Health technology

Queensland is home to Australia’s first large scale digital hospital and a leader in innovative health technologies.
Health technology

Digital healthcare is one of the most important revolutions in healthcare.

Queensland’s digital hospitals and other digital healthcare capabilities are providing highly connected and interactive models of care that support personalised, precise and well informed treatment of patients across care settings and care teams. This means improved safety, quality of care and faster treatment for patients.

From assistive technologies for the aged care industry to advanced imaging for clinical trials and a statewide telehealth network, Queensland is your health technology partner.
Queensland Health’s digital capabilities

The digital hospital—Princess Alexandra Hospital

The Princess Alexandra Hospital (PAH) is a large tertiary healthcare centre in Brisbane, with over 100,000 patient admissions and 60,000 emergency department patients annually. The hospital is one of Australia’s leading research health centres and provides acute medical, surgical, mental health, cancer, rehabilitation and allied health services.

The PAH is a fully digital hospital using the Queensland-wide Integrated Electronic Medical Record (ieMR), including electronic medications management and functionalities for anaesthetics and clinical research. All aspects of delivering clinical care at the PAH are electronic.

Following the successful implementation of the ieMR at the PAH in April 2017, eight more Queensland Health facilities will go digital by the end of 2018.

Gold Coast University Hospital’s Management Information System (MIS)

A Gold Coast University Hospital project team developed, tested and successfully implemented the Management Information System (MIS), a technology system which is helping to reduce elective surgery waiting times across the state.

The system allows clinicians and administrators to view detailed information about patients on their waiting lists through the MIS Elective Surgery Waiting List and Elective Surgery Risks and Projections applications. Clinicians can easily see which patients need to be seen as a priority and service directors have a clear set of data with which they can discuss waiting times, helping to improve clinical engagement.

The system is updated on a daily basis and provides doctor-level trend analysis, future risk and project analysis and the automatic identification and display of cohorts of patients who need to be treated to meet clinically recommended times.
Best Practice Software
https://bpsoftware.net
Best Practice Software is a leading Australasian provider of medical software, with their Operations Hub in Bundaberg, Queensland. Since launching in 2004, Best Practice has forged a reputation for quality products, great user functionality, and excellent customer support, partnering with medical practitioners to deliver a range of cutting-edge and user-friendly clinical and management software solutions, designed for simplicity, easy operation, feature-rich application and real world dependability.

Their software products benefit general practice, allied health, medical and surgical specialists, and their range of connectivity, integration and deployment tools and services help create better health outcomes for practices of all size, type and complexity. They are currently developing an app for patients to access and oversee their own health records.

Integrated Medical Systems
www.ims.com.au
Integrated Medical Systems (IMS), based in Brisbane, supplies integrated medical information systems to the healthcare industry. IMS was established in 1993 with many of its clients based overseas, including in New Zealand, Malaysia, Indonesia, China, Thailand, Vietnam and Europe. Government teaching hospitals, referral hospitals, general and district hospitals as well as private organisations (including multi-site radiology practices and laboratories) use IMS packages. The IMS systems are suitable for hospital administration, blood banks, laboratories, pathology, veterinary laboratory and radiology clinics. Industry and government agencies also use their systems for risk management and injury prevention.

Technology One
www.technologyonecorp.com
Technology One is Australia’s largest enterprise software company. Established in Brisbane in 1987, Technology One has 14 international offices in Australia, New Zealand, South Pacific, Asia and the United Kingdom. Technology One provides governments and universities with software to run everything from enterprise or organisational resource planning to performance management. The health and community services sector is their second largest market, with customers from aged and community care, healthcare service providers, and hospital and health foundations.

Queensland’s health technology capabilities
TrendCare is a leading software solution for healthcare workforce planning across Australasia and has recently expanded into the United Kingdom and Ireland.

TrendCare provides an evidence-based patient/nurse dependency system for all specialities in acute, sub-acute and non-acute healthcare services. Other product features include patient risk assessments, clinical pathways, diet ordering, workload measures and efficiency reporting for nursing, allied health, specialist nurses and medical services, loan equipment registers, clinical handovers, rostering, HRM registers and dashboard displays.

TrendCare promotes safe staffing, improved patient outcomes, productivity and efficiency across all healthcare services, winning national and international awards for innovation, service and training.

Cook Medical Australia

Cook Medical Australia has been operating in Australia since 1979. The company became one of the first businesses to operate from Brisbane Technology Park. Its state-of-the-art manufacturing and R&D facility now employs more than 600 people.

Cook Medical Australia manufactures endovascular stent grafts for the treatment of aortic aneurysms, and is one of the few sites in the world that custom-makes these products to fit individual patient anatomies. The company also develops and manufactures products used in the in vitro fertilization (IVF) process.

Cook Medical’s Australian operations also double as the headquarters for the Asia-Pacific region.

Wenross Holdings—Mansell Infant Retrieval System (Neocot)

Wenross Holdings has achieved national and international recognition for its unique medical device, the Mansell Infant Retrieval System, or the Neocot.

This device supports the life of premature or medically compromised neonates, who have been born in an environment where specialist medical care is urgently needed but unavailable. As a result the infants require transportation under intensive-care conditions, in a road ambulance or aircraft to a major hospital for specialist management. Currently in Australia alone, nearly 300 infants per month are transported in this device. Wenross has expanded into Europe with 25 systems currently operating in Scandinavia.
Centre for Advanced Imaging  
cai.centre.uq.edu.au

The Centre for Advanced Imaging (CAI) at The University of Queensland is the only centre of its type in Australia and one of a handful in the world. It contains sophisticated imaging and spectroscopy equipment, including some of the first and most powerful magnetic resonance imaging (MRI) scanners and nuclear magnetic resonance (NMR) spectrometers in Australia and in some cases, the world. Whole-body scanners and ultrasound are used for studies in neurology, cardiology, angiography, oncology, musculoskeletal, paediatrics and engineering.

Herston Imaging Research Facility  
www.hirf.com.au

The Herston Imaging Research Facility is a dedicated human imaging research facility housing PET/CT, PET/MR and 3T Prisma MRI scanners. It is located in Australia’s largest research and clinical precinct and is an alliance between four of Queensland’s research and clinical institutions (The University of Queensland, QIMR Berghofer Medical Research Institute, Queensland University of Technology and the Royal Brisbane and Women’s Hospital). Siemens Australia is an industry partner in the facility. The facility undertakes a wide variety of research projects ranging from dementia to infectious diseases, with most research being in the fields of oncology and neurosciences. The facility has access to a wide variety of PET clinical and research tracers produced by an on campus cyclotron and radiochemistry facility. Advanced image analysis is available on campus with the co-located eHealth Research Group.

Innovation and Translation Centre, Translational Research Institute

The Innovation and Translation Centre is a state of the art imaging facility with positron emission tomography PET-MRI and Prisma Magneton 3T machines. The centre, based at the Translational Research Institute, works in collaboration with Siemens Healthineers, the Queensland University of Technology and Queensland Health’s Princess Alexandra Hospital, making it a partnership between research, academia, health, business and government.

The centre is a world-wide development site for new scanning technologies and techniques geared at providing better diagnosis, monitoring and treatment of cancer, trauma and other diseases. It provides Queensland with world-leading, diagnostic imaging capabilities and a unique teaching, research and translational platform in multiple disciplines including immunotherapy.
Telemedicine

CSIRO and Queensland Government team up to save lives

Queensland Health and the Australian Government’s CSIRO signed a five-year agreement in 2017 extending the Australian e-Health Research Centre (AEHRC), based at the Royal Brisbane and Women’s Hospital. The $25 million joint venture agreement will see the AEHRC continue to develop and deliver evidence-based digital innovations in an increasingly digitally enabled health system.

Since its inception in 2003, the AEHRC has developed into a full health and biomedical informatics research program with expertise across electronic health data capture and processing, health data analytics, biomedical imaging, genomics, mobile and tele-health research.

From conducting Australia’s largest tele-health trial of home monitoring in aged care to the development of smartphone apps and technology for cardiac patients, scientists at the AEHRC have shown how technology can be used to improve health outcomes and save lives.
Health technology

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