FOREWORD

The NSW Rural Health Plan Progress Report 2017-18 shows significant progress in the delivery of high-value, quality care for patients in NSW rural health districts.

Every year in NSW, more than one million people receive care in a rural hospital, which delivers care closer to home. NSW Health is focused on delivering patient-centred care, and we strive to provide every person across the state access to high quality healthcare.

Value-based healthcare is one of our key priorities to improve health outcomes that matter to patients by changing how care is provided to patients and their families and carers. Rural communities will see some of the greatest impacts of this approach.

Throughout this report, you will see examples of how partnerships and innovation are contributing to improvements in the effectiveness and efficiency of care, the experience of receiving and providing care, and most importantly the health outcomes that matter to patients.

This progress report demonstrates significant progress in the delivery of healthcare in rural settings and we will continue work to enhance and improve healthcare delivery to rural NSW.

Elizabeth Koff
Secretary, NSW Health

This progress report showcases some of the partnerships and collaborations across rural NSW which are driving improved access to quality services and outcomes for patients.

These achievements have been made possible through the commitment and hard work of NSW Health staff in partnership with non-government organisations, universities, Aboriginal Community Controlled Health Services, education providers, local government, and primary health organisations.

We are pleased that rural patients consistently rate their involvement in, and standard of care more highly than metropolitan patients and that there have been significant increases in the rural health workforce across nursing, allied health, and medical practitioners.

As Co-Chairs of the Ministerial Advisory Committee for Rural Health, this progress report is an opportunity to celebrate the considerable achievements and effective partnerships that support the NSW Rural Health Plan: Towards 2021.

The report will also inform our priorities for the future. We thank all partners for their contribution to the outcomes achieved so far.

Mrs Leslie Williams, MP
Associate Professor Austin Curtin
Co-Chairs,
Ministerial Advisory Committee for Rural Health
The NSW Rural Health Plan: Towards 2021, launched in November 2014, outlines the NSW Government’s commitment to ensuring that the people of regional and rural NSW receive the right care, in the right place, at the right time.

This progress report is a snapshot of NSW Health achievements against the directions and strategies of the NSW Rural Health Plan including progress against health indicators for rural communities. It includes case studies that showcase collaborations, partnerships, and outcomes. The directions and strategies of the NSW Rural Health Plan, as shown in the figure above, are intrinsically linked with those of the NSW State Health Plan: Towards 2021, but with a focus on key areas that will deliver improvements in rural health.
SNAPSHOT OF HEALTH IN RURAL NSW 2017-18

ACHIEVEMENTS

1,225,737
ED attendances in rural Local Health Districts (LHDs)

617,079
episodes of care in rural LHDs

4,756,305
non-admitted patients treated in rural LHDs

More than
2.2 MILLION
people live in rural NSW, which is
28%
of the NSW population²

18
Rural Clinical Schools

Facilities in Rural Local Health Districts

88
Hospitals

63
Multi Purpose Services

160
Ambulance stations

18
Rural HealthOnes

37%
of Health Capital Expenditure in 2017-18 was in rural and regional areas (27% statewide, 36% metropolitan)

Accessing eMR 3.5 million times a month by Clinicians since the eMR Phase 1 and 2 completion in December 2016.

10,000 received radiotherapy closer to home in the 10 years to 2016, through the North Coast Cancer Institute.³

Increase in breast cancer screening for women in rural areas aged 50-69 years, from 52.8% in 2009-10 to 58.4% in 2015-16.⁴

Patients in Rural Local Health Districts⁵

89%
reported they were always treated with respect and dignity, compared to 85% in metropolitan health districts.

72%
rated their overall care as very good, compared to 62% in metropolitan health districts.

Increase in breast cancer screening

Children fully immunised is above 94%
for children in rural LHDs at 1 year and 5 years of age.⁵
Improve the health of rural children, young people and families

- In 2017, Murrumbidgee Local Health District implemented a 24 hour rapid response service to domestic violence. The service provides people who have experienced domestic violence with a psychosocial assessment within one hour of presentation to the Wagga Wagga Base Hospital Emergency Department. Telehealth services are also now available to support presentations at any other emergency department within the district.

- Mid North Coast Local Health District have achieved accreditation for their White Ribbon Workplace Accreditation Program. This program was also recognised at the 2017 NSW State Quality and Innovation Awards.

- In 2018, NSW Health commenced a partnership with the NSW Departments of Education, and Premier and Cabinet. A Wellbeing and Health In-reach Nurse (WHIN) Coordinator Model of care is being piloted in schools. The two WHIN Coordinator positions based in Tumut and Cooma are funded by Snowy Hydro and the position in Young is funded by NSW Health. The program is tailored to the needs of the local school community.

- The Far West Local Health District Primary Health Registered Nurse Schools Based Service is delivered in five primary and secondary schools in Broken Hill to promote prevention and early intervention health initiatives in 5-18 year olds. The Service operates in strong partnership with NSW Education, non-government organisations and the University of Sydney Department of Rural Health. The Local Health District is now exploring scalability of the service into other areas of the district.

- In 2017-18, an additional $4.5 million was invested in rural and regional services for pregnant women, women with dependent children, continuing coordinated care, and youth services for drug and alcohol treatment, prevention and harm reduction as part of the NSW Drug Package.
Promote prevention and early intervention initiatives

- To support the Premier’s Priority to reduce childhood overweight and obesity, early childhood services and primary schools have been supported to implement policies and practices that promote healthy eating and physical activity, including:
  - Munch & Move, which promotes and supports healthy eating and physical activity habits in children attending early childhood education and care services.
  - Live Life Well @ School, a collaborative partnership between NSW Health and the NSW education sector that provides training and support to primary schools to increase healthy eating and physical activity in students.

In 2018:

- 96% of centre-based early childhood services located in rural areas have participated in the Munch & Move program compared to 76% reported in 2015*
- 88% of schools located in rural areas that have participated in the Live Life Well @ School program compared to 64% reported in 2015*

Go4Fun rural participant numbers*

<table>
<thead>
<tr>
<th>Program</th>
<th>Number of families</th>
<th>% of total NSW enrolments in rural areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go4Fun</td>
<td>2,972</td>
<td>28%</td>
</tr>
<tr>
<td>Aboriginal Go4Fun</td>
<td>211</td>
<td>86%</td>
</tr>
<tr>
<td>Go4Fun Online</td>
<td>72</td>
<td>77%</td>
</tr>
</tbody>
</table>

* as at 30 June 2018  + as at 31 March 2018

- Go4Fun, which is a targeted healthy lifestyle program for NSW children aged seven to 13 years who are above a healthy weight. Aboriginal Go4Fun and Go4Fun Online are also now available to increase access for rural populations.
- In 2017, NSW Health released the Healthy Food and Drink in NSW Health Facilities for Staff and Visitors Framework.
- In 2017, Mid North Coast Local Health District implemented round one of the Healthy Communities Mid North Coast Innovation Fund. Thirty-nine projects have been funded to stimulate, support and evaluate community initiated preventive health innovations, including initiatives to reduce childhood obesity.
- In March 2016, a new Hepatitis C virus (HCV) treatment was introduced, making the elimination of HCV in NSW possible. In 2017, the estimated7 number of rural people living with HCV was 23,750. By December 2017, 35% (8,277) of rural residents with HCV had initiated this new treatment.

Improve rural Aboriginal health

- In 2017, the Gadhu Family Health Centre was established in Moruya. The Centre is a culturally appropriate place that provides integrated Aboriginal maternal and child health services including the Building Strong Foundations program.
- Murrumbidgee Local Health District is using appreciative inquiry with Aboriginal Elders and in partnership with the Charles Sturt University, to work on bridging the health gap for the Narrandera community. The project involves collecting stories about experiences in healthcare, establishing trust, and moving into dreaming phase for service models.
- Immunisation rates for Aboriginal children living in rural NSW have continued to improve since the introduction of Aboriginal Immunisation health workers in 2012-13. There is now a higher proportion of Aboriginal children at five years who are fully immunised (97%), compared to non-Aboriginal children (95%) in rural Local Health Districts.8
- In 2017, Western NSW Local Health District incorporated Aboriginal Women’s yarning circles to engage more Aboriginal women to attend BreastScreen NSW.
Improve rural oral health

- Since 2017, three new water utilities located in rural areas have committed to implementing or expanding water fluoridation. Fluoridation systems are currently under construction in four other rural communities.
- Since 2016, Wagga Wagga Oral Health Services has worked in partnership with the Charles Sturt University Bachelor of Oral Health program to provide oral health assessments for newly arrived refugees.

The Building Brighter Grins Oral Health Program in Mid North Coast Local Health District provides oral health services and promotes good oral health in Primary Schools. The program has achieved a 50% reduction in dental caries for participating schools.

Improve rural mental health

- The Illawarra Shoalhaven Suicide Prevention Collaborative is a partnership between Illawarra Shoalhaven Local Health District, the South Eastern NSW Primary Health Network, and 40 organisations and community groups. Illawarra Shoalhaven is one of the four NSW LifeSpan trial sites, and is working with the Black Dog Institute to improve the experience of those seeking help and those supporting them. Since inception:
  - over 3,700 students have participated in the Youth Aware of Mental Health program
  - 113 health professionals have completed Advanced Training in Suicide Prevention
  - 100% of those who participated in the Next Steps aftercare service for suicidal people transitioning between crisis care and community-based care reported the program was helpful in their recovery.
  - In 2017-18, over $644 million was committed to increase specialist clinical mental health services in the community in regional and rural Local Health Districts.
  - In 2017-18, $2 million was provided to support non-government organisations to deliver community based suicide prevention programs. The funding included:
    - $426,533 to HealthWISE Suicide Prevention Initiative for clinical mental health aftercare support for those at risk or affected by suicide in the New England North West region.
    - $372,820 to Clarence Coordinated Aftercare Service to run the CRANES Community Support Programs to reach out and connect with people who are at risk of suicide.
    - $248,610 to Coomealla Health Aboriginal Corporation for the Three Rivers Suicide Prevention Project to reach out and connect with people who are at risk of suicide in the Balranald and Wentworth areas, Far West NSW.
    - $176,830 to Compass Housing for suicide prevention activities targeted to social housing tenants across rural and regional areas in NSW.

Our Healthy Clarence, Northern NSW Local Health District

The Our Healthy Clarence Plan 2016-18 for improving mental health and wellbeing was initiated by the local community in response to a number of youth suicides in the Clarence Valley. This unique model brings together community, non-government and government organisations.

The plan has delivered a Headspace Service in Grafton; suicide prevention funding; Aboriginal mental health first aid training; post-suicide support; additional child and adult psychiatry services; and community pop up hubs.

www.ourhealthy Clarence.org.au
Support the Rural Patient Journey

- Murrumbidgee Local Health District delivers more than 35 clinical and support services using telehealth, in partnership with other Local Health Districts and Specialty Health Networks, including pain services, intensive care, paediatric minor burns and breast screening.

- Southern NSW Local Health District has partnered with The Canberra Hospital to form an integrated Renal Network. The network provides approximately 240 services every week, which includes:
  - standardised care with a focus on partnerships between nephrologists, nursing staff and consumers
  - specialist outreach renal clinics, which enable patients to receive care as close to home as possible
  - a shared electronic medical record across two state jurisdictions to support continuity of care.

Improved access to health transport

- The Isolated Patients Travel and Accommodation Assistance Scheme (IPTAAS), helps eligible patients meet the travel and accommodation costs associated with accessing specialist health services outside their local area. In 2017-18, more than 25,200 patients in rural Local Health Districts made approximately 51,000 claims, with a subsidy value of more than $16 million. Patients in rural health districts accounted for 96% of all IPTAAS claims in 2017-18.

- Mid North Coast Local Health District implemented the “No Way Home” project at Port Macquarie Base Hospital. In 2017, this project supported 27 Aboriginal people to get home when they were discharged late at night and on the weekends.

DIRECTION TWO: ACCESS TO HIGH QUALITY CARE FOR RURAL POPULATIONS

NSW Health continues to strengthen access to high quality services that are delivered as close to home as possible for rural communities.
Strengthen rural health services

- In 2017, Northern NSW Local Health District clinicians partnered with researchers from the University Centre for Rural Health in Lismore to develop protocols to reduce errors in the emergency setting. Controlled trials demonstrated a 54% reduction in critical errors. These protocols are being rolled out across NSW Emergency Departments.

- In September 2017, the Far West NSW Local Health District implemented the Direct Access Colonoscopy Clinic (DACC). This innovative, nurse-led clinic fast-tracks people with positive faecal occult blood tests (FOBT) through to colonoscopy. Prior to DACC, no patients with a positive FOBT received a colonoscopy within the recommended timeframe of 120 days. Since the introduction of this clinic, 74% of patients received a colonoscopy within 120 days.

- During 2017, 25 Multipurpose Services (MPS) participated in the Living Well in MPS Collaborative. The project aimed to improve the quality of care and services by providing a homelike environment with a focus on lifestyle, leisure, activity options, nutrition, independence, choice, and control to contribute to wellness in older people. This initiative has shown improved outcomes with:
  - 100% of residents reporting significant improvements to leisure opportunities
  - 95% of residents and carers and families reporting staff understand their health and care needs
  - 86% of residents reporting that their culture and beliefs are respected
  - 80% of residents, carers and families reporting significant improvements to meal choice.

Dean Robertson, Clinician, Northern NSW Local Health District

Dean has worked for 18 years in regional and rural NSW. Dean found the Emergency Protocols allow all team members to be ‘on the same page’. As well as staff being able to see the latest guidelines, they can look ahead and prepare for what might be needed next. He reports that communication and teamwork are improved, and nurses feel more confident advocating for the best and most up-to-date treatment for their patients. They also reduce unwanted variation in care across facilities.

“I've found that the Emergency Protocols allow me to think about the more complicated aspects without worrying about the basics in an emergency.”
Dean Robertson
Living Well in Multipurpose Services (MPS) Collaborative

Western NSW Local Health District Coonamble MPS resident John had difficulty communicating and participating in day-to-day activities.

Following a psychogeriatric review using telehealth, John started music therapy, garden walks, sharing a beer with his wife at happy hour and dining in a home-like environment. He and his family also worked with a local poet to write up his life in verse. John now interacts fully and his wife claims she “has her husband back”.

“I was amazed at the total transformation that had taken place over seven months for the betterment of the residents.”

Carer

“The Living Well in MPS is one of the most impressive improvement solutions that has been undertaken across rural NSW.”

Chief Executive LHD

Residents, Dorrigo MPS (Mid North Coast Local Health District) participating in Living Well in MPS activities (top left), view from Dorrigo MPS (bottom), and NSW MPS Sites that have participated in Living Well in MPS Collaborative (above)

Source: Multipurpose Services: Principles in practice, ACI Report
DIRECTION THREE: INTEGRATED RURAL HEALTH SERVICES

NSW Health continues to develop partnerships and drive initiatives to deliver better integrated care for rural communities.

**Integrate rural health services**

- Far West Local Health District has partnered with Mission Australia and GROW to develop the Connection program, an out-of-hours social connection service for people with a mental illness living in Broken Hill. The program aims to reduce loneliness, a major social determinant of poor mental health and wellbeing. It is staffed by eight peer support workers with lived mental health experience. Since commencing in August 2017:
  - 55 people have accessed the service
  - Emergency Department presentations have reduced by 80% for the most frequent attenders
  - acute mental health inpatient bed days have reduced by 65% for the most frequent attenders
- approximately $730,000 has been saved through efficiencies.
- Western NSW Local Health District’s Integrated Care Demonstrator Program has implemented initiatives in 13 sites including: the first 2000 days of life, mental health, and aged care programs. Over 1,800 people are enrolled in these local initiatives with 24% of participants identifying as Aboriginal.
- Asthma in Mudgee provides training and support by general practitioners, community nurses, and allied health clinicians to reduce emergency department attendance. The program now has over 530 people enrolled.
High Risk Foot Services
- Murrumbidgee Local Health District

High Risk Foot Services (HRFS) focus on treating the increasing number of patients with ulcers and foot infections in a non-admitted setting and decreasing the number of patients admitted to hospital.

Through the state-wide Leading Better Value Care program and guided by the *NSW Standards for HRFS (2014)*, Murrumbidgee Local Health District launched a High Risk Foot Service in August 2018 at the Wagga Wagga Base Hospital. The aim of this service is to improve the outcomes and experience of care for these patients. A collaborative approach with private providers has been essential to securing the services of an experienced podiatrist for the clinic.

The Murrumbidgee High Risk Foot Clinic is one of thirteen new clinics established across rural and regional NSW through the Leading Better Value Care program for High Risk Foot services.

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**Improve continuity of care**

- Palliative Care services in Tamworth, Moree and Armidale have been enhanced through the creation of new positions for a specialist palliative care medical officer and palliative care nurses in December 2017. These health professionals provide specialist consultation and outreach to smaller communities, improving access to these services and allowing patients greater choice about where they receive end of life care.

- In 2017-18, 653 people registered to join the Northern NSW Local Health District and North Coast Primary Health Network Winter Strategy. Hospitals, community healthcare providers and GPs work together on enhanced communication, proactive care planning and facilitating access to allied health services. This provides targeted, individualised care to help people with chronic and complex health conditions to remain healthy at home during winter. In a survey of patients receiving care under the Winter Strategy, 66% of respondents felt the care they received from the GP practice was much better in winter than in previous months.

**Better engage with rural communities**

- NSW Health has developed a Patient Reported Measures (PRM) Framework to support a more consistent and coordinated approach to the collection and use of PRM information across the health system in NSW. PRMs will help NSW Health better engage the community in health service planning and achieve integrated and better value care across NSW. The following initiatives have been established in collaboration with the NSW Agency for Clinical Innovation:
  - Mid North Coast Local Health District Integrated Care Team has adopted PRMs for patients living with Chronic Obstructive Pulmonary Disease.
  - Nambucca HealthOne Community Health Clinic has introduced a PRMs Program in their Wound Clinic.
  - Integrated Care Team – Hunter New England Local Health District, Mehi Sector, Moree Specialist Renal Clinic, Collarenebri and Mungindi Antenatal Outreach Clinics – have commenced the collection of PRMs.
More than **500 new graduate nurses** and **midwives** commenced employment in rural and regional areas in 2017.

**STRATEGY ONE: ENHANCE THE RURAL WORKFORCE**

NSW Health continues to focus on attracting and retaining a skilled workforce to deliver quality healthcare services for rural and remote communities.

**NSW Health’s rural workforce increased significantly**

- 387 extra doctors commenced work in rural NSW between 2012 and 2017 (excluding visiting medical officers).
- More than 500 new graduate nurses and midwives commenced employment in rural and regional areas in 2017.
- 132 interns were recruited via the NSW Rural Preferential Recruitment Program in 2018.

Between 2015 and 2017 there has been an increase in the rural health workforce of:

- **6.3%** for **nursing**
- **10.6%** for **allied health**
- **15.8%** for **medical practitioners**

**1 in 4 new graduate nurses and midwives were employed in rural and regional areas in 2017**
Support the Aboriginal health workforce

- As at June 2018 there were 3,342 Aboriginal people employed by NSW Health, 2.6% of the total workforce.
- In 2016-17, 96 undergraduate and 10 postgraduate regional and rural Aboriginal nursing and midwifery students were supported by the NSW Health Aboriginal Nursing and Midwifery Cadetship Program.
- In 2017, 11 cadets enrolled in the Aboriginal Allied Health Cadetship Program.
- Since 2017, seven traineeships have been based in rural health services with the Aboriginal Population Health Training Initiative. This initiative includes three years of supervised work placements in population health and completion of a fully subsidised Masters of Public Health degree.

Target Recruitment

- NSW Health provides training opportunities to increase the number of rural nurses, midwives and allied health professionals. In 2016-17:
  - 12 scholarships were awarded to support local registered nurses to train as midwives. These scholarships support the sustainability of very small rural maternity services.
  - 20 undergraduate scholarships were awarded to students from a rural background for entry level studies in allied health.
  - 17 postgraduate scholarships to assist rural allied health professionals.

Promote development and training

- In 2016-17 NSW Health provided training opportunities for medical practitioners in rural areas, including:
  - 23 Metropolitan Access Scholarships to support rural based medical trainees to undertake metropolitan rotations as part of their medical training.
- In 2015, the NSW Government committed $8 million over four years for 20 new Rural Generalist Training positions, increasing the number of funded positions to 50 by 2019.

Funding for new training positions:

### 5 Medical specialty
- psychiatry
- general medicine
- addiction medicine
- general medicine/palliative care
- general medicine/gastroenterology

### 3 Palliative care rural generalist

### 1 Mental health rural generalist

Enhancing palliative care in rural communities

In 2017-18 the NSW Government announced $100 million funding over four years for palliative care. This funding is to increase workforce capacity and improve access to services in rural and regional NSW.

Initiatives in 2017-18 included:

- 9 additional palliative care specialists in rural and regional areas
- 2 specialist positions to provide relief to other specialists in rural and regional areas
- 300 scholarships for rural and regional nurses and allied health staff.
HETI Rural Generalist Medical Training Program: Palliative care pathway

The Rural Generalist Medical Training Program (RGTP) is designed to advance the skills of doctors wishing to pursue a career as a rural GP. This is the first program in Australia to offer 12-month advanced skills training in palliative care to rural general practice registrars as part of their four year General Practice training.

Dr Kyle Links of Coffs Harbour and Dr Paul Lam of Woolgoolga are the first two graduates of the Palliative Care pathway provided by the RGTP. The qualification allows them to provide palliative care alongside other clinicians (such as specialist palliative care clinicians) in a range of settings including hospitals, community health, general practice and the patient’s home.

“With a rapidly ageing population, the need for more rural GPs with advanced skills in palliative medicine has been recognised by NSW Health as an area of demand, so it’s with excitement that we celebrate these first two graduates.”

Adjunct Professor Annette Solman, Chief Executive HETI

“I’ve always been interested in palliative medicine, but being located in the Coffs Harbour Clarence District made advancing this area of expertise difficult... The great thing about the Rural Generalist program is the flexibility of the program and the fact that it allowed me to do my advanced skills training at Coffs Harbour Health Campus. It’s been a fantastic experience.”

Dr Kyle Links, awarded a Royal Australasian College of Physicians (RACP) Clinical Diploma of Palliative Medicine in April 2018

(Left to right): Jacquie Page, Dr Kyle Links, Dr Daniel Curley, Dr Paul Lam, Scott Handsaker.
Delivering clinical simulation training in rural areas with the Sister Alison Bush AO Mobile Simulation Centre

The Mobile Simulation Centre (MSC) provides staff in isolated, remote and regional locations with direct access to a wide range of clinical training courses through a state of the art simulated clinical training facility.

The MSC has a replicate emergency room and hospital ward; high fidelity manikins and staging; and uses high-end technology to simulate medical scenarios. It provides training opportunities for rural clinicians to enhance patient safety and care. Over the past year the MSC visited five Local Health District Networks and:

- trained 680 health professionals from varying disciplines including nursing, medicine, allied health and para-medicine
- delivered the Emergency Master class for 61 staff from five rural sites, with positive feedback
- developed and delivered the Perinatal Master class for non-birthing sites to 13 paramedics.

Enhancing allied health rural workforce

NSW Health is implementing initiatives to increase availability of Allied Health Pathways from school to professional qualifications, especially in rural areas:

- Murrumbidgee Local Health District established an Allied Health Rural Generalist Pathway. In 2017, this included three trainee positions in physiotherapy
- Western NSW Local Health District is participating in a joint indigenous health research project with the Poche Centre, University of Sydney. The project includes financial assistance for five Aboriginal Allied Health Assistant cadets to complete the Certificate IV in Allied Health Assistance.
In 2017–18, $550 million was spent on new and upgraded health facilities across regional and rural NSW.

STRATEGY TWO:
STRENGTHEN RURAL HEALTH INFRASTRUCTURE, RESEARCH AND INNOVATION

NSW Health is significantly investing in rural health capital infrastructure and continues to progress research and innovation programs to improve access to health services for rural communities.

Strengthen rural health capital infrastructure
- In 2017–18, $550 million (around one third of NSW Health capital budget) was spent on new and upgraded health facilities across regional and rural NSW, including:
  - 9 hospital redevelopments commenced: Albury, Coffs Harbour, Cooma, Goulburn, Inverell, Lismore, Shellharbour, Wagga Wagga (Stage 3) and Wyong
  - 4 new hospitals commenced: Macksville, Maitland, Mudgee and Tweed
- 15 ongoing hospital infrastructure projects
- $59.6 million to continue planning and delivery of the $300 million Multipurpose Service Strategy, which delivers health and aged care services in small rural and remote communities: Commencing or continuing works: Barham, Bonalbo, Molong, Coolah, Culcairn, Tumbarumba and Rylstone
  Planning for facilities: Cobar, Harden, Braidwood, Yass and Murrurundi.
The NSW Trauma App was developed in collaboration with the Institute of Trauma and Injury Management, multidisciplinary teams and regional clinicians.

The App’s Critical Care Geospatial function provides information and contacts for more than 200 NSW Health facilities, including details on resources and their availability. This allows remote clinicians to access location specific advice and give timely treatment to injured patients, moving them through the trauma system faster.

The blood searching function of the Trauma App provides the Aeromedical Control Centre (ACC) with the location and distance from the scene of an accident, or rural health facility, to the nearest blood bank, detailing how much of which blood products are available. There have been over 50 cases, many in regional areas, where massive blood transfusions have been provided to patients especially in the pre-hospital scene, in consultation with the State Retrieval Consultant.

- Health infrastructure projects completed in 2017-18 included:
  - upgrades at Singleton Hospital
  - main works construction for the redevelopment of Armidale Hospital
  - Stages 1 and 2 of the redevelopment of Wagga Wagga Base Hospital.
- $151 million investment in the Aeromedical Reform Plan has resulted in:
  - Introduction of larger, more capable helicopters across the state, increasing the speed and range of service, and the ability to carry specialised teams and patients across NSW.
  - New or enhanced bases being built at Bankstown, Wollongong, Orange, Newcastle, Tamworth, Lismore and Canberra.
  - Additional Critical Care Paramedic and Doctor staffing at regional helicopter bases in Lismore, Tamworth and Orange. This will provide 24-hour, 7-day-per-week coverage to regional areas.
  - Dedicated Aeromedical Centre of Excellence Training facility that provides world class training for aviation and medical crews.
- $122 million investment in the Rural Ambulance Infrastructure Reconfiguration Program for 23 new, upgraded and/or refurbished ambulance stations across rural and regional NSW:
  - In 2017, Wagga Wagga Ambulance Station was completed and became operational.
  - Molong Ambulance Station became operational in August 2018. Kiama, Berry and Bay & Basin (St George’s Basin) will be operational in late 2018.
  - In 2017-18, $35 million was allocated for the completion of Coolamon, Harden and Ardlethan Ambulance stations, which are now operational.
  - Construction commenced for ambulance stations at Griffith, Bathurst, Hamlyn Terrace, Wauchope and Toukley.
  - Service planning commenced for ambulance stations at Grenfell, Cowra, Pottsville, Maitland (Rutherford), Wauchope, Birmingham Gardens (Wallsend), Coffs Harbour (Sawtell), Yass, Cootamundra, Goulburn and Bungendore.
Strengthen models of care in rural NSW

- The State Cardiac Reperfusion Strategy includes models of care designed to increase access to specialist medical advice and lifesaving therapy for heart attack patients. In 2017, the number of rural heart attack patients receiving thrombolytic therapy increased by 11% compared to 2016.

- Murrumbidgee Local Health District has worked with the Aboriginal community to inform, design and landscape the expansion of Griffith Renal Unit to ensure the service meets the needs of the local community.

Improve knowledge sharing, collaboration and research

- The Rural Health Research Alliance, made up of the seven rural NSW Local Health Districts, provides strategic leadership for rural and remote research in NSW. The Alliance’s vision is to drive the uptake of high impact translational research that enhances the quality of life of regional, rural and remote communities in NSW through strategic partnerships across health services, academia and research organisations.

- The Centre for Rural and Remote Mental Health supports the mental health of rural and remote residents. The Centre provides leadership in rural and remote mental health research and works closely with NSW rural communities to provide evidence-based service design, delivery and education. The program is delivered in partnership with Local Health Districts and connects individuals who are experiencing or are at risk of poor mental health with appropriate services and programs.

- The Translational Research Grant Scheme aims to accelerate the development of research capability and evidence translation within the NSW public health system. Grant recipients lead projects across a range of rural settings in 2017, including:
  - detecting child abuse and neglect in the emergency department in Mid North Coast Local Health District
  - providing early intervention for children with disruptive behaviour problems via telehealth in Southern NSW Local Health District

$2.4 million has been invested in the Rural Adversity Mental Health Program which provides 13 state-wide coordinators that link rural people to the help they need following natural disasters.

Innovative approach to locally relevant improvements to healthcare

Tamworth Rural Referral Hospital was identified as having a higher than expected 30-Day mortality rate for hip fractures in 2009-15.

A clinical improvement program commenced to achieve a systematic reduction in the mortality rate. With 50% of hip fracture referrals transferred from peripheral hospitals, the approach uses rapid triage, referral, medical and anaesthetic review so that patients have surgery within 48 hours.

The most recent results indicate that there has been a reduction in mortality of greater than 50%, a result that puts it below the state average.
Since implementation of the **Telehealth Strategy**, the number of telehealth consultations in Western NSW has increased five times.

**STRATEGY THREE: IMPROVE eHEALTH**

NSW Health has continued to implement technologies to improve access for rural communities to safe and quality healthcare services.

**Implement a single view of a patient record**
- In 2017, the HealtheNet Clinical Portal was upgraded to enable rural hospitals to share records of dispensed medications with HealtheNet and My Health Record.

**Support reporting and decision making**
- A rural Virtual Allied Health Service (VAHS) has been piloted by Western NSW Local Health District in the disciplines of Dietetics, Pharmacy, Physiotherapy, Psychology, Occupational Therapy, Social Work and Speech Pathology. The VAHS has increased access to Allied Health services, improved safety through interventions that reduce hospital acquired complications, and increased positive patient, clinician and family experiences.
- The pilot Tele-Stroke project is being led by eHealth NSW and the Agency for Clinical Innovation in partnership with Mid North Coast Local Health District to improve the timeliness of stroke assessment using telehealth. The service has provided 135 consultations to patients in Coffs Harbour and Port Macquarie since July 2017, resulting in more timely assessment and treatment for many patients.

The **Community Health Outpatient Care** platform is now live at 333 services including Aboriginal Health, Aged and Chronic Care, Allied Health and Mental Health Services.
Provide secure, reliable and available information and communication infrastructure

- By December 2017, all hospitals, community health centres and administration facilities were connected to the health wide area network (HWAN). This investment has:
  - transformed rural and remote health facilities by providing secure, reliable, and accessible information and communication infrastructure
  - delivered access to the HWAN for 184 rural sites
  - installed secondary links at 50 rural sites with a further seven planned
  - been the largest network upgrade of its kind to date across rural hospitals in NSW.

- Murrumbidgee Local Health District implemented guest and patient WiFi across pilot locations in Wagga Wagga and Griffith in 2017-18. This directly benefits patients and visitors by enabling them to stay connected with family and friends, as well as access entertainment during a hospital stay or visit.

TeleHealth in Western NSW LHD

Western NSW Local Health District serves more than 276,000 people, of which 30,000 are Aboriginal, over the largest Local Health District area of around 246,000 square kilometres. Since development of the Telehealth Strategy in 2014-15, Western NSW Local Health District led the expansion of telehealth services with a focus on strong partnerships and joint governance. This has included expanding telehealth systems and infrastructure such as desktops in specialist clinics, wireless trolleys in remote sites and virtual consultation rooms. Since implementation of the Telehealth Strategy, the number of telehealth consultations in Western NSW has increased five times, with more than 20,000 services delivered in 2017-18.

Growth of TeleHealth in Western NSW LHD

- 4,000 consultations in 2014/15
- 20,000 consultations in 2017/18

Thomas Glanville, Wagga Wagga, Murrumbidgee Local Health District

Thomas is an information technology professional who has developed innovative technology solutions to improve patient care at Murrumbidgee Local Health District.

In the past 12 months, Thomas has been the main driver in developing ED NOW, a real-time emergency department dashboard that tracks and enables clinicians to manage patient flow and care. This dashboard is a major advancement in improving patient flow through the emergency department. It is the first successful state-wide use of electronic patient medical record for automated real-time reporting and analytics. A key benefit is the reduction in manual reporting time to enable staff to focus more attention on patient care.

(Left to right): Daniel Hunter, Chief Executive, HealthShare NSW; Thomas Glanville; The Hon Brad Hazzard, Minister for Health, Minister for Medical Research; Dr Kim Sutherland, Chief Executive, Bureau of Health Information; Elizabeth Koff, Secretary, NSW Ministry of Health.
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Central Coast Local Health District
Far West Local Health District
Hunter New England Local Health District
Illawarra Shoalhaven Local Health District
Mid North Coast Local Health District
Murrumbidgee Local Health District
Northern NSW Local Health District
Southern NSW Local Health District
Western NSW Local Health District
Agency for Clinical Innovation
Bureau of Health Information
Cancer Institute NSW
Centre for Aboriginal Health, NSW Ministry of Health
Centre for Epidemiology and Evidence, NSW Ministry of Health
Centre for Oral Health, NSW Ministry of Health
Centre for Population Health, NSW Ministry of Health
eHealth NSW
Health and Social Policy Branch, NSW Ministry of Health
Mental Health Branch, NSW Ministry of Health
NSW Ambulance
NSW Health Education and Training Institute
Nursing and Midwifery Office, NSW Ministry of Health
Service and Capital Planning Unit, NSW Ministry of Health
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Mrs Leslie Williams MP, Co-Chair MACRH, Parliamentary Secretary for Regional and Rural Health
Associate Professor Austin Curtin, Co-Chair MACRH, Associate Professor, University of Sydney Centre for Rural Health; Adjunct Associate Professor, School of Health and Human Sciences, Southern Cross University and Sub Dean, Northern Clinical School.
Dr Kathleen Atkinson, NSW State Director of the Rural Generalist Training Program at NSW Health Education Training Institute, adjunct Associate Professor UNSW Rural Clinical School.
Dr Rosalind Bullock, NSW Rural Doctors’ Network representative, Deputy Chair for the Rural Doctors Network Board.
Ms Lindsay Cane, Chief Executive Officer of Royal Far West.
Mr Stewart Dowrick, Chief Executive, Mid North Coast Local Health District.
Mr Kerry Geale, MACRH consumer representative, Chair of the Wagga Wagga Health Service Local Health Advisory Committee and President of the Wagga Wagga Prostate Cancer Support Group.
Dr Ian Kamerman, NSW Australian Medical Association representative, Conjoint Senior Lecturer at the School of Medicine and Public Health, Faculty of Health and Medicine, University of Newcastle, member of the Hunter New England Local Health District Board.
Dr Nigel Lyons, Deputy Secretary, Strategy and Resources, NSW Ministry of Health.
Ms Leonie Parker, Nurse Practitioner, Western NSW Local Health District.
Mrs Maryann Tarrant, MACRH carer representative, member of the Pathways to Community Living Initiative.
Ms Nicole Turner, Adjunct Professor of Nutrition and Dietetics at the University of Canberra, Chairperson of Indigenous Allied Health Australia
END NOTES

1. The data and information included in this report represents achievements across rural health districts (Western NSW, Far West, Murrumbidgee, Hunter New England, Northern NSW, Southern NSW, Mid North Coast). Information has also been provided by Illawarra Shoalhaven and Nepean Blue Mountains local health districts for the rural areas they cover.

2. 2016 DPE NSW Population Projections. Rural residents defined by Rural Local Health Districts (Far West, Hunter New England, Mid North Coast, Murrumbidgee, Northern NSW, Southern NSW, Western NSW) and excludes residents of Albury.


5. Based on data from the Australian Immunisation Register. Health Protection NSW. Centre for Epidemiology and Evidence, NSW Ministry of Health.


8. Based on data from the Australian Immunisation Register. Health Protection NSW. Centre for Epidemiology and Evidence, NSW Ministry of Health.


MACRH meeting 7 May 2018 – Tweed Heads, NSW

Back (left to right): Mr Stewart Dowrick, Dr Nigel Lyons, Dr Ian Kamerman, Mr Kerry Geale, Ms Lindsay Cane, Dr Ros Bullock.

Front (left to right): Mrs Maryann Tarrant, Ms Nicole Turner, Mrs Leslie Williams MP, Dr Kathleen Atkinson, Ms Leonie Parker.

Apology: Dr Austin Curtin.