

FIRST INNOVATIVE O-ARM TECHNOLOGY IN A QUEENSLAND PUBLIC HOSPITAL

Royal Brisbane and Women's Hospital is Queensland's first public hospital to introduce the O-Arm – a multi-dimensional surgical imaging platform used in spine, orthopaedic, and trauma-related surgeries.

Orthopaedics Deputy Director Dr Dennis Hartig said the Medtronic O-Arm will increase the efficiency and safety of surgery.

“The technology produces high quality intra-operative images of a patient's anatomy, confirming the placement of surgical implants and potentially eliminating repeated surgeries,” Dr Hartig said.

“The most impressive feature is the navigation system which allows surgeons to visualise the anatomy in 3D,” he said.

“This improves patient care by more safely placing implants and potentially decreasing the length of surgery.

“Patients benefit from fewer surgical complications, and a shorter surgical procedure.”

Dr Hartig has frequently used the O-Arm at other hospitals and believes it is an important evolution in surgical technique.

“Some cases which previously have not been amenable to surgical management will now be operable,” Dr Hartig said.

“The O-Arm will improve efficiencies and patient outcomes.

“The patient is central to everything we do.”



Deputy Director Orthopaedics Dr Dennis Hartig and Registered Nurse Anna Dowe with the O-Arm.

5.0 GOVERNANCE – RISK MANAGEMENT AND ACCOUNTABILITY

5.1 Risk Management and audit

MNHHS is committed to managing risks in a proactive, integrated and accountable manner through clear key structures, systems and processes for risk management.

Risk management within MNHHS is managed according to an integrated Risk Management Framework aligned with the Australian/New Zealand Standard for Risk Management – Principles and Guidelines and is consistent with the Department of Health risk management policy and implementation standard.

In accordance with the approved 2013-14 Internal Audit Plan, the Risk Management Framework has been revised to support an organisation-wide integrated risk management system with more explicit articulation of the Board risk tolerance as well as the escalation and reporting requirements for significant risks.

The MNHHS Strategic Plan 2014-18 outlines the following key strategic risks:

- Rapidly increasing demand for health services – as a result of population growth and ageing, increasing incidence of chronic disease, high consumer expectations and the impact of technology. MNHHS has recognised service demand resulting from population growth particularly in the northern sector of MNHHS. As a result, the MNHHS Health Service Strategy 2015-2020 has prioritised increasing capacity to meet population growth in the northern sector of MNHHS.
- Maintaining a skilled and committed workforce – rapid and ongoing change places significant pressure on staff, impacting on recruitment and retention. Effective service redesign requires system-wide, systematic and simultaneous changes to service models and work practices putting additional demands on staff to respond.
- Reputational damage and loss of public confidence – Metro North is committed to maintaining and enhancing the public and community's confidence in the high quality of care provided by its services.
- Managing cost pressures – the cost of health care is rising at a rate in excess of any health funder's ability to respond. A major challenge for MNHHS will be to achieve the price and activity benchmarks set by the Department of Health as the system funder, and the national funding price set by the Commonwealth.



Doctor Louise Cullen speaks to the media about Rapid Assessment of Cardiac Chest Pain Research.

HEART ATTACK OR INDIGESTION? FAST-TRACKING IS FINDING OUT

More than 90,000 Queenslanders check into hospital Emergency Departments each year with chest pain.

The good news is that only about only one in five of those patients is actually suffering a heart attack; the rest are diagnosed as indigestion or other less serious conditions.

Now, ground-breaking research into cardiac emergencies is helping to free up hospitals beds and save health dollars as well as provide the best patient care and the best possible outcomes.

Royal Brisbane and Women's Hospital emergency physician Dr Louise Cullen and cardiologist Dr William Parsonage have devised a method to speed up diagnosis and shorten hospital stays for patients who present with symptoms of possible acute coronary syndrome.

Their Rapid Assessment of Cardiac Chest Pain Research has shown it can reduce the length of hospital stay for most of these patients from 25 hours down to eight hours, which could free up the equivalent of 42,500 bed days per year if utilised across Queensland Health.

Dr Cullen said with Queensland's population expanding and ageing, causing a four per cent annual increase in demand on hospital emergency departments, the research was vital.

"With Rapid Assessment of Cardiac Chest Pain, we can give back clinician and health resource hours to those who have more acute cases to treat," Dr Cullen said.

The \$1 million research project was funded by the Queensland Emergency Medicine Research Foundation (QEMRF).

Early findings from Dr Cullen's research are already in use in emergency departments in several regional Queensland hospitals.

The MNHHS Risk Management Framework clearly states that risk management is a responsibility of all staff and includes defined roles, responsibilities and accountabilities allocated to specific officers and management levels across the organisation. Risk management is integrated into MNHHS systems and process and is a key consideration for all planning and activities.

MNHHS use a centralised risk register sponsored by Department of Health, known as QHRisk, and connect to DSS-QHRisk module to support quality executive reporting. Risk registers are independently managed by each MNHHS clinical directorate and service, and are supported by delegated Risk Coordinators. Risk management is championed by MNHHS executive through an integrated system of committees including MNHHS executive, clinical directorates and service management committees.

Risks that are rated as 'very high' and 'high' are reported to the MNHHS Executive on a monthly basis and are also provided to the Board Risk and Audit Committee to ensure that appropriate risk treatments and management plans are in place.

MNHHS maintain engagement with the Department of Health and other Hospital and Health Services through its participation in the Health System Risk Working Group to ensure good governance and alignment with best practice.

5.2 External Scrutiny

Royal Brisbane and Women's Hospital (RBWH) and the Oral Health Service remain ACHS accredited through to 2018 with an Organisational Wide Survey due in 2016.

The Prince Charles Hospital, Redcliffe Hospital, Caboolture and Kilcoy Hospitals, and Ambulatory, Community and Indigenous Health Service (now Community, Indigenous and Subacute Services) remain ACHS accredited through to 2017 with a periodic independent ACHS review in 2015.



IMPROVING ACCESS TO HEALTH SERVICES

With 10 per cent of residents in the Metro North catchment speaking a language other than English at home, improving access to health services for this group is a key priority.

Inner city locations show a higher than average proportion of residents who are born overseas and speak languages other than English at home. For example, Nundah and surrounding suburbs had the highest proportion of residents (17%, or 17,314 persons) who speak a language other than English as their first language. While Toowong recorded the greatest number of residents who speak a language other than English at home (19,679 persons or 14%)*.

Metro North has recently undertaken a review of its interpreter services to ensure the services caters to the needs of an increasing number of people who speak a language other than English at home.

This review has indicated improvements that can be made to interpreter services, and also to a range of other factors that contribute to improving access and care for people from culturally and linguistically diverse (CALD) backgrounds. One key area is language and health literacy which are critical skills that can impact on CALD people's access to services, communication with health professionals and the quality of care they receive.

That is why equity of access to health services is one of the Metro North Community Board Advisory Group's key engagement priorities.

5.3 Internal Audit

The Internal Audit function operates with due regard to Treasury's Audit Committee Guidelines, a Board approved Charter, and contemporary internal audit standards.

Annual and Strategic audit plans are developed in consideration of the Board's risk management and governance processes, designed and maintained by management. Following consultation with management and members of the Risk and Audit Committee, annual audit plans are approved by the Board.

The function provides an independent and objective assurance and consulting service to management and the Board. The audits undertaken are risk based and are designed to evaluate and improve the effectiveness of risk management, control and governance processes.

The delivery of audits is assisted through a Co-Source partnership arrangement with an accounting firm and engagement of subject matter experts as required. Although the function liaises regularly with the Queensland Audit Office (QAO) it remains independent of the QAO.

Key activity and achievements of Internal Audit during the 2014-15 year included an independent Quality Assessment of the Internal Audit function by the Institute of Internal Auditors – Australia (IIA). The IIA concluded that "There is general conformance with the Standards and the IIA Code of Ethics. This is the top rating that can be given."

In addition, a number of audit projects were completed during the year including:

- Project management framework
- Activity based funding – Coding complexity
- Sentinel events
- IT – Governance
- Medical officer contracts
- Compliance framework
- Procurement and contract management
- Review of Kilcoy Hospital
- Payroll – Recruitment processes.

10%, or 83,142 people, in the MNHHS catchment speak a language other than English at home.

* Sourced from *Population Health Report 2013/14* compiled by Elliott Whiteing Pty Ltd for Metro North Brisbane Medicare Local.

SUPPORTING PATIENT-CENTRED CARE

At Metro North Hospital and Health Service we put people first. Critical to this is our continued focus on patient-centred care, consumer engagement and patient experience.

An online training module has been developed to introduce all staff to these concepts. This training was developed with consumer input and feedback. The training provides definitions, examples and case studies. The program was launched in mid-June 2015 and 111 staff had completed it by 30 June.

The module has opened up conversation in this space, giving staff an avenue to highlight areas for future education and to make suggestions for how they can be more patient-focussed each day. This feedback is being used to develop a suite of education modules for staff.

5.4 Information systems and record keeping

Section 160 of the Hospitals and Health Board Act 2011 requires that any confidential information disclosures made in the public interest by a Servicer are outlined in the Annual Report for that Service. There were no disclosures of confidential information by MNHHS under this provision in 2014-15.

The Office of the Chief Executive has implemented an electronic record management system (TRIM) this year for key correspondence to and from the office. This system is under evaluation to assess the suitability for use across all Metro North services.

MNHHS maintains its clinical records in accordance with a retention and disposal system which is in accordance with the Queensland State Archives Health Sector (Clinical Records) Retention and Disposal Schedule (QDAN683 V.1). Compliance with these requirements is externally assessed as part of the ACHS EQulP National Standards accreditation requirements.

STATE-OF-THE-ART CENTRE IMPROVES CARE FOR HEART AND LUNG PATIENTS

Patients with complex heart and lung conditions are benefitting from a purpose built state-of-the-art health care facility at The Prince Charles Hospital (TPCH).

The 14-bed Heart Lung Complex Care Centre, which opened last November, ensures patients continue to receive the best care in a comfortable setting specifically tailored to their clinical needs.

Cystic Fibrosis (CF) is genetic condition resulting in chronic lung disease, reduced nutrition and reduced life expectancy.

Since 1996, the number of patients with CF cared for by TPCH has almost tripled. Patients can have up to four admissions each year, with some admissions lasting 14 days or more.

TPCH's Director of Cystic Fibrosis Professor Scott Bell said patients have very specific clinical requirements due to the nature of their condition.

"Patients with CF are susceptible to bacterial infections and in some possible cross-infection occurring between patients," he said.

"In a normal hospital ward setting, the opportunity for patient-to-patient contact naturally increases, particularly if patients are in hospital for a period of time. Patients can have up to four admissions each year, with some admissions lasting 14 days or more."

As the State's centre for adult CF care, the service today cares for around 300 patients from around Queensland and northern NSW, achieving world class results. It has a strong research program enhancing evidence for the best ways to deliver care and treatments.

Professor Bell said the rapid increase in patient numbers over the years provided an opportunity to study ways infection can be spread and to review current accommodation, and custom build a facility in line with international CF care standards.

"Optimising the healthcare experience will enhance the quality of life of adults living with CF in Queensland" said Professor Bell.

5.5 Patient Safety and Quality of Care

Safeguarding and improving the safety and quality of patient care is a key priority of Metro North Hospital and Health Service, and informs all aspects of the provision of services and decisions across the health service.

The Board and executive ensure reported incidents are regularly audited, that the most serious incidents are reviewed in accordance with policy, and that aggregated and trended analysis is provided and reviewed regularly. Key aspects of the effectiveness of the incident management system have been reviewed by both internal audit and procedural outcomes to ensure the process remains consistent with best practice.

To ensure the ongoing effectiveness of the patient clinical governance system, the design, performance, and supporting frameworks of assurance for several other key elements within the system were also evaluated and improved:

- Governance and Quality Improvement systems:
 - the systems for identifying safety and quality risks were reviewed and revised as part of the integrated risk management framework
 - the framework for policy and procedure development was reviewed, with a streamlined system implemented, supported by an enhanced online register for ease of access and use for staff.
- Collecting and reviewing Safety and Quality performance data:
 - a revised reporting schedule was implemented to ensure that over time all services, locations, risks and dimensions of quality and safety were covered. The suite of safety and quality indicators, along with targeted governance reports, were enhanced to support a relevant and comprehensive performance reporting framework.
- Patient healthcare rights and engagement:
 - a review of consumer advisory and engagement processes has resulted in an enhanced process for the development and registering of patient information brochures, with consumers assisting to ensure all patient information brochures are reviewed prior to publication.

Consumers rate overall impressions of care as 93% positive.

National Safety and Quality Health Service Standards

The *National Safety and Quality Health Service (NSQHS) Standards* were developed by the Australian Commission on Safety and Quality in Health Care (the Commission) in consultation and collaboration with jurisdictions, the private sector, health professionals and patients. As part of the organisation's commitment to safeguarding and improving the safety and quality of services, the board, executive and management, consumers and clinicians have engaged in the implementation of the Standards and further developing the governance systems and performance monitoring of these standards across the organisation.

Metro North is working closely with consumers and the community to ensure the organisation meets and exceeds the standards, with a particular emphasis on Standard 2: Partnering with Consumers.

Local Safety and Quality Committees

Metro North organisation-wide safety and quality activities are directed and monitored by the Metro North Executive Safety and Quality Committee.

Each facility or service maintains a local Quality and Safety Committee that meets monthly and assists the Board and executive to implement and monitor the performance of the organisation's clinical governance framework and its elements.

Members of these committees include executive and senior managers, quality and safety staff, clinicians and clinical leaders and consumer representatives. All facilities have governance structures that facilitate and promote consumer engagement activities as part of service planning, delivery and evaluation, and in the analysis of safety and quality data and the development of actions plans for improvement.

Metro North Quality of Care Report

In keeping with the organisation's commitment to communicating the importance of the patient experience and high quality care outcomes, an inaugural 'Quality of Care Report' was released in November 2014. This report outlined the organisation's achievements in relation to quality of care, using patient and staff stories to illustrate the partnerships that support continuity of care, how research is applied to improve patient outcomes, and how the organisation is responding to the diverse needs of patients, consumers, and the community served. The Quality of Care Report is now an annual publication to share key initiatives and outcomes with the community.



COMMITTED TO RESEARCH

Metro North Hospital and Health Service is home to some of the world's leading researchers. Our thriving culture of research is delivering continuous service improvement and evidence-based care.

In September 2014, the Metro North Research Committee was established to develop an overarching framework for research across the organisation. Committee Chair Professor Lawrie Powell said research brings enormous benefits to the health system.

“Hospitals with a strong research culture attract staff with inquiring minds, with tenacity and pursuit of excellence. Such staff themselves attract others and students of like mind. The end result is a higher quality of healthcare at cheaper cost,” Professor Powell said.

Committee members include representatives from nursing, medical services and allied health as well as university partners.

MNHHS is also part of the Brisbane Diamantina Health Partners (BDHP), which brings together the State's leading Hospital and Health Services, including Metro South HHS, Children's Health and Mater Health, Queensland's major universities and institutes for medical research.

The position of BDHP is that better healthcare can be delivered by closer integration of research, education and clinical care. This position well reflects MNHHS's commitment to its core pillars of research, training, education and service delivery.

HOOKWORM RESEARCH LOOKS PROMISING FOR COELIAC DISEASE SUFFERERS

Ground-breaking Queensland medical research involving hookworms may one day lead to the cure for a debilitating intestinal disorder affecting millions worldwide.

The research project is investigating the effects of hookworms on patients with coeliac disease and is led by Australian leading hookworm experts, Professor Alex Loukas from James Cook University in Cairns, and Gastroenterologist Dr John Croese at The Prince Charles Hospital.

Dr Croese has long suspected that one reason patients appear more prone to inflammatory bowel disease and other diseases such as coeliac disease than occurs in less affluent people was that intestinal parasites have been effectively eradicated from developed countries.

“In the one out of every 70 Australians who suffer from coeliac disease, the immune system reacts abnormally to gluten resulting in small bowel damage. Symptoms vary but the most common include gastrointestinal upsets such as diarrhoea, constipation, nausea, vomiting, cramping and bloating.

“Other symptoms, some more severe may include fatigue, weakness, anaemia, unexplained weight loss or gain, bone and joint pains, recurrent mouth ulcers or swelling of mouth or tongue.

“Our researchers are testing whether the specific chemical released by the hookworm may suppress inflammation associated with coeliac disease, inflammatory bowel disease, and other intestinal disorders,” Dr Croese said.