DIGITAL HEALTH NETWORK

RESEARCH CAPABILITY

Global Change Institute

September 2021

Imagining a smart health care system, where all data entered during an episode of patient care is reused to improve the care of subsequent consumers.

The University of Queensland is at the forefront of global efforts to deliver exciting new clinical benefits from the multiple, expanding technologies available to digital health care.

Global Change Institute

GENERAL ENQUIRIES

gci@uq.edu.au
Phone: +61 7 3443 3100

INTRODUCTION

The GCI sponsored **Digital Health Network Capability**

World-class expertise to develop a learning healthcare system

Digital healthcare is showing promise to address the imbalance between demand and resources.

However, the overwhelmingly high-level digital information generated at the frontline of clinical care has highlighted the risk of digital records becoming mere filling cabinets, if not processed, analysed and shared properly across clinical settings.

To ensure full benefit of digital records, all data entered during routine clinical care should be available and ready to be re-used for continuous quality improvement and research.

Outputs available to clinicians and users in near real-time can drive continuous, iterative, data-driven improvement of patient outcomes.

This is known as a "learning healthcare system".

However, developing this learning system requires new ways of processing health data, and there is still little research or capability to guide the development process, which is remarkable given the potential benefits to patients and the huge cost of healthcare overall.

Also, current methods of research and education will be challenged as we move away from the traditional "break-fix" model of healthcare to a "predict-prevent" population based digital model, centred around the person, rather than the illness.

Digital transformation enables this shift in focus but requires new skills and research methods in our teams.

To address this challenge, UQ's Global Change Institute (GCI) is sponsoring a new digital health network, underpinned by capabilities across a range of UQ disciplines, alongside external stakeholders.

AIM and Vision

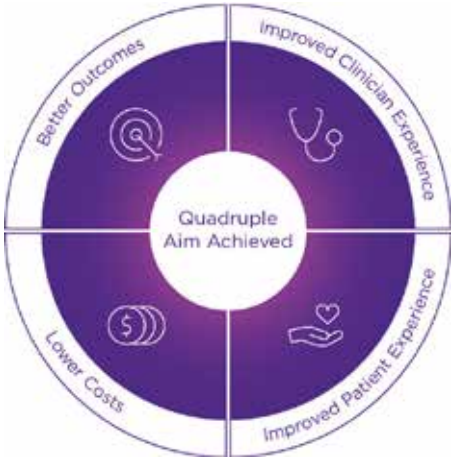
The aim of the network is to transform healthcare by meeting the Quadruple Aim of Healthcare. Our vision is to imagine a smart health care system, where all data entered during an episode of patient care is reused to improve the care of subsequent consumers.

The aim of this network is to create the much-needed framework for these digital records to be recorded, shared across the entire healthcare spectrum, and used in real-time.

This will allow us to lead the healthcare transformation towards a digitally enabled learning healthcare system, to improve the quality and efficiency of healthcare.

With the involvement from more than 30 researchers and clinician-researchers from across UQ, the network is providing unique capability across health data information and utilisation, digital health education, policy, health behavioural sciences, health systems improvement and virtual, remote and technology enabled health at UQ.

Our network also includes ECR/HDR team members—we have three post-doctoral researchers and 8 HDR students. Our projects, funded by the Digital Health CRC and others, have early-career research development as an integral component.



Career development is a focus of the network with the Digital Health Grand Rounds and Digital Health Journal Club providing rich learning opportunities.

The network is involved in developing the Graduate Certificate in Digital Health to provide a comprehensive curriculum in this critical area of healthcare delivery and innovation.

The network researchers have led significant research and consultancy projects. These include projects creating streamlined data extraction from clinical information systems, best practice for digital transformation and artificial intelligence in healthcare.

Consultancies include Federal agencies (e.g. Australian Digital Health Agency), multinational companies (e.g. Stryker) and government (Queensland Health).

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

UQ **research** capability

The University of Queensland is at the forefront of global efforts to deliver exciting new clinical benefits from expanding technologies such as machine learning to advanced imaging, photonics, biomedical engineering and is also globally competitive in robotic surgery.

The researchers from our UQ Digital health Network come from faculties, and schools from across UQ, including:

- Centre for Health Services Research
- Centre for Online Health
- Centre for the Business and Economics of health
- School of Health and Rehab Services
- School of Public Health
- Business School – Future of Health
- Centre for Clinical Research
- Cancer Prevention Research Centre
- Centre for Health Services
- Research (CHSR, FOM)
- School of Maths and Physics (AI)
- School of ITEE (Data science, robotics, AI, EMR).

The network leverages more than $25M in funding over the past 10 years from Category 1-4 funding, including $8.4M from NHMRC and over $10M in industry-led funds.

The network also has collaborations with top institutions across the globe.

Our people

NETWORK LEADER

A/PROF. CLAIR SULLIVAN (CHSR)

Clinical Informatics

A/Prof. Clair Sullivan is a leading Australian researcher on electronic medical records and the digital transformation of health systems and leads the UQ GCI-sponsored Digital Health Network.

At UQ, she leads the Queensland Digital Academy Research Group, at the Centre for Health Services Research (CHSR) at the FOM.

Clair is a fellow of the Royal Australasian College of Physicians, the Australian College of Health Informatics and the Australasian Institute of Digital Health. She is also Adjunct Professor, Faculty of Health, Queensland University of Technology.

She leads and sits on several national digital health advisory committees, including chair of the national MHealth strategy, the ADHA clinical and technical board advisory committee, the Australian Medical Council committee for the digital health and the Australian Medical Association Federal Committee for Digital Health.

researchers.uq.edu.au/researcher/13187
c.sullivan1@uq.edu.au

HEALTH DATA, INFORMATION & UTILISATION

DR GUIDO ZUCCON (ITEE)

Information retrieval; health search; formal models of search and search interaction; and health data science

Dr Zuccon's research interests include information retrieval, health search, formal models of search and search interaction, and health data science.

Regarding formal models of information retrieval, he is particularly interested in models of search, information seeking and interactions, semantic models of search, exploiting word embeddings in information retrieval, and evaluation of information retrieval (including task-based evaluation).

In relation to medical/health information retrieval and data science, he is interested in retrieval models and strategies for consumers searching the web for health advice, and retrieval models and strategies for cohort identification for clinical trials from electronic medical records.

researchers.uq.edu.au/researcher/22857
g.zuccon@uq.edu.au

DR SALLY SHRAPNEL (MATHS & PHYSICS)

Machine learning

Dr Shrapnel is an inter-disciplinary scientist working at the interface of causality and machine learning.

She has studied biomedical science, medicine, surgery, biomedical engineering and has been a registered medical practitioner for more than 20 years.

She studied quantum physics and machine learning – her PhD topic was quantum causal learning – and is Deputy Director of the ARC COE for Engineered Quantum Systems.

Her research combines theory, methodology, and applications across a broad range of disciplines. Her goal is to infer causal relationships from different types of data and build models that are robust with respect to interventional distributional shifts.

researchers.uq.edu.au/researcher/16630
s.shrapnel@uq.edu.au

DR CHELSEA DOBBINS (ITEE)

Digital health and human computer interaction

Dr Chelsea Dobbins is a Senior Lecturer within UQ's School of Information Technology and Electrical Engineering (ITEE). Her research focuses on the detection of emotions using smartphones, wearable sensors, and personal informatics to support clinical outcomes and behavioural change by detecting markers of disease and allowing people to reflect upon their behaviour by integrating personal data with a sense of self.

The digital health aspect of her work focuses on investigating the integration of technology in supporting improvements to our health and spans the following research areas: lifelogging, affective computing, pervasive computing, digital health, human computer interaction, machine learning, mobile computing, mobile/wearable sensors, human digital memories, signal processing, and physiological computing.

researchers.uq.edu.au/researcher/23170
c.m.dobbins@uq.edu.au

PROF. JASON POLE (CHSR)

Administrative data and complex survey instruments

Jason D. Pole is a Professor in the Centre for Health Services Research (CHSR) within the Faculty of Medicine. Relocating from Toronto, Canada in early 2020, Jason is building a program of research that utilises clinical and surveillance data linked with administrative data to answer health questions in several areas.

Jason has a background in epidemiology and health services research with an emphasis in the use of administrative data and complex survey instruments.

Currently, Jason has research interests in the areas of health care utilisation among childhood cancer survivors, the effects of childhood cancer treatment specifically on the development of second cancers and education achievement.

researchers.uq.edu.au/researcher/25515
j.pole@uq.edu.au

HEALTH DATA, INFORMATION & UTILISATION

DR OLIVER CANFELL

Clinical informatics and Precision prevention of obesity

Dr Oliver Canfell is a postdoctoral researcher at The University of Queensland, an Accredited Practising Dietitian (APD), interdisciplinary leader and health transformer dedicated to pursuing new knowledge to build better lives for all children, young people and adults, equally and equitably.

Oliver is working as a Research Fellow in Digital Health Transformation with UQ Business School, collaborating with the Centre for Health Services Research (CHSR) (Faculty of Medicine), Digital Health CRC and Queensland Health.

Oliver also holds an Affiliate Research Fellow position with the CHSR. Oliver is a member of the Queensland Digital Health Research Network and is currently Chair of the Digital HDR Cohort (>10 HDR candidates).

Oliver's current program of research focuses on digital health transformation across two pillars: (1) Clinical informatics and (2) Precision prevention of obesity.

researchers.uq.edu.au/researcher/28628
o.canfell@uq.edu.au

A/PROF. JASON FERRIS

Data Science

A/Prof. Jason Ferris is the Director of Research and Statistical Support Services which services UQ's Faculty of Medicine. He is also a research academic at the Centre for Health Services Research (CHSR), where he is the Program Leader for Global Substance Use and Mental Health (GSUMH) unit.

As an epidemiologist he has a successful history of using administrative and registry health data to translate research into policy change.

Jason holds an honorary professorial role at Turning Point, Victoria (2018-) and is also the Chief Data Scientist for the Global Drug Survey (2013-). In 2019, he was ministerially appointed an Advisory Council Member to the Queensland Mental Health Commission.

researchers.uq.edu.au/researcher/2822
j.ferris@uq.edu.au

DIGITAL HEALTH EDUCATION

DR ANN PEACOCK (NURSING, MIDWIFERY & SOCIAL WORK)

Digital learning modules development

Dr Peacock's interests lie in developing learning modules (theory and practical) that prepare student nurses and midwives to work with digital health and patient care.

Ann has been a midwife for more than 25 years, and in that time has worked in all aspects of maternity care. She has specialised in antenatal care, lactation consultancy and Advanced Certificate in Neonatal Intensive care.

Ann's previous experience and current role as a Nursing and Midwifery Lecturer provides an opportunity to both prepare and develop the future Digital Health workforce within Nursing and Midwifery.

researchers.uq.edu.au/researcher/1480
a.peacock2@uq.edu.au

DR BEN BARRY (SOCM)

Teaching innovation to support learning with electronic medical records

Dr Barry is leading a teaching innovation to support learning with electronic medical records for medicine, nursing, pharmacy, physiotherapy, and IT students.

He has extensive experience teaching allied health (exercise physiology), medical science and medicine students.

This has included coordinating degree programs and courses, leading teaching teams and discipline-wide curriculum reviews, and innovations in online teaching of health professionals.

Dr Barry is an exercise physiologist and academic with a research background in adaptations of the nervous system to exercise. His research informs and guides exercise and education interventions for the management of weakness, pain and fatigue.

researchers.uq.edu.au/researcher/16769
b.barry@uq.edu.au

DR CHRISTINE SLADE (ITALI)

Design of digital health teaching and learning projects

Dr Slade designs and delivers teaching and learning projects, and curriculum enhancement, and advocates for the inclusion of digital aspects in curricula.

Since 2012, she has advanced folio pedagogies to facilitate students using ePortfolios to demonstrate learning over time, reflect on their developing practices, and to showcase their digital brand to wider audiences.

Aspects of these practices are important when understanding and applying digital ethics and eProfessionalism principles to online engagement.

Christine is a member of the international Association for Authentic, Experiential and Evidence-based Learning (AAEEBL) Taskforce on Digital Ethics and ePortfolios, which has produced guiding ethical principles, strategies and scenarios for institutions, educators, administrators and students.

She also partnered with the UQ Library to develop a new eProfessionalism digital essentials module for educators and students to use when building their online presence.

She has a particular interest in Digital Healthcare and work with international academics and industry representatives to advance student preparation for clinical placements and future work.

researchers.uq.edu.au/researcher/14189
c.slade@uq.edu.au

VIRTUAL, REMOTE & TECHNOLOGY-ENABLED HEALTH

PROF. ELIZABETH EAKIN (SPH)

Population-level dynamics of chronic disease and technology-enabled interventions

Professor Elizabeth Eakin is Head of School and Principal Research Fellow in UQ's School of Public Health.

As a behavioural scientist working in the field of population health, she has developed an internationally recognised program of research in health behaviour interventions in chronic disease prevention and management.

As part of the network, she is interested in investigating population-level dynamics of chronic disease and associated technology-enabled interventions.

Her research emphasises CONSORT-designed, pragmatic randomised controlled trials (RCTs) of physical activity, dietary behaviour and weight loss interventions, using broad-reach delivery modalities (telephone and text messaging) to maximise population reach.

Attention is given to rigorous measurement of health behaviours and biomarkers of disease risk; development of intervention protocols guided by and contributing to the science of behaviour change and maintenance; and systematic evaluation of outcomes important to informing translation into practice, including cost-effectiveness.

She has developed numerous partnerships across the cancer control community – including with consumers, clinicians, researchers nationally and internationally and cancer control organisations - which have facilitated the uptake her team's work on telephone health coaching by state-level organisations across Australia.

researchers.uq.edu.au/researcher/1335
e.eakin@uq.edu.au

PROF. COLLEEN LAU (SPH)

Infectious disease epidemiology

Prof. Colleen Lau is an NHMRC Fellow and Professorial Research Fellow at the UQ School of Public Health. Her areas of expertise include emerging infectious diseases, neglected tropical diseases, and clinical travel medicine.

Her wide range of research interests include infectious disease epidemiology, spatial epidemiology and disease mapping, infectious disease surveillance and elimination, vaccinations, travel health, environmental health, and digital decision support tools.

Professor Lau's research projects focus on answering practical questions in clinical management of infectious diseases and operational questions on improving strategies to solve public health problems.

researchers.uq.edu.au/researcher/2260
colleen.lau@uq.edu.au

A/PROF. GENEVIEVE HEALY (SPH)

Population-level dynamics of chronic disease and technology-enabled interventions

A/Prof. Genevieve Healy is a MRFF Emerging Leadership Fellow at the UQ School of Public Health with expertise in behaviour change. Her internationally recognised program of work focusses on supporting adults to sit less and move more for their health and wellbeing, including through technology-enabled interventions.

She works with a multidisciplinary team in collaboration with industry, policy and practice partners to translate her research into practice. This includes the BeUpstanding program — an online program with an underlying implementation and evaluation platform — designed to support work teams to sit less and move more.

researchers.uq.edu.au/researcher/757
g.healy@sph.uq.edu.au

VIRTUAL, REMOTE & TECHNOLOGY-ENABLED HEALTH

DR DOLLY BALIUNAS (SPH)

Population-level dynamics of chronic disease and technology-enabled interventions

Dr Dolly Baliunas is a Research Fellow in Alcohol, Tobacco and other Drug Studies (ATODs) at the UQ School of Public Health.

These studies investigate population-level dynamics of chronic disease and technology-enabled interventions. They focus on chronic disease prevention and management, sedentary behaviour, and smoking, alcohol and substance use. Among a body of work that includes more than 35 peer-reviewed journal articles, Dr Baliunas has conducted a range of ATODs including primary care-based smoking cesation treatments, the relationship between clinical decision support systems and high-risk alcohol consumption intervention, and web-based tools to combat smoking addiction.

researchers.uq.edu.au/researcher/27870

d.baliunas@uq.edu.au

PROF. TREVOR RUSSELL (RECOVER)

Telerehabilitation

Trevor is a Professor in the Division of Physiotherapy within UQ's School of Health and Rehabilitation Sciences. He has a PhD in Telerehabilitation and co-directs UQ's Centre for Research in Telerehabilitation. His primary research focus surrounds the use of mobile technologies and telecommunication tools for both clinical service provision and teaching and learning in the rehabilitation sciences.

Specifically his research aims to develop innovative computer based hardware and software solutions to enable the provision of rehabilitation services remotely via the Internet; to further the evidence base of telerehabilitation through controlled clinical trials of telerehabilitation interventions; to evaluate the treatment efficacy of specific telerehabilitation interventions; investigate cost-benefit factors of telerehabilitation services; and develop best practice guidelines for the establishment of telemedicine services in the rehabilitation sciences.

researchers.uq.edu.au/researcher/891

t.russell@uq.edu.au

PROF. ANTHONY SMITH (COH)

Evaluation of new telehealth applications

Prof. Smith has extensive experience in the planning, implementation and evaluation of new telehealth applications for clinicians and patients - in metropolitan, regional and remote areas. Specific research interests include the evaluation of feasibility, cost-effectiveness and diagnostic accuracy of telemedicine applications.

He has developed and sustained an exemplary international track record in the establishment and evaluation of telehealth, principally in paediatrics and more recently in the adult and aged care disciplines.

In collaboration with the Royal Children's Hospital in Brisbane, he was instrumental in establishing and managing the Queensland Telepaediatric Service (QTS) from 2000 to 2015.

researchers.uq.edu.au/researcher/1081

a.smith8@uq.edu.au

PROF. ROSS CRAWFORD

Orthopaedic Robotic surgery

Ross Crawford is a Professor of Orthopaedic Research at Queensland University of Technology and Honorary Professor at UQ.

He is an internationally recognized expert in the field of hip and knee replacement surgery. He performs about 150 hip and 150 knee replacements per year, both in public and private practice.

He lectures and teaches surgical techniques both nationally and internationally. In this role he supervises PhD students, post-doctoral researchers and collaborates closely with experts in the field of tissue engineering, cartilage degradation, cartilage mechanics, and clinical orthopaedics.

staff.qut.edu.au/staff/r.crawford

r.crawford@qut.edu.au

VIRTUAL, REMOTE & TECHNOLOGY-ENABLED HEALTH

A/PROF. LIAM CAFFERY

Telehealth, digital skin imaging

Liam is an Associate Professor in Telehealth and Director of Telehealth Technology for the University of Queensland's Centre for Online Health.

His research is centred on pragmatic trials of telehealth services. Liam has a special interest in the use of telehealth for Indigenous health and rural health care delivery.

He is involved in telehealth service development, delivery and evaluation across a broad range of telehealth services. Liam uses implementation research principles to understand why telehealth services work well in some scenarios and not others. He evaluates the effectiveness of telehealth from multi-disciplinary perspectives including clinical effectiveness, patient perspectives, economic aspects, organisational aspects, and socio-cultural, ethical and legal aspects.

Liam also has an active research agenda in health informatics, in particular, in imaging informatics, with a focus on skin imaging for melanoma detection. Liam chairs dermatology working group for the DICOM standards development organisation as well as the technology group for the International Skin Imaging Collaboration: Melanoma Project. This project is an academia and industry partnership designed to facilitate the application of digital skin imaging to help reduce melanoma mortality. Liam is technology lead for the Australian Centre of Excellence in Melanoma Imaging and Diagnosis. Liam has previously been a member of the Standards Australia IT-014 Health Informatics technical committees for telehealth and messaging and communication.

researchers.uq.edu.au/researcher/7626
l.caffery@uq.edu.au

PROF. PETER SOYER

3D digital body skin imaging

Professor Soyer is an academic dermatologist with over 30 years' experience in the field. He was appointed as the inaugural Chair in Dermatology by The University of Queensland (UQ) in 2007 and as Director of the Princess Alexandra Hospital (PAH) Dermatology Department in 2008.

He has a strong focus on translational skin cancer research in his dual role as Director of the Dermatology Research Centre (DRC), UQ Diamantina Institute, UQ Faculty of Medicine; and leadership of the Dermatology Department at the Princess Alexandra Hospital in Brisbane.

Professor Soyer is internationally recognised in the field of dermatology with particular expertise in the areas of clinical dermatology, dermatooncology, dermatopathology and dermatologic imaging (dermoscopy and reflectance confocal microscopy). Within the dermatology discipline he is a pioneer and world leader in the field of dermoscopy of pigmented skin lesions, a non-invasive diagnostic method. He has led the development of the morphologic classification system currently used worldwide.

researchers.uq.edu.au/researcher/1918
p.soyer@uq.edu.au

POLICY & TRUST

DR AMELIA RADKE

Interdisciplinary Futures Policy

Dr Amelia Radke is a Postdoctoral Research Fellow in Digital Human Rights at UQ's Centre for Policy Futures. Amelia joined the Centre for Policy Futures in 2019 as part of the CSIRO-UQ Responsible Innovation Collaboration to investigate the intersection of technology and human rights on a local to a global scale.

As an interdisciplinary scholar, Amelia's research lies at the juncture of science and technology studies, anthropology, and socio-legal studies. Amelia attained a Bachelor of Arts with First Class Honours (anthropology) in 2013, where she was the recipient of the Bruce Rigsby Prize in Anthropology; and awarded her PhD in 2018 from the School of Social Science and School of Law at the University of Queensland.

researchers.uq.edu.au/researcher/24176
a.radke@uq.edu.au

DR CAITLIN CURTIS

Trust & Privacy

Dr Curtis is interested in science and technology and their impacts on society, and she is particularly interested in privacy issues surrounding digital DNA data. More broadly, her work explores how we can responsibly deploy emerging biotechnology and AI-driven technologies.

Her versatile science and science communication skills make Dr Curtis a valuable member of the Centre for Policy Futures' Science, Technology and Society research program.

Dr Curtis is a cross-disciplinary researcher, with highly developed quantitative and qualitative skills. She is a trained population geneticist, with postdoctoral experience in population genetics and genomics, forensic genetics, ancient DNA, and bioinformatics.

researchers.uq.edu.au/researcher/14369
c.curtis@business.uq.edu.au

HEALTH BEHAVIOURAL SCIENCES

PROF. MONIKA JANDA

Behavioural Science; Cancer prevention, early detection and treatment outcomes

Professor Monika Janda is a Professor in Behavioural Science, Centre for Health Services Research, at the Faculty of Medicine, University of Queensland, and a NHMRC Translational Research Fellow (2018-20).

She is a health psychologist with a research background in cancer prevention and quality of life research, with strong clinical collaborations. Her work focuses on applied health and clinical research problems, making a difference to cancer prevention, early detection and treatment outcomes.

Professor Janda has two main research interests i) prevention and early detection of cancer (in particular melanoma); and ii) improving clinical and supportive care for cancer patients (in particular gynaecological cancers), as well as health services delivery and outcomes.

During the past five years, she has a strong research focus on improving the early detection of melanoma using telehealth methods such as mobile teledermoscopy and enhanced skin self-examination.

In her cancer work she contributed essentially to the LACE trial which will change the current standard treatment for early stage endometrial cancer worldwide. She has supervised 19 postgraduate students to completion.

researchers.uq.edu.au/researcher/11560
m.janda@uq.edu.au

HEALTH SYSTEM IMPROVEMENT

PROF. ANDREW BURTON-JONES (BUSINESS SCHOOL)

Electronic health records

Professor Burton-Jones studies the effective governance of digital transformation and the effective use of electronic medical records. The premise of much of his research is that data and technology by itself rarely creates value – instead, the value arises when there is a combination of the right technology and the right use of it in a particular context. Finding and supporting this combination requires good governance.

Through longitudinal field studies of digital transformation, he seeks to learn how health service providers and clinical leaders can leverage their investments in new systems and new data to best effect — and what can derail their efforts.

He is particularly interested in the power of 'metrics' in the health system and how focusing governance efforts on the benefit of new metrics could greatly help the health system and its consumers.

researchers.uq.edu.au/researcher/755

abj@business.uq.edu.au

PROF. BRENDA GANNON (CEBH)

Health Economics of Ageing

Prof. Gannon is an applied health economist and econometrician with experience in the health economics of ageing, health care utilization, and use of big and complex data.

She is a Professor in the School of Economics and Affiliate Professor at the Centre for the Business and Economics of Health, The University of Queensland, and an affiliate member of CEPAR (ARC Centre for Research Excellence in Population Ageing Research). Professor Gannon is an international expert in the field of Health Economics of Ageing and has won over $28 million, as chief investigator, in collaborative research income, with economics, medicine and social science with academia and industry.

She has developed a range of projects in Economics of Ageing and Longevity on topics of physical activity and cognition, health shocks and health care utilization, and consumer directed care and home care. Her work has been influential in the development of programs for falls preventions and informing policy on disability and social inclusion, and has positively impacted on the health of many older people across the world.

researchers.uq.edu.au/researcher/16432

brenda.gannon@uq.edu.au

PROF. LEN GRAY (CHSR)

Models of aged care service delivery, e-health and telemedicine strategies

Prof. Gray is the Director of the Centre for Health Services Research (CHSR) within the Faculty of Medicine. Prior to assuming this role, he directed both the Centre for Online Health and the Centre for Research in Geriatric Medicine, both of which have been incorporated into the new CHSR.

Prof. Gray's research aims to improve the quality of healthcare and quality of life for older people, and vulnerable populations of all ages, via new technologies and systems of care.

His research interests focus on aged care policy, models of aged care service delivery, assessment and care planning systems, and in recent years, e-health and telemedicine strategies.

researchers.uq.edu.au/researcher/1121

len.gray@uq.edu.au

HEALTH SYSTEM IMPROVEMENT

DR LEE WOODS

Centre for Health Services Research

As a nursing informatics researcher, I am committed to the digital transformation of the Australian healthcare system. I believe in the power of digital health to improve the experiences of patients and clinicians, reduce healthcare expenditure, and improve population health. Currently, I am undertaking a post-doctoral research fellowship at the University of Queensland (Herston campus) funded by the Digital Health Cooperative Research Centre (DHCRC). The research involves digital maturity assessment of Queensland Health in collaboration with the Healthcare Information and Management Systems Society (HIMSS). My PhD (2019) was focused on mobile health design where I led a team to co-design Care4myHeart, a consumer health app to support heart failure self-management using the latest techniques in participatory, user-centred design.

researchers.uq.edu.au/researcher/29207
lee.woods@uq.edu.au

DR KRISTIANA LUDLOW

School of Psychology, Faculty of Health and Behavioural Sciences

Dr Ludlow is a Postdoctoral Research Fellow at the School of Psychology, University of Queensland, and an Honorary Postdoctoral Fellow at the Australian Institute of Health Innovation, Macquarie University. She is passionate about collaborating with consumers and health professionals to improve the delivery of healthcare and mental health services through digital solutions. Dr Ludlow is currently working with children and adolescents to co-design a digital youth mental health platform. In her previous position at the Australian Institute of Health Innovation she engaged with aged care clients in the co-design of a digital dashboard of integrated data and predictive models to identify risk of falls and poor quality of life.

researchers.uq.edu.au/researcher/30668
k.ludlow@uq.edu.au

OUR PARTNERS

CSIRO AUSTRALIAN EHEALTH RESEARCH CENTRE (AEHRC)

Dr Jim Steel leads CSIRO's Health Data and FHIR team and has extensive experience in health data interoperability and standards, and the application of computational modelling to health.

HEALTHCARE PARTNERS

Translation of research output into better clinical practice will depend on the close partnership with the health sector. Further, the model of a "learning" health system is predicated on continuous improvement and agile methods, requiring research programmes to be embedded in the health system.

Prof. McNeil – Queensland Health Deputy Director General & CCIO; **Dr Wong** – Director of Data Strategy, QH; **Firstname Green** – Deputy Director General & CEO of eHealth QLD; and **Dr Fahim** – CCIO Metro North Health Hospital Service (MNHHS) are active members of this network. We also collaborate with **David Bunker** (Executive Director BDHP) and **A/Prof. Mike Beckmann** (Mater Mothers', Babies' and Women's Health).

HEALTH & WELLBEING QLD

Health and Wellbeing Qld is an independent organisation that works to benefit the whole of Queensland. Their vision is to improve the health and wellbeing of all Queenslanders and reduce health inequities.

Their mission is to partner, to create and to amplify policy and actions that achieve real and measurable improvements for the health of every Queenslander.

Addressing health problems such as overweight and obesity, and the impact these have on people's quality-of-life requires a multi-strategy, multi-modal approach, and the work in partnership to protect and empower people. Solutions must be shared across all areas of society – community, government, non-government organisations and the private sector – for the benefit of our entire population, especially those who are living with disadvantage.

They address this challenge by developing a new way of working that requires innovation, partnerships and an element of risk-taking that government is not well placed to deliver. In this regard, they have found a strategic alignment with the vision of the UQ Digital Health Network sponsored by the Global Change Institute.

Industry partners

STRYKER

Stryker is a world leader in medical technology providing products and services in orthopaedics, medical and surgical and neurotechnology and spine aimed at improving patient outcomes.

Stryker has recently invested in an R&D Hub in Brisbane to enable greater engagement with academic and clinical partners (Queensland Health, the Queensland University of Technology and The University of Queensland) in Australia in driving innovation in healthcare.

Key Stryker executives involved in the Digital Health Research Network include Senior Director, Research and Development **Rob Wood** and Research Development Manager **Julia Hocking**.

Within the network, Stryker is contributing to the transformation of health pathways relevant to orthopaedic medicine, and are an active partner in the TRANSFORM (Transformative Real-time ANalytics System For ORthopaedic Medicine) project that the network aims to develop as one of their use cases.

This project submitted to MRFF Frontiers Stage One (pending for outcome) aims to create a scalable digital surgeon, hospital and patient platform to streamline, monitor and direct a personalised patient care pathway to deliver the right treatment for the right patient at the right time, every time.

Global Change Institute
The University of Queensland
Australia
T +61 7 3346 0739
gci@uq.edu.au

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