Looking Ahead

Partnering, Pioneering and Promoting world-class health care, research, training and education
Diamantina Health Partners (DHP) was launched in July 2011, bringing together eight of our Queensland institutions with a shared vision and mission to deliver better health outcomes by integrating innovation and excellence in health research, clinical education, and patient care. Our unity of purpose, cross fertilization of ideas and increased collaborations bring scientists, educators and clinicians productively together to deliver healthcare, social and economic benefits.

Our core partners, two of Brisbane’s largest health service providers - Princess Alexandra Hospital and Mater Health Services, our two university partners - The University of Queensland and Queensland University of Technology, and The Translational Research Institute have developed strong and cohesive interconnections and linkages. Together with our UQ Health Care (GP superclinics), Metro South Mental Health and Inala Indigenous Health Service we are giving productive attention to the full spectrum of health care.

We now have defined seven major themes. A variety of enabling capabilities have been given structure and interconnections to the themes. Each of our themes has defined a comprehensive set of integrated programs.

This publication at a glance encapsulates our shared vision, mission, values, goals, and our key areas of excellence with some of our interlocking enabling capabilities.

**Professor David Theile AO**
PhD (Hon), MBBS (Hons) (Qld),
MS, FRACS, FRCS (Eng), FRCS (Ed)
(Hon), FANZCA (Hon)
Chairman
Diamantina Health Partners
Our Vision
To be recognised internationally as a premier academic health sciences centre, achieving innovative healthcare through academic leadership

Our Mission
To achieve better health and well being globally by integrating innovation and excellence in patient care, training, and research

Our Values

Clinical and Academic Excellence
We will achieve excellence and the highest quality standards in patient care, teaching and research by drawing on the strengths of our partnership

Strong Collaboration
We will actively support interdisciplinary collaborations to achieve greater synergy in clinical care, research and teaching

Innovation and Implementation
We will translate and utilise innovative healthcare solutions – locally, nationally and internationally – to improve patient care and clinical learning through stronger strategic linkages with our partners

Respect, Integrity, Trust, Accountability
We will respect the values of each of our partner institutions; engage and value the collaborative linkages and capabilities; respect our colleagues and patients as we work to effectively deliver our vision
Our goals...

Advancing Knowledge Globally
- Make discoveries and advance knowledge
- Develop new and cost-effective treatments

Building the Right Culture
- Stimulate a learning, research and innovation culture across clinical services
- Aim to prioritise and deliver optimal patient and community welfare
- Promote and practice performance based self evaluation
- Translate innovative research effectively into better patient management
- Undertake research to advance our knowledge base and develop and implement better patient management

Delivering through Collaborative Partnerships
- Deliver on high-need areas with cross-organisational multi-disciplinary involvement
- Deliver world class health care, underpinned by collaboration and greater integration of research and teaching across clinical services

Sharing & Strengthening our Communications
- Communicate effectively with our staff, the community we serve, and our partner organizations
- Promote our organisation, its strengths and its values, locally, nationally and internationally
- Develop and promote international recognition and profile in defined areas of clinical care, research, education and training
- Broaden the influence of DHP by extending its boundaries and partners

Developing People & Creating Opportunities
- Attract and retain skilled staff who share our values
- Mentor and develop the careers of our staff
- Educate and inspire the next generation of health care professionals

Securing & Utilising Resources
- Utilise resources efficiently and effectively to achieve our intended outcomes
- Ensure the future development and operational viability of DHP
- Secure sufficient resources to achieve our current and future goals
- Position DHP to be competitive for funding opportunities as they arise
“We are working together in a partnership, integrating research, training, education, clinical care to deliver innovative evidence based healthcare to our populations.”

Professor David Theile, Chairman
Integrated and Comprehensive Cancer Care

The management of cancer has changed dramatically through increased knowledge of the biology of tumour growth with molecular pathways explaining tumour progression, metastasis and cell death. Treatment for many is still centred around surgery but now finer details from basic science can provide better predictions and better treatments. However, there remains much to develop as cancer is a broad group of diseases with intra patient variation requiring more and more information on each patient and each tumour.

The Cancer Theme within Diamantina Health Partners will provide a number of interlinked pathways that lead to improved patient outcomes via better understanding of tumours using the resources of our tumour banks and circulating tumour cell technology with direct linkages to clinician researchers and innovative clinical trials.

“We aim through this integrated approach to determine and deliver the most effective personalised treatment.”

Associate Professor Euan Walpole

Chronic Diseases Management

Chronic diseases are of long duration, slow progression and incurable. Chronic diseases have emerged as the leading cause of mortality in Australia and in the world. Among non-communicable and non-cancer diseases, diabetes and cardiovascular diseases are the most prevalent, and increasing as a result of the ageing Australian population. Nearly all aged over 65 years report at least one long-term condition. Obesity, diabetes and cardiovascular diabetes are national health priorities.

The Chronic Disease Theme is well positioned to contribute to reducing the national burden of chronic disease. The Theme brings together the specialities of nephrology, hypertension, endocrinology, cardiology, cardiac surgery, and gerontology. It also incorporates the Obesity and Metabolic Collaborative, established as an NHMRC-funded Centre of Clinical Research Excellence partnership between several of the speciality departments across the Princess Alexandra Hospital and Mater Health with research laboratories now co-located in the TRI.

Much common ground exists among chronic diseases with respect to pathogenic mechanisms, risk factors, research and treatment paradigms, models and cost of care.

“Within a model that integrates research, education and clinical services, this theme aims to bring about cost effective and evidence based health gains.”

Professor Ken Ho
Integrated Trauma and Recovery

The Trauma and Recovery Theme aims to provide state of the art trauma care - from the time of the accident through to optimal recovery. This will be achieved through a holistic trauma patient management and treatment chain: prevention, pre-hospital, hospital and rehabilitation. This highly innovative trauma care strategy has not previously been realised in Australia.

The translational opportunities created by this integrative strategy provide unique interfaces between research, education, technology and clinical delivery. The research is inspired and driven by real-world challenges faced by health care professionals, patients and carers.

The holistic treatment chain allows detailed analysis and evaluation of all stages of care and enables focusing of improvement efforts.

“This integration of research, education, clinical practice and evaluation will allow continual optimisation of trauma patient management chain and outcomes, streamlined resource management and realised cost savings.”

Professor Michael Schuetz

Immunity, Inflammation and Infection

The immune system protects us from a variety of diseases. It recognises bacteria, viruses and parasites and distinguishes them not only from our own healthy tissue but also from the bacteria that physiologically colonise our bodies. Disorders of the immune system can result in the inability to cope with infections, autoimmune diseases, inflammatory diseases and even cancer.

When the immune system is less active than normal, life-threatening infections and cancers may occur. This can be either the result of a genetic disease, acquired conditions such as HIV/AIDS, or as the consequence of treatment with immunosuppressive medications. In contrast, a hyperactive immune system may attack normal tissues. Common autoimmune diseases include rheumatoid arthritis, diabetes mellitus type 1 and systemic lupus erythematosus. More recently autoimmunity has been discovered as a key factor in highly prevalent conditions such as functional gastrointestinal disorders.

As more insights are gained into the role of the immune system in disease conditions, opportunities arise to develop better targeted interventions that ultimately will cure conditions currently thought to be incurable.

“This with a highly integrated approach of clinicians and basic scientists our theme aims to elucidate disease mechanisms and develop new treatments that will make a real difference to patients.”

Professor Gerald Holtmann
Our themes...

**Neuroscience, Recovery and Mental Health**

The Centre for Neuroscience, Recovery and Mental Health (the Centre) has been established to facilitate the utilisation of world class neuroscience research and education to effectively inform and improve healthcare for individuals with mental health disorders.

Mental health has always recognised the importance of a multidisciplinary and cross sectorial approach to address better health outcomes for individuals that experience mental illness. The Centre’s partners are committed to forming a sustainable partnership that expands and develops neuroscience, molecular and cellular research; scopes out areas of innovation in neurology and rehabilitation; and develops post graduate mental health educational programs. The effective translation of this new knowledge, innovation and improved clinical skills ensures that individuals who experience poor mental health will have access to the best care that focusses on their improved rehabilitation, recovery and social inclusion.

“Our aim is to improve the lives of those with mental health and neurodevelopmental disorders through better and earlier diagnostic practices, better understanding of demographic and socioeconomic influences, and research from the cellular and molecular to clinical trials and the further development of therapies and early intervention.”

*Associate Professor David Crompton*

**Mothers, Babies and Early Development**

The health of future generations of Australians depends on a healthy start to life. Pregnancy complications such as gestational diabetes and hypertensive disorders provide insights into mothers’ future health risks as well as an opportunity for early intervention. Concurrently, in utero exposure to the maternal environment profoundly influences the future health of children. Currently, the mechanisms underlying these associations are poorly understood. However, this coincidence of maternal and fetal risk offers unique opportunities to develop interventions with potential dual benefits for maternal and infant health.

The Mothers, Babies and Early Development theme encompasses the spectrum of health risks and clinical care of women and their infants before, during and after pregnancy. The interests also extend to later development through childhood and adolescence.

The research expertise covers a spectrum from basic science to epidemiology, through clinical trials research to the implementation of basic and clinical discoveries into everyday practice. A key feature of the Theme is a strong link beyond the hospital sector into general practice.

“Our vision is to combine and extend current clinical, research and teaching strengths into a coordinated approach to mother–baby care across our region.”

*Professor David McIntyre*
Evidence and Innovation into Clinical Practice

New discoveries and subsequent clinical applications are continuously available for implementation into day to day health care practice. While many enter practice through a well established delivery system – for example, administration of orally administered drug to hospital patients – others present challenges in implementation that may require a new delivery system or adjustment of a previous one. For example, thrombolysis in the emergency management of stroke within 4 hours of onset of symptoms requires re-engineering of retrieval practices and emergency care, and potentially a telemedicine solution for patients living at a distance from a major hospital.

This final stage of application of new discoveries may require significant adjustment of health care practice, training, equipment and protocols. In many instances, this process may require major developmental research, as well as robust evaluation of the final product or system.

“The focus of the Evidence and Innovation Theme is to improve health care delivery by applying and evaluating health care practice improvements to both assist in the implementation of new discoveries, and in the review of current practice.”

Associate Professor Ian Scott
Genetics advancing healthcare

Genetics will be a major part of future clinical practice, and I expect that it will become routine within the next decade for everyone to have their genome sequenced, and for cancer sequencing to become part of routine care. Integration of genetics into clinical care will greatly advance personalised medicine. For many diseases genomics will invert practice from a responsive one putting the horse back behind the gate, to a preventative one keeping the gate closed altogether.

“At the UQ Diamantina Institute we recognise the great importance of genomics in medicine, and are building a major program in this field around our UQ Centre for Clinical Genomics, which is already one of the largest genomics facilities in Asia and the southern hemisphere“.

Professor Matthew Brown
Director, UQ Diamantina Institute
**Tissue banks enabling translational research**

The Australasian Leukaemia and Lymphoma Group (ALLG) Tissue Bank, housed at the Princess Alexandra Hospital, facilitates translational research. The ALLG Tissue Bank provides essential services to Australasian sites participating in national and international clinical trials. Uniformity and stringent assessment is necessary in such trials and is a top priority for the ALLG.

“Our future vision includes the establishment of a sophisticated central laboratory conducting essential trial related testing which is not uniformly available through routine pathology services. This vision will be facilitated by the Diamantina Health Partners collaborations. Ultimately research driven advances will lead to improved treatments for patients suffering from haematologic malignancies”.

**Associate Professor Paula Marlton**  
Head of Leukaemia and Lymphoma Services, Princess Alexandra Hospital and Deputy Director of Haematology

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**Telehealth transforming today’s clinical practice**

The Centre for Online Health and the PAH Telehealth Centre provide teleconsultation studios and support staff allowing a vast array of specialists expertise to be made available across north eastern Australia, and beyond.

“Our aim is to engender a world-class research and development program to gain a reputation as a telemedicine centre of excellence and the best adult telehealth service in Australia. Clinicians within the DHP constitute a rich repository of medical knowledge and expertise to be shared beyond conventional geographic boundaries”.

**Professor Len Gray**  
Director, UQ Centre for Research in Geriatric Medicine  
Director, UQ Centre for Online Health

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