

Nepean Blue Mountains
Local Health District

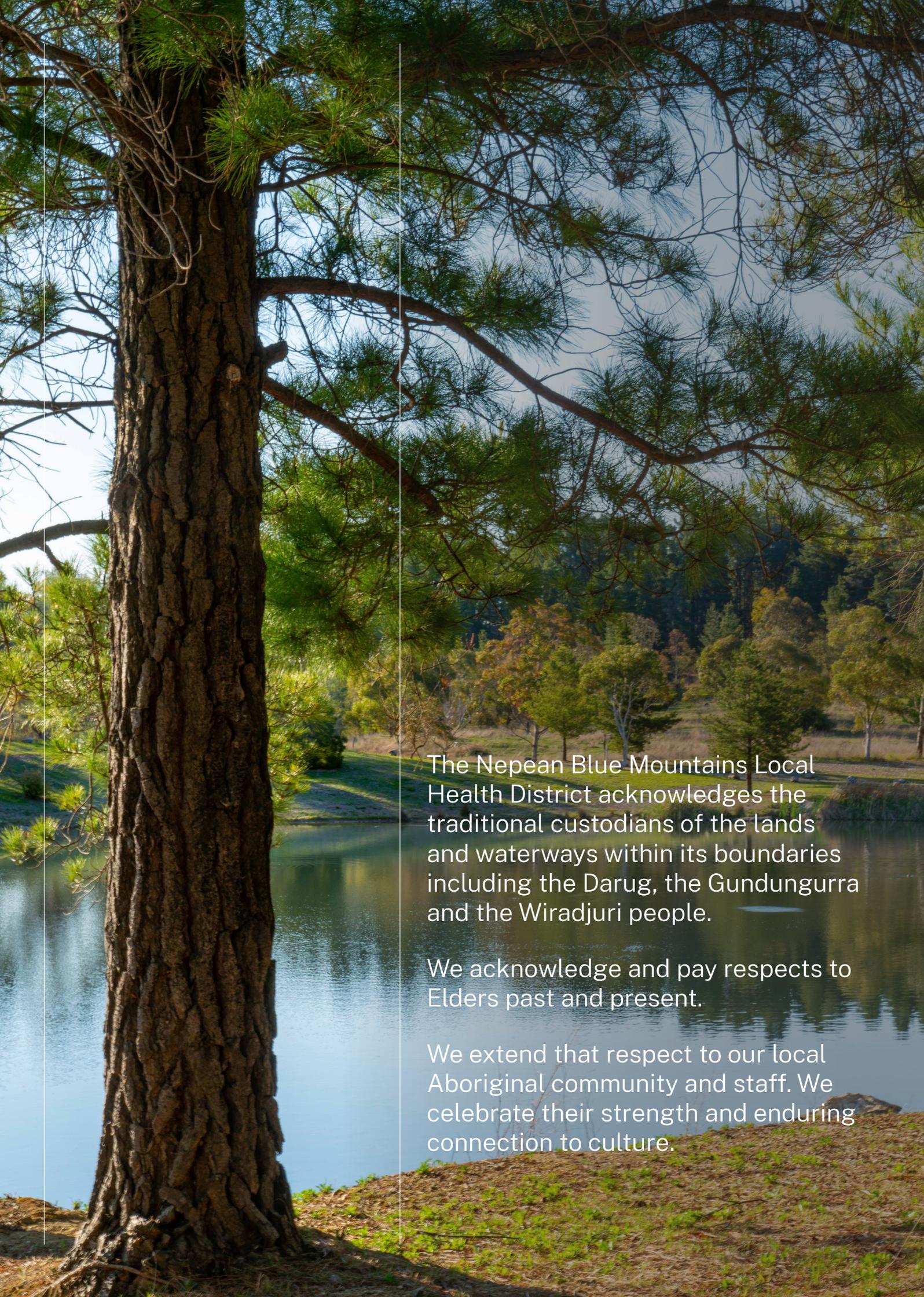


Year in Review

2023 - 2024

Together Achieving Better Health





The Nepean Blue Mountains Local Health District acknowledges the traditional custodians of the lands and waterways within its boundaries including the Darug, the Gundungurra and the Wiradjuri people.

We acknowledge and pay respects to Elders past and present.

We extend that respect to our local Aboriginal community and staff. We celebrate their strength and enduring connection to culture.

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Foreword from the Board Chair

The 2023-2024 year was yet another period in which Nepean Blue Mountains Local Health District went from strength to strength.

The year saw new services made available to the community, some impressive staff-led projects developed, all while we continued our deeply held focus on high-quality patient care.

It has been a busy time at the Nepean Hospital campus with construction works well underway to deliver the new Stage 2 building and a Child and Adolescent Mental Health Services Unit. We thank you for your patience as this important work takes place, signalling a new era of health care for the people of our community.

Our reputation at the forefront of health care and home to one of the state's leading hospitals, is of critical focus now as we move into this growth trajectory.

Complementing this major development, was an enormous focus on research and innovation, consolidating our standing as a leader in cutting-edge health care. Performing our first gynaecology robotic surgery at Nepean Hospital, installation of the TrueBeam radiotherapy system, and receiving numerous grants to propel studies that will revolutionise clinical care are a few of the many achievements in this area worth celebrating.

Our superior training programs and experienced staff guided clinical decision-making, and their commitment, compassion, and teamwork amplified the truly world-class care being provided to our patients once again this year.

“As we accelerate building our world-class infrastructure, our reputation for being at the forefront of health care and home to one of the state's leading hospitals can only continue to grow.”

I hope you enjoy reading the snapshot of our services and achievements in this 2023-2024 Year in Review. The Board and I are particularly proud of the new initiatives and of course our dedicated staff – all of which enables us to deliver sustainable health care while improving the lives of our patients and their families now and into the future.

Peter Collins

**The Hon. Peter Collins AM KC,
NBMLHD Board Chair**



A Message from the Chief Executive

Our dedicated staff can rightly be proud of our District's health services and achievements for our patients, consumers and community over the past year.

The Year in Review highlights just some of the outstanding work and initiatives delivered by staff, with several significant milestones and new initiatives striving to help us deliver a great service to our community.

Our drive to engage community in their health care was evident with the development and launch of the Disability Inclusion Action Plan, produced by and for consumers, as well as establishing Aboriginal Health Practitioner roles in our Emergency Departments to provide culturally safe care.

“While it is always challenging to continually improve health outcomes for a diverse community with a growing population, our sustained focus towards our strategic objectives has resulted in significant achievements.”

The launch of a new menopause service in collaboration with our neighbouring local health districts, coupled with the opening of a new McGrath Breast Clinic at Lithgow, and the first gynaecologic robotic surgery occurring at Nepean Hospital, is aiming to reduce the burden of disease and improve the quality of life for women across our region.

We have been able to develop and launch programs that support our staff in their roles and their wellbeing. The introduction of Safewards in medical and surgical wards at Blue Mountains and Nepean hospitals is a significant achievement, ensuring friendlier and safer environments for patients and staff and improving nurse-patient relationships. In Mental Health, the establishment of a dedicated Staff Wellbeing Committee means staff are providing direct input into ways we can actively improve their time in the workplace.

While it is always challenging to continually improve health outcomes for a diverse community with a growing population, our sustained focus towards our strategic objectives has resulted in significant achievements.

I commend the contributions of staff and their dedication to always providing patient-focused care and services to a high standard.

Lee Gregory

**Lee Gregory,
NBMLHD Chief Executive**

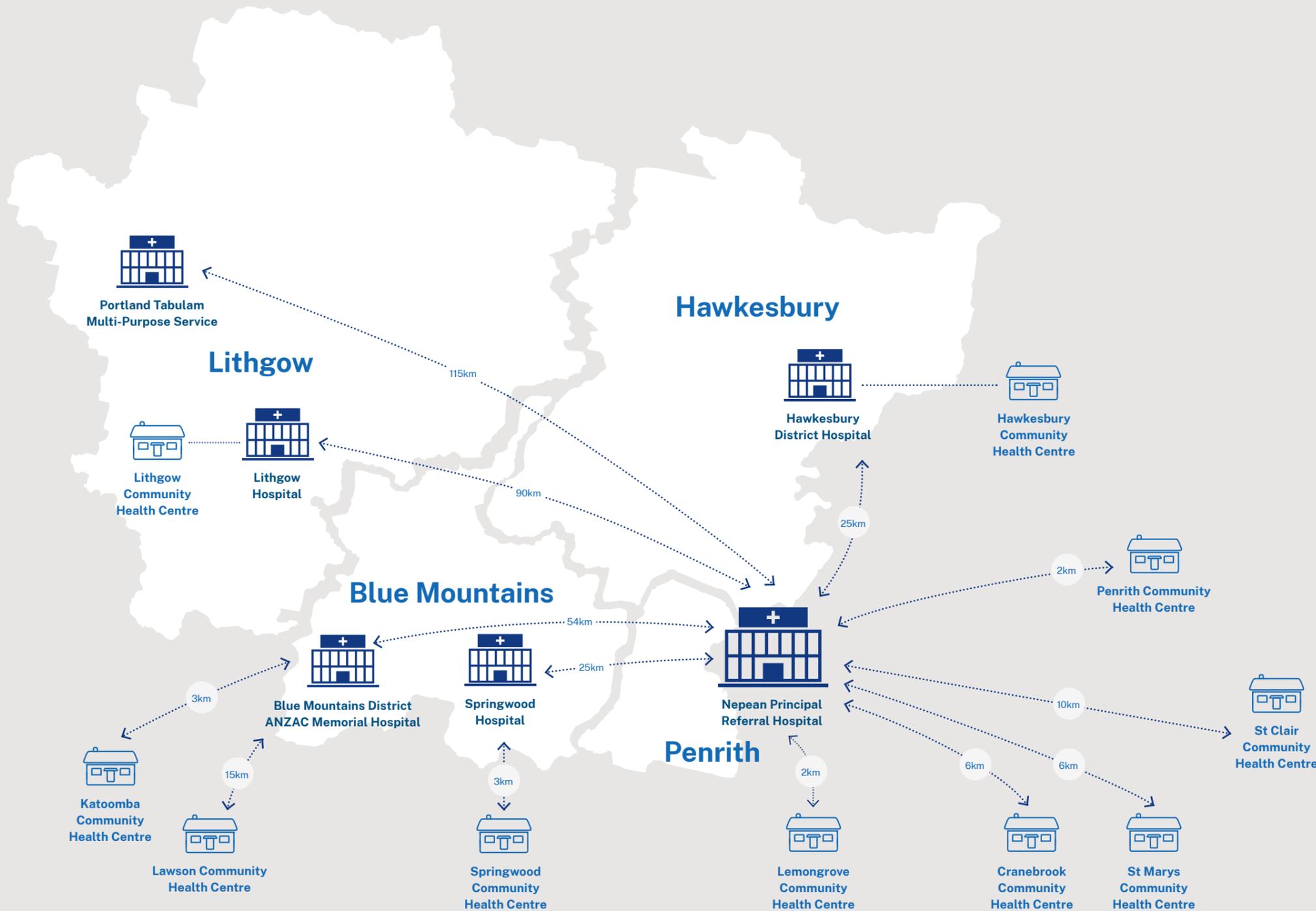
District Highlights

Nepean Blue Mountains Local Health District's achievements and successes have continued to improve the health outcomes for our community.

This year we:

- Established Aboriginal Health Practitioner roles to provide culturally safe care and support Closing the Gap priorities in all our Emergency Departments.
- Implemented a new Menopause Service in collaboration with SWSLHD, WNSWLHD and Murrumbidgee LHD clusters.
- Opened a new McGrath Breast Clinic at Lithgow Hospital.
- Launched the Disability Inclusion Action Plan in collaboration with our Disability Consumer Council, with implementation groups now driving actions.
- Commenced construction on a new Child and Adolescent Mental Health Facility.
- Opened a new Nepean Hospital Pharmacy Department which is almost triple in size and now has a dedicated clinical trials area.
- Established a Mental Health Wellbeing Advisory Committee for our staff.
- Implemented Safewards across medical and surgical wards at Nepean and Blue Mountains hospitals.
- Installed the TrueBeam radiotherapy system at Nepean Cancer and Wellness Centre offering local cancer patients the latest treatment with advanced imaging and high precision dosage control.
- Performed the first Gynaecology Robotic surgery at Nepean Hospital.
- Celebrated Clinical Midwifery Consultant, Tracey Codner Midwife of the Year winner at the NSW Health Excellence in Nursing and Midwifery Awards.





Almost **392,000**

residents across 9,179km²



11%

of the population is over 70 years of age



14%

speak a language other than English

5.7%

of the Local Health District population identify as Aboriginal and Torres Strait Islander



20%

were born overseas



7.2%

the projected population growth in the District to 2033

Sources: Australian Bureau of Statistics, Regional Population Growth, Australia (3218.0). Compiled and presented in profile.id by .id (informed decisions); NSW Dept of Planning and Environment (NSW DPIE) 2022 NSW Common Planning Assumption Projections; Australian Bureau of Statistics, Indigenous Status Estimated Resident Population (ERP), Prepared for NSW Health, 2023.

About our community

We provide health services across the region through our hospitals and health facilities.

- Our hospitals are Nepean (Penrith – tertiary referral hospital and teaching hospital of The University of Sydney), Blue Mountains District ANZAC Memorial (Katoomba), Springwood and Lithgow. We also operated a public/private partnership with St John of God Health Care at Hawkesbury District Health Service in Windsor during this reporting period. From 1 July 2024 management and delivery of Hawkesbury District Health Service transferred to NBMLHD.
- We have Community Health Centres across the region that provide a range of vital services to people of all ages, those with chronic and complex health conditions, families, and older people.
- Oral Health and Mental Health services are provided at multiple locations across the District.
- Portland Tabulam Health Service includes a Residential Aged Care Facility which moved to a Multi-Purpose Service model in the subsequent reporting period.

Our Staff

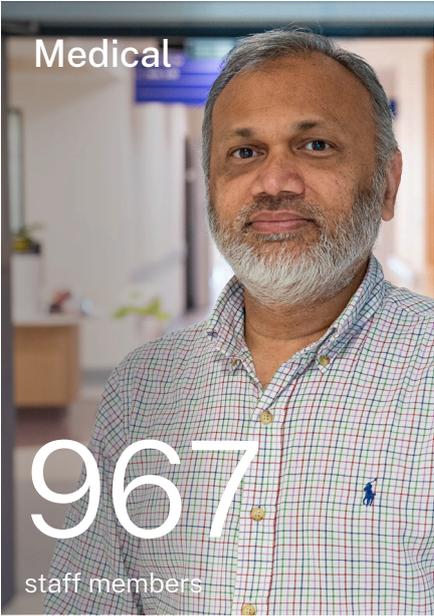
Almost seventy per cent of our 7,504 dedicated staff reside locally, either within the Nepean Blue Mountains Local Health District or surrounding postcodes.



Clinical Support, Management, Admin and Miscellaneous

1,920

staff members



Medical

967

staff members



Allied Health

885

staff members



Oral Health

127

staff members



Nursing and Midwifery

3,573

staff members



Research/ Academics

32

staff members

Source: Estimates downloaded from Stafflink for period 01/07/2023 - 30/06/2024. Data includes casual, and staff on extended or unpaid leave.

Our Vision and Values

Our Vision

Together Achieving Better Health

We will drive innovation and excellence in health service delivery and provide safe, equitable, high quality, accessible, timely and efficient services that are responsive to the needs of patients and the community.

Our Values

Our values support our vision, shape our culture and reflect our principles and beliefs.

NSW Health CORE Values:

- Collaboration
- Openness
- Respect
- Empowerment

NBMLHD SAFER Values:

- Safety
- Agility and responsiveness
- Fairness and equity
- Excellence
- Resource effectiveness



Our Board Members

Our Board brings together a wealth of experience and local knowledge, to make sure our decisions meet the needs of our local communities.



Peter Collins (Chair)



Murray Austin



Stephen Fuller



Robert Lagaida



Nhi Nguyen



Tony Rombola



Pamela Rutledge



Ian Seppelt

A Year of Activity

In 2023-2024 the Local Health District continued to deliver services to meet a growing population.



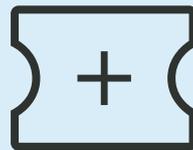
1,308,719
community and
outpatient occasions
of service

▲ UP 3.3%



149,534
presentations to
the emergency
department

▲ UP 6.9%



92,167
admissions to
hospital

▲ UP 8.3%



4,513
babies born

▲ UP 1.8%



15,377
elective surgeries

▲ UP 19.7%



8,800
emergency surgical
procedures

▲ UP 2.7%



320
research
publications with
NBMLHD authors

▼ DOWN 3.6%



A new era of health care

Following the completion of Stage 1 of the more than \$1 billion Nepean Hospital Redevelopment, focus has turned to the delivery of Stage 2.

It is a busy time at the Nepean campus with construction works well underway to deliver the new Stage 2 building and Child and Adolescent Mental Health Services Unit (see artist impression above).

Milestones:

- Relocation of the new Pathology Department – August 2023
- Opening of Level 6 of the P1 car park – December 2023
- Completion of refurbishment and repurposing works – February 2024
- Construction started on new Child and Adolescent Mental Health Services Unit – March 2024
- First of two cranes installed at site of the new Stage 2 Building – June 2024

Stage 2 includes a new building that seamlessly connects to the Stage 1 tower and includes:

- An Intensive Care Unit
- Medical imaging services and nuclear medicine
- An in-centre renal dialysis unit
- More in-patient beds including paediatrics
- A new front of house and reception area
- New Pathology laboratory

Stage 2 also includes upgrades and repurposing of some existing buildings on campus and a new community health centre.

The Nepean Hospital Stage 2 tower is scheduled for completion in 2026.

With changes to the way we move around the Nepean campus, we thank everyone for their patience as this important work takes place.

NBMLHD & NSW Health Strategic Outcomes



01

Patients and carers have positive experiences and outcomes that matter

People have more control over their own health, enabling them to make decisions about their care that will achieve the outcomes that matter most to them.



02

Safe care is delivered across all settings

Safe, high quality reliable care is delivered by us and our partners in a sustainable and personalised way, within our hospitals, in communities, at home and virtually.



03

People are healthy and well

Investment is made in keeping people healthy to prevent ill health and tackle health inequality in our communities.



04

Our staff are engaged and well supported

Staff are supported to deliver safe, reliable person-centred care driving the best outcomes and experiences.



05

Research and innovation, and digital advances inform service delivery

Clinical service delivery continues to transform through health and medical research, digital technologies, and data analytics.



06

The health system is managed sustainably

The health system is managed with an outcomes-focused lens to deliver a financially and environmentally sustainable future.

Patients and carers
have positive
experiences and
outcomes that
matter

1

People have more control over their own health, enabling them to make decisions about their care that will achieve the outcomes that matter most to them



This year we:

- Implemented 'Carers on the Go' trolleys to improve patient and carer access to information and assistance.
- Signed a partnership agreement with Greater Western Aboriginal Health Service that will enable culturally safe and more integrated health care for Aboriginal people.
- Implemented video interpreting in Women and Children's Outpatients Clinics improving care, increasing accessibility to interpreters, saving costs, and reducing greenhouse gas emissions.
- Established a Multicultural Consumer Advisory group.
- Appointed our first Aboriginal Clinical Psychology Cadet. This is the first Clinical Psychology cadet in NSW to be funded through the NSW Health Aboriginal Allied Health Cadetship program. This program aims to grow our Aboriginal workforce, support closing the gap priorities and promote cultural safety.
- Established Aboriginal Health Practitioner roles to provide culturally safe care and support Closing the Gap priorities in all our Emergency Departments.
- Expanded the Patient Reported Measures Program to support CALD community completion of surveys.
- Implemented the NSW Health Patient Reported Measures Framework in Oral Health.
- Implemented a new Menopause Service in collaboration with SWSLHD, WNSWLHD and Murrumbidgee LHD clusters.
- Opened a new McGrath Breast Clinic at Lithgow Hospital.
- Opened a newly refurbished Palliative Care room at Lithgow Hospital thanks to donations from local volunteer organisations.
- Engaged with consumers in the planning and design of services including the Nepean Palliative Care Unit and renal services.
- Expanded Needle and Syringe Program service delivery across the region with sterile injecting equipment now available at all community health centres across the District.

Breast Clinic opens at Lithgow Hospital



Support is now much closer to home for breast cancer patients in Lithgow with a new McGraith Breast Clinic opening at Lithgow Hospital.

Delivered in partnership with Nepean Blue Mountains Local Health District's Cancer Care Services, the outpatient clinic is staffed by three McGraith Foundation early breast care nurses and one metastatic nurse.

McGrath Breast Care Nurse, Sarah Maguire says the clinic offers a range of services for the assessment and care of people who have undergone breast cancer-related treatments.

"We offer wound care, lymphoedema assessment, a drop-in clinic as well as patient education and support pre and post surgery. We can also refer patients as appropriate to specialist services."

Staff will also undertake breast health promotion and breast cancer awareness with the community on clinic days.

Sarah says the Lithgow clinic is an exciting new addition to outpatient cancer services, with regular breast clinics already established at Nepean Hospital and Blue Mountains Hospital.

"We have previously seen some Lithgow-based clients travel to Katoomba to attend our clinic, so we're particularly pleased to bring care much closer to home and reduce the travel time for local breast cancer patients," says Sarah.

Safe care is
delivered
across
all settings

2

Safe, high quality reliable care is delivered by us and our partners in a sustainable and personalised way, within our hospitals, in communities, at home and virtually

This year we:

- Launched a Disability Inclusion Action Plan in collaboration with Disability Consumer Council, with implementation groups now driving actions.
- Received, from a local auxiliary donation, a new state-of-the-art ultrasound machine at Lithgow Hospital to provide patients higher quality scans.
- Opened a state-of-the-art pathology laboratory at Nepean Hospital.
- Delivered new work areas and clinical spaces for services relocated as part of the Nepean Redevelopment.
- Led the implementation of Voluntary Assisted Dying in the District, in collaboration with Cancer Services.
- Developed the draft Blue Mountains Hospital and Community Health Clinical Services Plan for submission to the Ministry of Health following consultation with staff, community and stakeholders.
- Successfully applied to the Commonwealth to transition Portland Tabulam to a Multi-Purpose Service, and worked with stakeholders to transition the service by 1 June 2024.
- Developed networks and relationships with Lithgow Hospital campus partners to increase support networks for the community.
- Increased medical bed base at Nepean Hospital to improve emergency treatment performance and reduce clinical risk with 19 beds added across 5 wards.
- Embedded the NSW Health Violence Prevention framework.
- Installed a new emergency power generator ensuring essential power can be provided year round at Portland Tabulam Multi-Purpose Service.
- Launched the NBMLHD Strategic Plan 2023-2028 to guide the future health and direction of the District.
- Welcomed 70 new medical interns beginning their medical careers in our District.
- Welcomed 14 student midwives, 6 new graduate registered midwives and 136 new graduate registered nurses.



Junior doctors follow in family footsteps



There were some very familiar names amongst a new cohort of junior doctors recently welcomed to Nepean Blue Mountains Local Health District. Embarking on their medical careers are three medical interns with strong family ties to our District.

Now working at Nepean Hospital, medical interns Anastasia Teece, Stephanie Sardinha and Alex Pardey walk in the footsteps of their fathers, each well regarded medical professionals from the Nepean Hospital family.

While each acknowledges that their surnames can add a layer of expectation at this early stage of their careers, the trio are keen to step out on their own and forge their own paths.

“The recognition of my family connection makes me hopeful that I can live up to the name and do as good a job as my dad did,” says Stephanie, whose father is Nepean Hospital geriatrician, Dr Luis Sardinha.

Stephanie says it was the District’s excellent reputation that led to her to joining our workforce.

“I had heard lots of positive things about the culture, which was important to me. I’d also heard about the Basic Physician Training program, the support that’s given to junior medical officers, the quality of teaching sessions and the friendliness and approachability of consultants,” says Stephanie.

“It can be a difficult job to do when you’re fresh out of medical school, so hearing that the doctors above you are very supportive was a big reason I wanted to come here. Knowing that there’ll be a lot of supervision and guidance when you’re first starting on the job is so important.”

Alex, whose father is retired Nepean Hospital obstetrician Associate Professor John Pardey, says the positive

workforce culture at Nepean Hospital also tempted her to select it as the location of her internship.

“After moving away from Penrith, I returned to the area during medical school and had an incredible time. The people here were so lovely. Everyone was keen to teach and I just fell back in love with the community. All the staff were delightful and so nice to me, so I had a really good time and when it came time to choose, I put Nepean first.”

For Anastasia Teece, whose father Andrew Teece is a former chief radiographer at Nepean Hospital, commencing her career with Nepean Blue Mountains Local Health District just made sense.

“Nepean Hospital is ultimately where I wanted to end up working. I’d spoken to doctors from other hospitals as well as my dad and they all advised me to look at Nepean.”

While each intern has enjoyed a very positive start to their time at Nepean Hospital, they admit to being driven by the challenges ahead and motivated by their family legacies.

“I think it’s really cool that I’m where my dad was,” says Anastasia.

“I like feeling that I’m building upon what he contributed to.”

People are
healthy and
well

3

Investment is made in keeping people healthy to prevent ill health and tackle health inequality in our communities

This year we:

- Completed a clinical redesign of 48 Hour Follow Up service, 'Walanga Gul', to improve referrals and reduce representations to hospital for Aboriginal community members.
- Renamed the Building Strong Foundations service in Wiradjuri language to 'Walanbang gabingidyal' following community engagement to reconnect our Aboriginal consumers with spirit, Country and themselves.
- Implemented a new cardiac notification platform, helping to enhance communication from ambulances to Nepean Hospital when someone has a suspected heart attack.
- Delivered I-MED connectivity for Lithgow Hospital enabling their medical imaging capability.
- Commenced construction on a new Child and Adolescent Mental Health Facility.
- Renamed the Aboriginal Mental Health Service to 'Namurugunya' to reconnect our Aboriginal consumers with spirit, Country and themselves.
- Opened a new Nepean Hospital Pharmacy Department which is almost triple in size and now has a dedicated clinical trials area.
- Installed a new bladder scanner to ensure post-operative bladder assessments can support a decreased length of stay and reduced risk of infection.
- Opened Reconciliation Garden at Nepean Hospital to provide a space for healing and reflection.
- Implemented the NSW Health Protection Plan & Public Health Network Plan using STI epidemiology to quickly identify changes within the community and respond appropriately to them.
- Commenced a Movement Disorder Service to keep people with movement disorders living in the community longer with improved quality of life.
- Implemented the Health Services Functional Area Supporting Plan and Pandemic Influenza Plan.
- Opened a bush garden at Lithgow Hospital as a healing space for patients, visitors and health care professionals.
- Developed a Major Incident Mass Casualty Plan for use during major incidents.
- Increased staff influenza vaccination by 7% with 4,588 staff and contingent workers vaccinated.
- Developed an LHD Bushfire Plan to provide a consistent approach to the delivery of health care services across the District when fire danger ratings are Extreme and Catastrophic.





Warami to ‘Namurugunya’, your local Aboriginal Mental Health team

The renaming of the Nepean Blue Mountains Local Health District (NBMLHD) Aboriginal Mental Health Service is reconnecting our Aboriginal consumers with spirit, Country and themselves.

Namurugunya, the Dharug name of the relaunched Aboriginal Mental Health Service, represents the journey of consumers. Translated, Namurugunya means ‘to see the way to find the path home’.

Proud Biripi/Dhungutti man and NBMLHD Manager of Aboriginal Mental Health, Stephen Ainsworth says the renaming is a commitment by our Local Health District to provide culturally appropriate health care.

“We want to guide our Aboriginal and Torres Strait Islander communities through some of the complexities of our health system to ensure each individual is seen, heard and valued,” says Stephen.

“We are using their insights to shape the way we deliver our Service. The dedicated team we have here

in our District is proactively engaging the community and building confidence in our health system so our consumers have better health outcomes.”

Some of the ways the Service is building trust within the community is through the easy identification of their team. Aboriginal peer workers and clinicians will proudly wear a new uniform. The design by First Nations artist Emma Hollingsworth has a strong family theme that embodies the holistic nature of the work Namurugunya does and the results the team aspires to achieve.

To mark the renaming of the Service, the District held a traditional smoking ceremony that celebrated the path of renewed health and wellbeing for Aboriginal consumers.

Our staff are
engaged and
well supported

4

Staff are supported to deliver safe, reliable person-centred care driving the best outcomes and experiences

This year we:

- Strengthened clinical supervision practice to better support our allied health practitioners.
- Established a Mental Health Wellbeing Committee.
- Redeveloped a non-clinical space into an Education Hub for Lithgow Hospital staff.
- Launched the District's first ever Data & Analytics Community of Practice.
- Celebrated our staff who received recognition in State awards:
 - Clinical Midwifery Consultant, Tracey Codner Midwife of the Year winner at the NSW Health Excellence in Nursing and Midwifery Awards
 - Blue Mountains Hospital Midwife, Mithra Kennaugh Healing Heart -Consumer Award finalist at the NSW Health Excellence in Nursing and Midwifery Awards.
 - Vocational Education and Training Nurse Educator, Kelly Watkins, winner of Aurora Award in NSW Training Awards
 - Clinical Psychologist, Dr Lynne Mason finalist in for Allied Health Professional of the Year in the NSW Health Excellence in Allied Health Awards
 - Social Worker, Madeleine Bridge finalist for Aboriginal Allied Health Professional of the Year in the NSW Health Excellence in Allied Health Awards
- Attained reputation as destination for emergency medicine trainees with Nepean Emergency Department listed as part of the Australasian College for Emergency Medicine Trainee Placement Survey.
- Reduced ergonomic and manual handling injuries through a dedicated assessment on body stressing tasks using wearable technology to capture motion and movement.
- Celebrated and recognised staff with 13 Together events held across five locations.
- Delivered a new Broadcast information service which is accessible to staff via mobile smart devices and the NBMLHD intranet.
- Launched the Excellence Together Program at Nepean Hospital to encourage and support staff to improve culture and performance and provide excellence in service.
- Celebrated our volunteers with a recognition day.
- Implemented Safewards across medical and surgical wards at Nepean and Blue Mountains hospitals.
- Celebrated the graduation of 61 HSC students who undertook their VET studies at the District.
- Added dedicated Nursing and Midwifery goals to the Performance and Talent system to elevate practice and support professional development.
- Piloted lone worker duress alarms within Primary Care and Community Health and Community Mental Health Teams to keep staff safer when working in community and offsite locations.
- Streamlined recruitment processes by implementing an online Staff Health Employment Assessment.





Peoples' feedback drives action

In response to PMES survey results, Nepean Blue Mountains Local Health District's Mental Health Service has been working to improve staff engagement and recognition through the creation of the Wellbeing Committee.

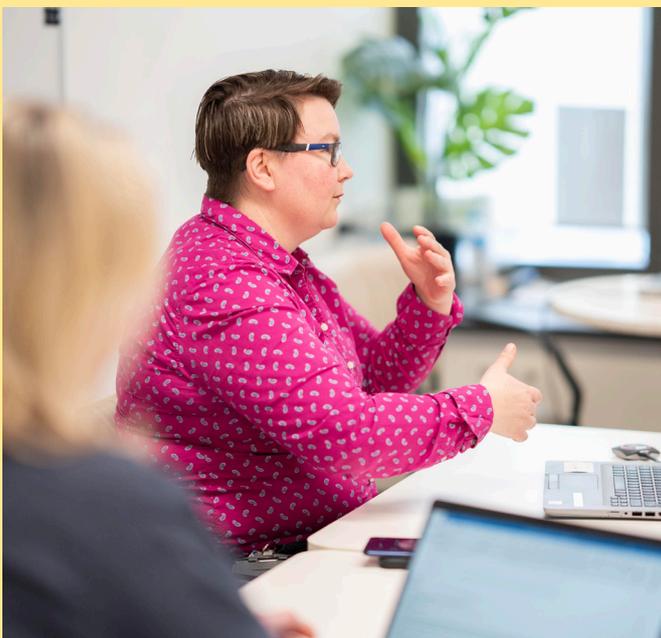
"The Committee is about ongoing, meaningful engagement with our people. It allows staff to have a real impact on how we respond to PMES, rather than seeing it as just an annual task," says Matthew Russell, Director of Mental Health.

The Wellbeing Committee gathers employee feedback, ensuring their voices shape initiatives that enhance staff wellbeing in the long term.

Adult Mental Health Service Manager Rachael Mulley is the Co-Chair of the Committee.

"One purpose of committee is to ensure a bottom-up approach to providing ideas and actions that support wellbeing.

"We are keen to improve the overall wellbeing of our people in the workplace by gathering ideas from all areas of the workforce," she says.



Research and
innovation, and
digital advances
inform service
delivery

5

Clinical service delivery continues to transform through health and medical research, digital technologies, and data analytics

This year we:

- Established a monthly Nursing, Midwifery and Allied Health Research Symposium to encourage collaboration and grow research in these workforces.
- Installed TrueBeam radiotherapy system at Nepean Cancer and Wellness Centre offering local cancer patients the latest treatment with advanced imaging and high precision dosage control.
- Implemented Virtual Care in additional services including mental health and paediatric physiotherapy.
- Commenced a phased roll out of the NBMLHD Data Governance Framework.
- Implemented EDWARD data warehouse.
- Performed the first Gynaecology Robotic surgery at Nepean Hospital.
- Implemented a warehousing app enabling clinicians to locate and issue equipment to patients.
- Developed the NBMLHD Digital Strategy to positively impact how future technology can better support our teams, services, and ultimately our patients.
- Were awarded grants from the Charles Perkins Centre Jennie Mackenzie Research Fund for two projects – a comprehensive study of people with severe and complicated obesity, and the link between chronic inflammation and the sum of all environmental factors.
- Appointed Dr Nhi Nguyen and Anwar Hassan to the NSW Health System Advisory Council to help drive positive change throughout the public health system.
- Published research outlining the use of artificial intelligence to predict the risk of a person with COVID-19 developing a secondary respiratory infection after hospital admission.
- Published research linking the prevalence of people diagnosed with asthma to nutrition and food accessibility.
- Completed a study with University of Sydney affirming the health benefits of breastfeeding and its influence in infant intestinal metabolism.
- Published a joint study with Dr Laura Gerhardy and University of Sydney on the rates of prescription oral retinoid use amongst reproductive aged women over the past decade and the risk it poses to unborn babies.
- Established an Oral Health Promotion and Research Coordinator role.
- Improved the capability for research and evaluation in Primary Care & Community Health.
- Completed research with Clinical Associate Professor Dr Habib Bhurawala examining birth and health determining characteristics of 470 First Nations infants born at Nepean Hospital to address maternal and neonatal health outcomes.
- Received two equipment grants from the Nepean Foundation for NBMLHD led research into women's and children's health. Dr Mimi Liu will investigate circadian rhythm patterns in children and associations with mood disorders. Dr Girish Deshpande will undertake research into routine body composition in preterm neonates using innovative technology.
- Celebrated Allied Health researchers, Dr Magda Luciuk and Dr Liora Ballin on receiving the Makers & Shapers Award for Research Support Excellence.
- Celebrated Professor Kazuaki Negishi who was awarded a Heart Foundation Future Leader Fellowship for his Restoring microvascular circulation with Diagnostic Ultrasound with Contrast agent (REDUCE) Research Program.

First Nations peoples given best start to life at NBMLHD



New research has confirmed Nepean Blue Mountains Local Health District is making significant strides in Closing the Gap, as more and more First Nations women and children experience positive maternal and neonatal health outcomes.

First Nations peoples make up approximately 4.7% of the NBMLHD population, the highest percentage of First Nations peoples across all NSW metropolitan health districts.

A Nepean Hospital led study examined birth and health-determining characteristics of 470 First Nations infants born at the Hospital, alongside their mother's pregnancy and birth outcomes.

Clinical Associate Professor Dr Habib Bhurawala, one of

the lead researchers on the study, says results showed that despite challenges facing First Nations mothers and infants, there was no significant difference in maternal morbidity or adverse birth outcomes for First Nations infants in comparison to non-First Nations groups.

"We found that First Nations mothers did not have an increased risk of maternal morbidity nor any difference in rates of caesarean section, resuscitation at birth, NICU admission, preterm birth or birthweight," says Habib, who is also Head of Paediatrics at Nepean Hospital.

"However, there is still more that can be done to address the immense challenges faced by First Nations parents during pregnancy. These women are still more likely to face socioeconomic disadvantage, teenage pregnancies, psychosocial issues, smoking, drug and alcohol use, and mental illness."

Results from the research do not take away from the importance of providing culturally specific health services to improve health outcomes for Aboriginal and Torres Strait Islander communities.

NBMLHD Director of Aboriginal Health, Rachel Scobie says improved access to culturally appropriate health programs is helping communities engage more with health services across the District.

"The District places a lot of emphasis on consumer-led feedback to enhance their health programs. We're empowering Aboriginal communities to shape how they want services delivered so that they can feel safe and assured in knowing that health professionals can be trusted to improve their health outcomes," says Rachel.

"This study highlights the importance of the continuation and expansion of First Nations-specific programs in NBMLHD to be able to support women and children through the antenatal period and infancy."

NBMLHD offers a range of Aboriginal maternity care programs to help women and their families feel safe during their journey from pregnancy, child birth and beyond including:

- Aboriginal Caseload Midwifery
- Aboriginal Maternal Infant Health Service (AMIHS)
- Aboriginal outreach clinic
- Mudang Mudjin (Building Strong Foundations service)

The health
system is
managed
sustainably

6

The health system is managed with an outcomes-focused lens to deliver a financially and environmentally sustainable future

This year we:

- Installed a new heat pump air-conditioning system to provide cleaner, greener energy to services.
- Achieved a 20% reduction in fleet, further reducing our carbon emissions.
- Developed the 2024 Capital Investment Proposals submission to ensure investments deliver improved outcomes and experiences and are both responsive to the needs of local communities and aligned to system-wide objectives.
- Launched the 2024-2028 Sustainability Plan to continue to help guide how we deliver health care now and for the future.
- Installed our first EV charger at St Clair Community Health Centre.
- Achieved a 10% reduction in office accommodation leases.
- Implemented a reporting mechanism for annual operational planning that aligns to the NBMLHD Strategic Plan.
- Supported Cost Centre Managers to access finance and workforce reports to make informed decisions.
- Undertook a review of department work schedules to include use of mechanical equipment.
- Enhanced sustainable research activity within the ICU by supporting dedicated research time for allied health and nursing.
- Conducted a Telstra account review, cancelling inactive mobile devices and entering new commercial agreements to achieve \$192,000 in savings.
- Achieved a 10% reduction in soft phone licences reducing expenditure by \$24,176 in the next contract renewal.
- Launched Managed Print Services to save approximately \$329,773 over a 60-month term on our printer fleet.
- Implemented a new vulnerability and threat management platform to uplift our ICT security and improve overall cyber security.



- Implemented ICT Change Management to provide a systematic approach to control the life cycle of all changes, facilitating beneficial changes to be made with minimum disruption to IT services.
- Replaced hard plastic needle and syringe packaging with cardboard boxes, resulting in procurement and sharps disposal savings of \$207,700 and carbon emission savings of 15,133kg

Lithgow Hospital: A green powerhouse



Lithgow Hospital is providing cleaner, greener energy to its health services with the installation of a new heat pump air-conditioning system.

The geothermal system runs water through an underground loop and uses the stable temperature of the earth to gain or lose heat before running through 75 heat pumps to provide air-conditioning to the Hospital.

It's design that has been in place since the hospital's establishment in 1998, however was recently upgraded as the original system neared its end of life. It has been the preferred option over traditional external cooling towers due to the climate of the region.

The heat pump works alongside other sustainability initiatives including a 367-kilowatt solar photo-voltaic system and 1,563 LED lighting upgrades to solidify Lithgow Hospital as a green powerhouse.

The 367-kilowatt solar photovoltaic system at Lithgow is the largest single system in the LHD portfolio of 1,024 kilowatts. At the time of commissioning the solar photovoltaic system generates enough free and green energy to cover the hospital's entire electricity requirements between 9am and 3pm on a bright summers day.

Nepean Blue Mountains Local Health District has invested in energy reduction initiatives across Lithgow, Nepean, Springwood, Blue Mountains Hospitals and Portland Tabulam Multi-Purpose Service.

The energy reduction initiatives align with NSW Government mandatory targets to reduce energy consumption across all agencies. The initiatives at NBMLHD will deliver:

- 5.36 GWh reduction in Grid Electricity usage for NBMLHD - a massive 4.07 GWh from energy efficiency, and an additional 1.29 GWh from renewable energy generation per year
- Peak Demand Reduction of 785 kVA per year
- More than 15,000 light fittings converted to LED
- 1,024 kW Solar PV System across all sites
- Variety of mechanical plant and boiler upgrades
- 254 Sub meters for electricity (234), Gas & Water (20)



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