

Across Metro North our leaders are committed to changing the face of healthcare through compassion, commitment, innovation and connection.



**Led for
excellence**

Research excellence improves healthcare

A doctor dedicated to improving antibiotic use for critically ill people is Metro North's Researcher of the Year 2017.

Intensive Care Specialist Professor Jeffrey Lipman was awarded the Researcher of the Year for his ground breaking research into intensive care and antibiotic resistance at the 2017 Research Excellence Awards.

Professor Scott Bell, Metro North Executive Director of Research, said the awards recognised excellence and represented tangible acknowledgement for researchers, attracting 74 high calibre nominations over seven categories.

“The sheer volume of research happening across Metro North is impressive, from evidence-based practice at the bedside, to drug and device trials, through to end-to-end clinical research and knowledge translation,” Professor Bell said.

“Our researchers are the epitome of what bringing ideas to life is all about. They are improving healthcare at all stages of the patient journey and making huge strides in their dedicated expertise. They are turning research outcomes into daily practice which is a challenge faced by both researchers and clinicians around the world.”

Rising Star recipient Dr Jonathon Fanning was recognised for his research into advancing understanding of the effects of cardiac procedures. Additionally, the inaugural Chief Executive Award was presented to the Brighton Research Advancement Team for their clinician-led ‘grassroots’ research in Community, Indigenous and Subacute Services.

Below: Professor Scott Bell with Research Supporter of the Year Dr Alka Kothari, Professor Jeffrey Lipman and Dr Jonathan Fanning.



World-first centre advances anaesthesia training

There has long been very limited exposure for anaesthetists to hone their craft in the safety and security of a simulator or skills laboratory.

This coupled with the overwhelming growth of the profession—the volume of medical information doubles every 18 months, with related journals producing 1000 new pages each day—highlighted the need for more efficient ways to teach, analyse and access information for anaesthetists.

Now, the Royal Brisbane and Women’s Hospital (RBWH) and The University of Queensland have created the world’s first Centre of Excellence and Innovation in Anaesthesia (CEIA) offering a simulation skills lab, including airway management, regional anaesthesia, vascular access and minimising drug error.

RBWH staff specialist Professor Andre Van Zundert said the CEIA delivers a way to tackle the issues faced by anaesthetists—in a way that nowhere else does quite as well.

“Just like aeroplane pilots who train for months at a time before taking to the skies, anaesthetists need to be trained on a regular basis on all sorts of devices, equipment, drugs and situations to master their profession and all possible scenarios,” Prof Van Zundert said.

“This is a profession of high-pressure and high-risk scenarios, and now for the first time we can offer these anaesthetists specialised simulated training to increase their confidence, improve their skills and decrease their stress levels.”



***Pictured top:** Professor Andre Van Zundert, Dr Kerstin Wyssusek and Lizanne Dalgleish are the proud RBWH faces behind the CEIA
Above: Medical staff participate in a trauma simulation exercise at the CEIA*



The CEIA was established for better education, research, communication, collaboration, governance and funding around anaesthetics. The development of skills through simulation gives health professionals an opportunity to gain knowledge and technical expertise in an environment that removes stress and increases clinical confidence.

The centre will also play a key role in the assessment of medical equipment as part of the Systematic Analysis of Basic Equipment in Anaesthesia (SABEA) project, and aims to develop a Wiki-Anaesthesia website to complement existing medical literature.

“The work in the CEIA will contribute in making the field of anaesthesia a safer profession not just for the patient, but for the specialists themselves,” Prof Van Zundert said.



Right care, right place, right time

Patients coming into Metro North emergency departments can be assured they'll receive the right care fast thanks to the Patient Access Coordination Hub (PACH).

PACH launched in May 2016, after an eight-week design and development process, to assist with the expected increase in demand for services over winter. The hub has been so valuable it has continued to provide daily support for busy clinicians and ensure hospitals are ready to receive patients.

Executive Director of The Prince Charles Hospital Anthony Williams said at a local level PACH assists with decision making by providing real-time information about what's happening across the network.

"We have two large screens with a subset of the data in our executive centre and it's a regular part of my work day to look at it. It allows us to analyse what's happening and react before problems arise," Mr Williams said.

"Before PACH we had a narrow view of what was happening at our facility only, but now we can see all four emergency departments as well as a view of our wards.



Metro North's PACH team celebrate one year of the Hub's operation

I know for a fact by looking at the information whether everyone has a problem or if it's just us."

PACH Medical Director Dr Liz Rushbrook said since the service has been running it has assisted staff to manage emergency department crowding by flagging potential delays.

"We have a comprehensive whole of system approach which allows us to focus on making sure there are no bottlenecks or delays," Dr Rushbrook said.

"We have reduced adverse patient outcomes due to ED crowding and delays."

Telehealth technology continues to put rural patients first

Kilcoy Hospital is continuing to improve access to specialist outpatient services through the use of telehealth technology, with the recent introduction of a Holter Monitoring service.

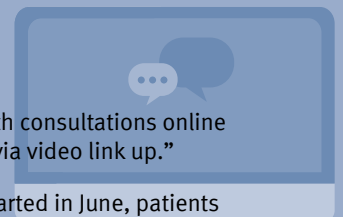
Kilcoy Hospital Facility and Nursing Director said this was a fabulous new service for our community which has a high number of frail and elderly residents at risk of heart disease and conditions.

"Telehealth is increasing the capacity to offer outpatient sessions to the community of Kilcoy and surrounds for specialist appointments that occur in Brisbane, Redcliffe and Caboolture," Ms Best said.

"Telehealth delivers real-time health consultations online by providing specialist healthcare via video link up."

As part of the new service which started in June, patients and locals suffering from heart conditions, such as heart palpitations or irregular heartbeats no longer need to travel to Caboolture Hospital for specialist testing and monitoring.

The new telehealth service follows the introduction of allied health clinics for the frail and elderly recovering from falls and heart attacks, and outpatient appointments for locals who suffer kidney disease.





Skills honed through world-leading simulation

With more than 3800 simulators, hundreds of full-bodied, high-tech mannequins and more than 100,000 hours of training, the Clinical Skills Development Service (CSDS) is the only facility of its kind in Queensland.

Hosted by Metro North Hospital and Health Service, CSDS is a statewide service with over 107 partner Pocket Simulation Centres across the state. It's the largest network of healthcare simulation provision in the world.

Each site has access to interactive neonatal, paediatric and adult mannequins used to train a vast variety of staff across multiple scenarios and disciplines. CSDS is recognised as one of the leading innovators in health education worldwide. Health professionals from all over Queensland receive critical medical training through the CSDS network so they can deliver life-saving emergency medical assistance to their communities, as do Australian Defence Force personnel.

CSDS Director Dylan Campher said simulation in healthcare education and training allows the clinical workforce to adapt to high-stress, life-threatening situations—improving the outcome for both the patient and the clinician.

“Rethinking how we use simulation has created an opportunity for frontline staff to solve their daily problems with new and innovative solutions. Simulation is more than just an educational and rehearsal tool, today we use it to test improvement at the bedside and translate how-work-is-done to help inform and guide our understanding of the healthcare journey,” Mr Campher said.

“The work done here at CSDS allows us to deliver training in major traumas such as road accidents, workplace accidents, fires, natural disasters and physical assaults.”

CSDS's network is developing at a rate of 10 new Pocket Simulation Centres a year across the state and delivers critical advanced medical training to Australian Defence Force (ADF) personnel before deployment into some of the harshest war zones on the planet.

“ADF medical professionals and soldiers are provided with real life scenarios to handle the most extreme conditions. This is the sort of stuff you can't truly prepare for unless you've faced it yourself, and that's why simulation is so essential,” Mr Campher said.

The centre has over 26 session rooms, laboratories and a fully functional operating theatre and hospital ward located on the Herston campus of RBWH.

Surgery robot to reduce hospital stay

It may seem like a work of science fiction, but a surgical robot at the Royal Brisbane and Women's Hospital (RBWH), will have very real, and very positive impacts on the lives and recovery times of Queenslanders with throat tumours.

Two RBWH surgeons have been trained in the world-leading technology, which involves the remote operation of fine, robotic arms designed to reach areas in a patient's throat that are normally impossible to access using conventional methods.

Director of the RBWH Ear, Nose and Throat (ENT) Department Dr Sharon Kelly said the industry changing benefit of the robot was the length of time it takes a patient to recover.

"With conventional surgery the procedure can take up to 12 hours, with a subsequent four week stay in hospital. Depending on the case, it may be possible for a patient to go home two days after the robotic surgery," she said.

"Around 20 patients a week require ENT surgery at the RBWH and the introduction of the robot will help to reduce overall theatre time, so it will benefit even those who don't use the robot directly."

Dr Kelly said major surgery required a long period of difficult and sometimes painful rehabilitation, with some patients having to re-learn basic processes such as talking and swallowing.

A robot-utilised procedure could reduce scar tissue and rehabilitation time for these patients.

The new robotic procedure is just one component of a wide-reaching campaign which saw ENT waiting lists reduced dramatically over the past 12 months.

Dr Kelly said the use of existing resources, combined with alternate working strategies and the dedication of RBWH staff resulted in reducing the number of patients waiting longer than clinically recommended for an appointment or a procedure to zero.

Statewide Epilepsy Program

Prior to late 2016, Queenslanders with severe, uncontrollable epilepsy were left with no choice but to cross the border and seek surgical intervention in Victoria, separating them from the support of family and friends.

Identifying this gap in treatment, Royal Brisbane and Women's Hospital (RBWH) began work on the Statewide Epilepsy Program to bring treatment options back to Queenslanders.

By late 2016 the program began taking in patients and 19 people have been treated with a surgical intervention to great success so far.

Executive Director of Internal Medicine Services Kate Mason said it was the comprehensive multidisciplinary team and the surgical pathway components of the service that made the real difference.

"Some patients who have uncontrollable epilepsy have all the therapeutic management and medications we

can possibly employ, but their seizures still cannot be managed. That's when a surgical procedure may be of benefit," she said.

"Up until last year these patients had to be separated from their families to receive this get treatment... it's very traumatic and very isolating. It was hard to believe a state as big as Queensland didn't have this service, but now we do.

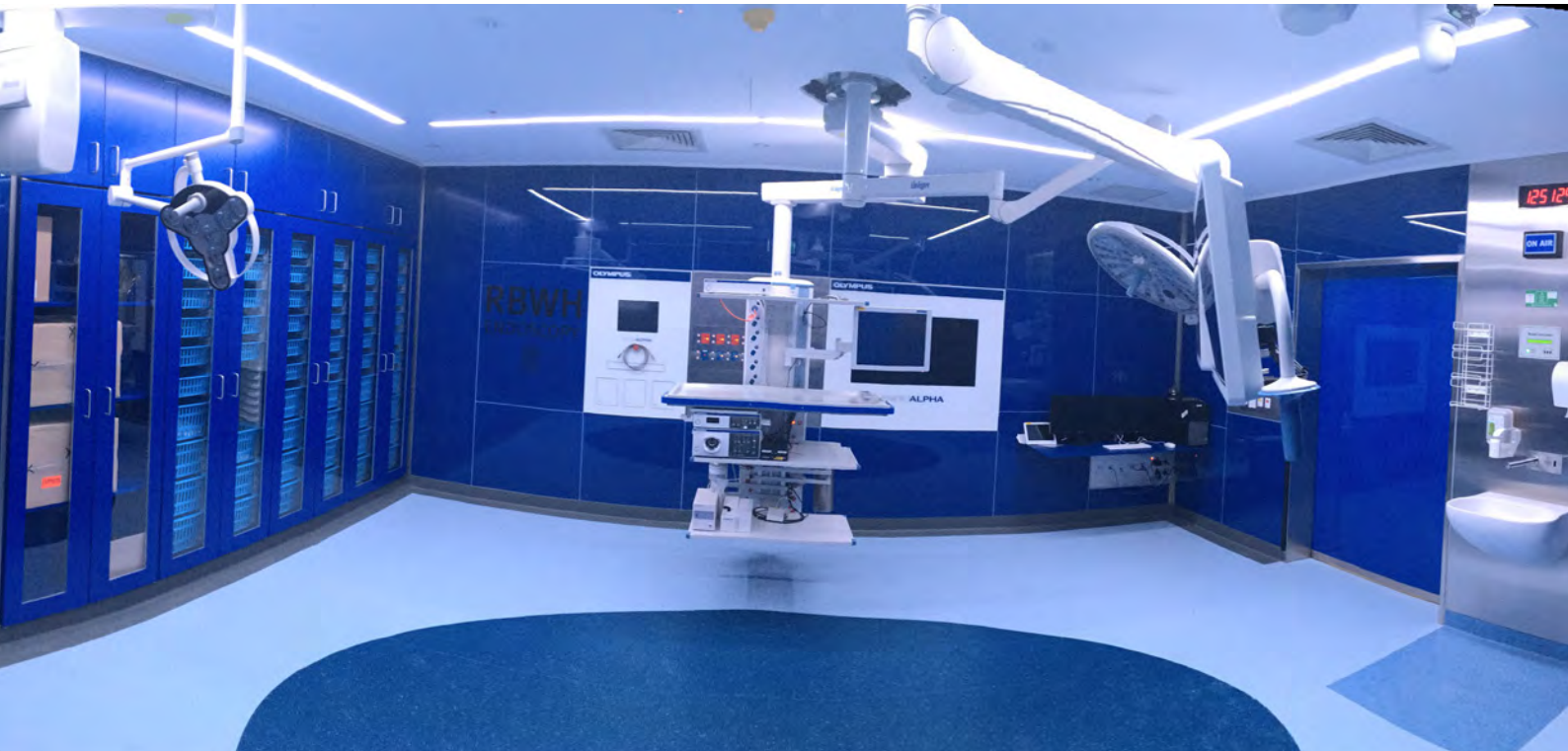
"We think it is wonderful. Our patients think it is wonderful. Queensland thinks it is wonderful.

"These patients so far haven't had to go down south, and I think that is a win. They have the potential now to take up fully functional lives again."

The program uses a close and intensive follow-up process, due to the serious nature of brain surgery, and boasts strong interdisciplinary collaboration between medicine, surgery and imaging.

**JUL-DEC
2016**  148 patients admitted
5 surgeries

**JAN-JUN
2017**  165 patients admitted
14 surgeries



Blue room boosts endoscopy numbers

More Queenslanders than ever before will now have access to specialist endoscopy services at the Royal Brisbane and Women's Hospital (RBWH).

A new blue procedure room will increase the number of endoscopies by almost 50 per cent to more than 9000.

RBWH Director of Gastroenterology and Hepatology Dr Mark Appleyard said the 'Blue Room' is a brand new theatre capable of handling additional and more complex procedures than the other theatres.

"More complex interventional and diagnostic gastroenterology services are possible with the room's blue walls providing a high contrast to the pink tissues being examined," Dr Appleyard said.

"This service expansion includes an automated sterilising system as well as an equipment tracking and drying room to improve safety."

At the push of a button the room is automatically set up to the surgeon's requirements which saves time between procedures.

The new procedure room has blue tempered glass walls and 'kick bars' for staff to exit the room without using their hands. A fully integrated digital system includes a touch panel to control equipment, communication devices, lighting and sounds.

Dr Appleyard said one of the features of the state-of-the-art equipment provided increased scope to expand training and research options.

"The 'Blue Room' is equipped with cameras and videoconferencing equipment capable of broadcasting procedures to students around the globe. Conversely our surgeons will benefit from teachers interstate or overseas being able to dial into complex procedures to help with training," Dr Appleyard said.



Providing dignity at end of life

Spending our last days and hours in comfort and with dignity are the minimum we would all want for ourselves and our loved ones.

The Prince Charles Hospital (TPCH) Palliative Care unit has developed new tools to help staff ensure patients receive the best possible care in their final days.

Palliative Care Clinical Nurse Consultant Sue Mannion said not all health staff have experience caring for people who are dying.

“Caring for someone who is dying can be extremely confronting for health practitioners who are unfamiliar with looking after patients and families in this situation,” Ms Mannion said.

“The effective management of symptoms in patients who are nearing the end of life is of great value when supporting families and carers through grief and bereavement.”

The resources include an observation chart for common signs and symptoms, such as pain, shortness of breath, and restlessness. The chart also prompts the nurse or doctor to assess family and significant others for distress so as to make appropriate referrals for support.

“Without the correct knowledge and tools, a staff member may find it particularly challenging to know how to approach the end of life care process. This includes having difficult conversations with patients and families,” Ms Mannion said.

Palliative Care nurse René Carnes said the observation chart is a good visual aid to see which symptoms are causing the patient the most distress and how best to relieve them.

“In my own day to day experience, I enjoy being able to use a tool that allows me to very quickly manage the problems that are most troubling to both the patient and their families at a very challenging time,” Ms Carnes said.

The tools are now being rolled out across other parts of TPCH and through Community, Indigenous and Subacute Services providing care to people at the end of their life. The project is supported with funding from Metro North’s SEED innovation grants.

Pictured: René Carnes, Registered Nurse, TPCH Palliative Care Unit

350 access new telehealth service in first three months

Royal Brisbane and Women's Hospitals (RBWH) Allied Health Professions are enhancing the quality of care they provide through establishing and expanding new telehealth models to enable more convenient patient access to specialist services—regardless of location.

A number of departments across the hospital, including speech pathology, nutrition and dietetics, cardiac sciences, physiotherapy, occupational therapy, social work, rehabilitation, and audiology are delivering care to patients either at their local facility, or home via their own computer or mobile device.



In a state as decentralised as Queensland, equal and easy access to specialised healthcare has always been a point of difficulty—but technology is fast changing that.

Clinicians are expanding their use of telecommunication technologies, such as live audio and video links and health monitoring devices to connect directly with patients and staff to enhance clinical care and service outcomes.

RBWH Allied Health telehealth services are rapidly expanding into new territory, treating more and more patients. The new Spinal Physiotherapy Screening Telehealth Clinic alone, which delivers multidisciplinary treatment to patients with chronic spinal pain conditions, conducted over 350 telehealth appointments within the past three months.

The Speech Pathology and Nutrition and Dietetics departments have combined and expanded their existing telehealth service to patients with head and neck cancer. Renal patients treated at Kilcoy Hospital are receiving psychosocial support by the Social Work Department, and the Occupational Therapy

Department have established support clinics for burns rehabilitation and hand therapy. The Audiology Department have plans to expand their post cochlear implant home service to patients living in regional Queensland.

The statewide RBWH Tele-Cardiac Service, implements Holter monitors and conducts stress testing for patients across Queensland via a videoconference setup with live electrocardiograms (ECGs).

“Our belief is that we would like to see rural patients get quick access to care,” Director of Cardiac Sciences Adjunct Professor Adam Scott said.

“This is one mechanism we can use to help out our rural partners.”

***Pictured above:** Cardiac science telehealth department connects with patients at other hospitals around the state*