Health.

SARA	ROB	PAT
 a workflow and services management platform — search and request anything (SARA) staff raised 446,000 IT incidents, 830,000 HR cases and 12,000 IT changes 	 the recruitment and onboarding (ROB) system used to post 32,000 jobs managed one million applicants 154 million transactions. 	 the online performance and talent (PAT) system went live for eight NSW Health entities used by almost 20,000

Improving corporate services and systems

· hosts more than 450 knowledge

articles

eHealth completed the merge of two key, related reporting tools: statewide management reporting and corporate analytics. This enabled a single corporate analytics reporting tool to become the integrated data source for workforce data across NSW Health to better analyse and predict workforce patterns.

HealthShare NSW and eHealth developed and completed the Phase 2 implementation plan of ServiceNow, a statewide platform driving efficiencies through standardisation and transparency, offering:

- ✓ increased service quality
- ✓ improved customer experience
- enhanced reporting capabilities.

HealthShare also completed the pilot and roll out of the accounts reconciliation cloud system, providing improved quality of reconciliations and reporting data.

Enhancing infrastructure, security and intelligence

Maintaining IT system safety and security is vitally important to NSW Health. To inform a statewide business case, eHealth commenced pilots of the Health Grade Enterprise Network at three sites in the Ministry, Western Sydney and Mid North Coast local health districts.

This year, eHealth:

- ✓ accelerated the roll out of 289 sites with Patient and Guest Wi-Fi
- ✓ finalised a four-year project to implement disaster recovery environments across NSW Health facilities
- ✓ redeveloped NSW Health's Electronic Information Security Policy, to align with NSW Government's Cyber Security Policy
- ✓ provided real-time analysis and 24/7 monitoring of cyber security threats across NSW Health
- enhanced the resilience of NSW Health's network and supporting infrastructure, particularly in responding to Triple Zero (000) calls. This included upgrading to more robust telephony technology and moving the NSW Ambulance's Sydney Control Centre to a new data network.

Priority 7:

Deliver infrastructure for impact and transformation

Building essential health facilities to meet the needs of NSW communities now, and into the future, has never been more important.

Delivering infrastructure for impact and transformation creates jobs, increases opportunities for local businesses, delivers world-class facilities and ultimately improves the care we provide to NSW citizens. This year, we progressed our largest capital works program ever delivered, despite the challenges brought by the bushfires, floods and the COVID-19 pandemic.

Our priorities

- 7.1 Utilise capital investment to drive new models of health service delivery
- 7.2 Deliver agreed infrastructure on time and on budget
- 7.3 Deliver infrastructure plans and integrate with other agencies
- 7.4 Strengthen asset management capability

Key achievements

Development of a 20-year Health Infrastructure Strategy to provide a world-class public health system which supports safe and high quality care for NSW citizens.

Awarded more than \$1.8 billion in construction contracts across 27 projects.

Early completion of the biggest hospital building ever delivered by Health Infrastructure; the 14-storey Westmead Central Acute Services Building as part of the Westmead Health Precinct that is transforming healthcare for Western Sydney.

Delivered the Macksville and Mudgee hospital redevelopments. three Multi-Purpose Service (MPS) facilities within the \$304.9 million Stage 5 MPS Program, and eight ambulance stations as part of the \$122 million Rural Ambulance Infrastructure Reconfiguration Program.

Progression on the delivery of world-leading health and education precincts at Westmead, Liverpool and Randwick, linking health professionals with students, researchers and academics in a pioneering approach to future-proofing public health.

A 20-year infrastructure strategy to transform the health system

To ensure NSW continues to provide a world-class public health system, the Ministry worked with major stakeholders to develop a 20-year Health Infrastructure Strategy. The strategy advances the network of health facilities and services, and enables NSW Health to navigate the changes and realise its long-term vision.

In April 2020, the NSW Delivery and Performance Cabinet Committee endorsed the strategy and the Ministry began finalising a new Planning and Prioritisation Framework that aligns with the investment directions set out in the strategy.

Implementing the Health Infrastructure Strategy

The Ministry commenced implementation planning for the 20-year Health Infrastructure Strategy, to translate the strategic directions into action, and develop a work program to ensure delivery across the health system and wider government.

A new approach to planning and prioritisation aligning with the investment directions set out in the strategy was progressed, which included developing a robust process to manage relative investment across portfolios, and refreshing the capital prioritisation process to drive broader economic outcomes.

The Ministry also finalised the update of the Process of Facility Planning guideline to reflect a contemporary facility planning framework, integrated service planning, and government changes to capital policies.

Assessing design impact on operational costs

To facilitate modern design standards and care delivery needs, the redevelopment of health facilities often requires larger floor area. The Ministry undertook an analysis of the relationship between floor space and aspects of fixed operational costs and developed a simple calculator tool that allows staff to assess the impact of floor space changes on operational costs as decisions are made. This can now occur much earlier than detailed project cost estimates are available.

Major infrastructure projects making an impact

Health Infrastructure achieved a massive \$2 billion in infrastructure planning and construction this year, completing 23 projects across NSW. Highlights included:

- · Regional:
 - Bulli Aged Care Centre of Excellence (December 2019)
 - Macksville Hospital Redevelopment (May 2020)
 - Mudgee Hospital Redevelopment (May 2020)
 - Shoalhaven Hospital Car Park (December 2019).
- Metropolitan:
 - Blacktown and Mount Druitt Hospitals Redevelopment Stage 1 and 2 (July 2019)
 - Campbelltown Hospital Stage 2 Multistorey Car Park (February 2020)
 - Royal North Shore Hospital Douglas Building, floors 4 and 5 (May 2020)
 - Westmead Central Acute Services Building* (May 2020).
- Eight new ambulance stations* as part of the \$122 million Rural Ambulance Infrastructure Reconfiguration Program, the largest transformation of NSW Ambulance infrastructure.
- Seven new projects* as part of the \$304.9 million Stage 5 Multi-Purpose Service Program and the \$100 million HealthOne Strategy, delivering contemporary, purpose-built facilities benefitting rural and regional communities.

Four projects were progressed through the process of facility planning, including the \$700 million Statewide Mental Health Infrastructure Program, which follows a co-design process, and engages mental health consumers. Health Infrastructure also completed 86 projects under the \$20 million Therapeutic Environment Minor Capital Works Program* — part of the \$700 million program to support the delivery of mental health care reform in NSW and improve mental health facilities.

Health Infrastructure developed frameworks and tools to assist health organisations to improve sustainability and ongoing affordability of heath assets. This included initiatives supporting implementation of the Statewide Asset Management Policy and environmental sustainability initiatives such as solar, water and carbon reduction.

*Note. The above 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.

Staff Member of the Year

Leonie Parker

Western NSW Local Health District

Leonie Parker has worked as a Nurse Practitioner for the past 13 years, providing clinical gynaecology and women's health services for the community of Condobolin and surrounding rural and remote villages. Leonie provides access to timely care including prevention, contraception, cervical screening, pre cancer and overall women's health, particularly for vulnerable women and those in lower socioeconomic groups. Her provision of a sustainable service in colposcopy has been recognised internationally. She is dedicated to open communication and transparency and has maintained successful patient and collegial relationships over many years to improve the health outcomes for her patients. Congratulations to Leonie for being awarded Staff Member of the Year at the 2019 NSW Health Awards.



The Hon. Brad Hazzard MP, Minister for Health and Medical Research, Elizabeth Koff, Secretary, NSW Health, Leonie Parker, Adjunct Professor Annette Solman, Chief Executive, Health Education and Training Institute, and Michael DiRienzo, Chief Executive, Hunter New England Local Health District.

Infrastructure collaboration across the health system

Health Infrastructure's successful completion of 23 projects, with integrated deliverables from other health agencies, included a strong focus on collaboration to achieve high quality results. Health Infrastructure also worked collaboratively across NSW Health on the pandemic response, forming an integrated team with the Ministry, and collaborating closely with the State Health Emergency Operations Centre.

Work with a range of partners enabled Health Infrastructure to progress the delivery of world-leading health and education precincts at Westmead, Liverpool and Randwick. HealthShare NSW established a governance group with Health Infrastructure in a co-design approach for site rebuilds and redevelopments, and commenced a draft framework to ensure support services are integrated into capital planning and development.

NSW Health Pathology developed laboratory design guidelines to optimise workflows, ensure labs meet workforce needs, and increase automation to support the rapid delivery of results to clinicians. The guidelines informed major lab redevelopments at Liverpool and Nepean hospitals and will inform planning at Westmead.

Support for integrated planning across government agencies

To support place-based integrated planning with other NSW Government agencies, the Ministry participated in initiatives to ensure a health service focus in the following areas:

- · development of infrastructure growth compacts
- the Greater Parramatta Olympic Peninsula strategic business case
- development of local strategic planning statements
- the Ryde Local Government Area Coordination Group
- the Snowy 2.0 State Coordination Committee
- the Western Sydney Health and Education Coordination Committees.

Health Infrastructure worked with the Construction Leadership Group and integrated requirements of the Premier's 10 point commitment to the construction sector into project delivery methodology, to support sustainability of the sector and enable ongoing delivery of high quality infrastructure for NSW.

Asset management planning

Implementation of NSW Health's asset management reforms focused on ensuring alignment with the new NSW Treasury Policy and Guideline Paper — Asset Management Policy for the NSW Public Sector. To ensure alignment with the Treasury Policy, development of the NSW Health Asset Management Framework incorporates identification of asset management capability opportunities and strategies to increase asset management maturity.

Health Infrastructure supported strengthening of the asset management capabilities of NSW Health organisations and local health districts. NSW Health and Health Infrastructure developed an overarching plan which outlines key activities, programs and governance processes to be implemented over the next four years across the health system to meet the requirements of the NSW Treasury Policy by 2024.

World-class health services in the Westmead Health Precinct

Major construction on the Westmead Health Precinct's new Central Acute Service Building was completed in May 2020, three months ahead of schedule; fast tracked to assist the pandemic response and provide cutting-edge health services to the Western Sydney community. Health Infrastructure was instrumental to the early completion of the 14-storey building, which houses a state-of-the-art hospital, and includes:

- · two emergency departments
- digital operating theatres
- more than 300 patient rooms
- expanded imaging, pharmacy and logistics
- education, training and research facilities on every floor.

The building is the centrepiece of the \$1 billion plus Westmead Redevelopment.

Bringing together Westmead Hospital with the Children's Hospital at Westmead and the University of Sydney to create a high quality care, learning and innovation space, it enables health experts to work alongside top medical and science researchers.



Priority 8:

Build financial sustainability and robust governance

Building financial sustainability and staff capability across the health system allows NSW Health to strengthen service provision, achieve value in procurement, improve governance, accountability and risk management, and commission non-clinical services for better value.

We are focused on financial planning, measuring the economic value of our healthcare programs, analysing financial data to improve financial management, and compliance and governance across the whole of NSW Health. Our principal focus is on improving our financial systems to ensure the efficient and effective management of healthcare services for the citizens of NSW.

Our priorities

- 8.1 Deliver financial control in the day-today operations
- 8.2 Develop sustainable funding for future growth
- 8.3 Drive value in procurement
- 8.4 Deliver commercial programs
- 8.5 Deliver effective regulation, governance and accountability

Key achievements

The Ministry continued developing Outcome Budgeting in 2019-20 and is setting out five State Outcomes and relevant outcome indicators that will be focused on over four years.

Future national funding streams continued to be secured through the newly signed Addendum to the National Health Reform Agreement, operating from 1 July 2020 to 30 June 2025.

An economic appraisal of the Leading Better Value Care initiatives that have been implemented since 2017-18 indicated avoided costs when compared to business as usual

HealthShare NSW streamlined transport services. implemented an accelerated and scalable medical consumables procurement model, and achieved more than \$42 million in annual recurrent savings.

Delivering financial control through enhanced budgeting and reporting

Focus on maturing outcome-based budgeting methodology, in line with the NSW Government framework continued, to provide:

- an enhanced platform for robust governance
- system financial sustainability for budgeting
- a view of forward estimates
- improved ability to predict spending trends across financial years.

The Ministry continued roll out of the Clinician Billing Portal — a billing application for staff specialists and visiting medical officers. During the year, NSW Health enhanced the functionality of the Clinical Billing Portal, most notably through the addition of a reporting module and development of a website and instructional videos.

To better understand the recurrent impacts of capital investment, the Ministry reviewed a financial model that identifies key drivers impacting recurrent costs of new builds. This enabled work to develop better capability across the health system to address these cost impacts.

Embedding new accounting standards

In 2019-20, three new Accounting Standards were implemented: AASB 15 Revenue from Contracts with Customers, AASB 1058 Income of Not-for-Profit Entities and AASB 16 Leases.

All revenue streams were assessed to determine the extent to which three newly implemented Australian Accounting Standards should apply. For each material revenue stream impacted, the Ministry prepared an accounting assessment paper. To embed compliance with the standards, grant registers and templates were implemented across all NSW Health entities to document the obligations under each grant or contribution.

To accommodate the requirements of standards for leases, the Ministry established and mandated a statewide system to record leases. The Ministry held monthly workshops and training seminars to educate and train lease accountants, and published guidance papers, best practice guides and policies to facilitate compliance with the new standard.

Improving financial management through data analysis

By managing financial metadata, the Ministry improved the interpretation of financial data to be more consistent across information systems. This enhanced benchmarking capability across the health system, improved reporting, and allowed users to better understand financial data.

The Ministry also worked with eHealth NSW to support initial investment in virtual health technologies and a virtual health pilot, along with the transition to cloud-based technologies to support system change.

Financial leadership and sustainable resource allocation

The Ministry remained focused on providing financial leadership, including sustainable resource allocation across the NSW public hospital system, working closely with NSW Treasury to assess key budget pressure areas while introducing new accounting standards.

An enhanced governance and reporting framework was implemented across NSW Health to improve the ability to measure and evaluate the effectiveness of an investment, from both a service delivery and financial perspective, including projected financial metrics.

Scoping commenced on an enhanced NSW Health evidence bank database and capital database to capture initial economic impact appraisals and enable evaluations. Work commenced across the Ministry to develop the requirements of the evidence bank and develop the data requirements of the capital database, which will be hosted in eHealth's corporate analytics platform.

Assessing the economic impact of the Leading Better Value Care program

A key aim of economic analyses, for both evaluation and as a decision-making tool, is to enable improvement in patient outcomes and experience of care by using available resources more efficiently. Economic appraisals were completed for the Leading Better Value Care initiatives this year including for wound management, and enhancements to the electronic records management system supported several of the other initiatives. Results for initiatives implemented since the program's inception indicated avoided costs when compared to business as usual.

Securing national funding streams for public hospitals and national reform

Future national funding streams continued to be secured through the newly signed Addendum to the National Health Reform Agreement, operating from 1 July 2020 to 30 June 2025. The Addendum sets out arrangements over the next five years for federal funding of public hospitals and national reform, including:

- improving how health, aged care and disability systems intersect
- long-term reforms that improve patient outcomes and reduce emergency department demand, avoidable hospital admissions, and extended stays.

Using infrastructure to improve energy efficiency across the health system

This year's funding of energy efficiency projects was the largest in NSW Health's history. In January 2020, the implementation of solar panel systems and high efficiency lighting across numerous sites was supported by an investment of \$8.1 million followed by an additional \$14.5 million.

The Ministry oversaw a pilot to test the financial viability of implementing battery-ready, large-scale solar photovoltaics (PV) on major hospitals and other suitable sites. The first of these systems, at Port Macquarie Hospital, saved more than \$260,000 over two years' operation. This year it was expanded to 770kWp1 to accommodate a large-scale battery energy storage system pilot.

Completion of a second system at Blacktown Hospital in June 2020 at 843kWp, is the largest system on a healthcare facility in Australia and the largest on any NSW Government building. This system is generating bill savings of more than \$200,000 per annum. Three other large-scale solar PV systems commenced at John Hunter, Hornsby Ku-ring-gai, and Canterbury hospitals. These three systems, when complete, will have a capacity of nearly 4MWp² and will generate approximately \$1.2 million in savings per annum.

A combination of energy efficiency measures, managed by the local health districts, also enabled NSW Health's building energy consumption to remain stable for a fifth consecutive year.

1 Kilowatts power. 2 Megawatts power.



Collaborative Leader of the Year

Wendy Machin

South Eastern Sydney Local Health District

Wendy Machin has provided inspiration and leadership at the Kirkton Road Centre for more than 20 years, bringing warmth, humour, expertise, professionalism, compassion and sharp intelligence to her role as Clinical Services Manager. She supports staff to provide a consistently excellent standard of care across the centre's clinical services. Wendy works collaboratively to promote positive change and is a kind, genuine and inspirational role model who has helped ensure the centre maintained its position as a world-class primary healthcare provider for marginalised and disadvantaged populations.



The Hon. Brad Hazzard MP, Minister for Health and Medical Research, Elizabeth Koff, Secretary, NSW Health, Wendy Machin, Kerry Chant, Chief Health Officer, NSW Health, and Diane Watson, Chief Executive, Bureau of Health Information.

Driving value in procurement

Establishing appropriate governance mechanisms at a functional level to drive effective procurement practice across the organisation remained a priority. The Ministry focused on improving the procurement ecosystem, including its framework and processes.

Building resilience across procurement and supply chain for critical categories was also a priority. While procurement plans focused on meeting critical needs, procurement savings were realised where appropriate, without impacting key priorities.

Enhancing program delivery

The Ministry focused on developing long-term capital lease replacement programs in medical imaging categories, to ensure the best possible outcomes for patients across the system.

HealthShare NSW's Patient Transport Service, in partnership with the Ministry, piloted principles to streamline transport across health services at high cancellation facilities. The program achieved an 84 per cent reduction in on-scene cancellations and a 25 per cent reduction in pick-up times. HealthShare NSW also replaced the medical consumables pilot at Royal North Shore Hospital with an accelerated and scalable model, and achieved more than \$42 million in annual recurrent savings.

Fostering regulation, governance and accountability

The Ministry's Tuning Governance and Accountability Program engaged with a range of stakeholders to discuss best practice, challenges and system-wide solutions to regulation, governance and accountability. Two topics, leadership development and engagement with clinicians, boards and management, were explored as part of the program.

The Ministry worked closely with NSW Treasury to review existing whole-of-government risk management policy and guidelines, and focused on the identification and reporting of risk by engaging with the NSW Health executive, NSW Health Board, Audit and Risk Committee members, and risk practitioners.

The Ministry also delivered a series of engagement forums for NSW Health board chairs and members. The 2019-20 forum program culminated in the hosting of the 2019 Board Member Conference, attended by 250 NSW Health board members and guests, which focused on the theme of leading effective engagement.