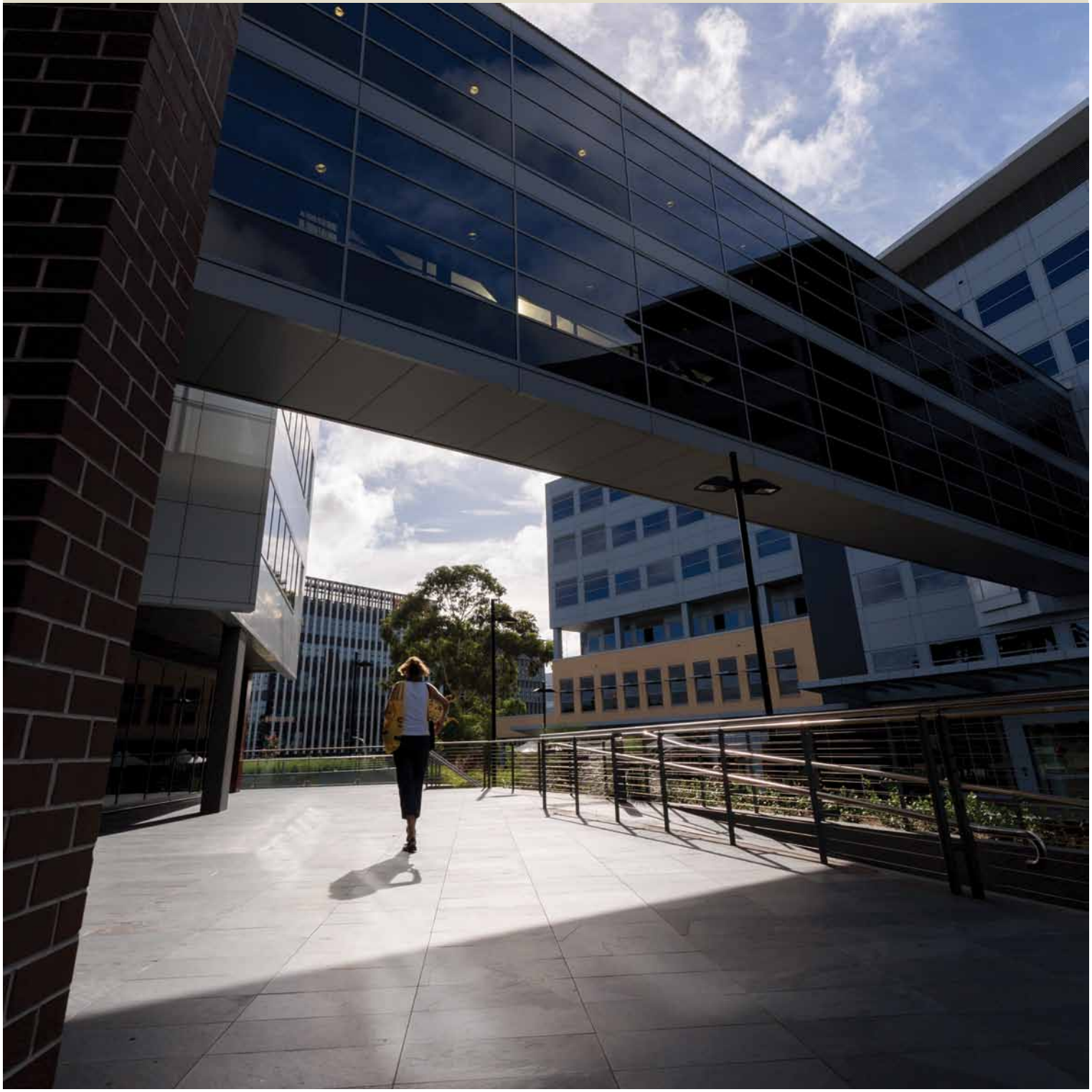
AUSTRALIAN INSTITUTE
OF HEALTH INNOVATION
Faculty of Medicine and Health Sciences

MACQUARIE University

Research Insights

SEPTEMBER 2017



JOIN OUR TEAM

We welcome policy-makers, researchers, clinicians, information technologists, economists, computer engineers, students, government and industry who share our vision of health system sustainability to join our team.

For more information on current research opportunities at AIHI visit **aihi.mq.edu.au/study-at-aihi**

NHMRC Partnership Centre for Health System Sustainability

Professor Jeffrey Braithwaite, Director of the Australian Institute of Health Innovation (AIHI), with Professor Enrico Coiera and Professor Johanna Westbrook have been awarded a grant of $5.25 million to lead and administer the Partnership Centre for Health System Sustainability ("the Centre"). The Centre is jointly governed and funded to the value of $10.75 million over five years by NHMRC, Bupa Health Foundation, NSW Ministry of Health, Department of Health Western Australia and the University of Notre Dame Australia. The Centre will support the implementation of research-informed improvements in healthcare system performance sustainability. It will commence in mid-2017 and will take a co-production approach to research design and implementation. This research collaborative comprises seventeen outstanding academic and health system investigators, and a range of health service providers, system managers, policy-makers, consumers, professional bodies and insurers from across Australia.

The objective of the Centre is to investigate and create interventions to improve health system performance sustainability. The Centre will explore the issues impacting healthcare system sustainability and develop and evaluate a set of implementable interventions that are appropriate from a clinical, patient and economic perspective. The outcomes of this work will be practical in nature and relevant to governments at all levels.

RESEARCH THEMES

Health system sustainability requires an alignment of funding, strategy, delivery, performance management and information to achieve optimal health outcomes, patient experience and value for money for the community. The areas of research for the Centre which address these interconnected components of health system sustainability are:

- Using analytics, technology and shared data
- Reducing waste and low-value care
- Promoting better value for the health dollar

COLLABORATORS

The Centre will harness the expertise of subject matter experts from the public, private and non-government sectors and is based at Macquarie University, Sydney. The team of investigators on the project are:

Professor Jeffrey Braithwaite (CI)
Macquarie University

Professor Enrico Coiera
Macquarie University

Professor Johanna Westbrook
Macquarie University

Professor Paul Glasziou
Bond University

Professor Anthony Scott
University of Melbourne

Professor Jonathan Karnon
University of Adelaide

Professor Rachelle Buchbinder
Monash University

Professor Robyn Ward AM
University of Queensland

Dr Teresa Anderson
Sydney Local Health District

Professor Leonard Gray
University of Queensland

Professor Helena Teede
Monash Partners

Ms Leanne Wells
Consumers Health Forum of Australia

Ms Jennifer Nobbs
Independent Hospital Pricing Authority

Ms Kim McClymont
NSW Ministry of Health

Mr Babu Simon
Department of Health Western Australia

Ms Annette Schmiede
Bupa Health Foundation

Professor Christine Bennett AO
University of Notre Dame Australia

OUR FIRST SYMPOSIUM

An inaugural symposium was held in Sydney on 16 March 2017 to showcase the proposed research to be conducted and stimulate critical discussion and involvement in formulating the vision and future work of the Centre.

Over 120 people attended the Symposium, representing a broad range of sectors: health departments and government health agencies, research institutions, health insurers, private health services, professional and peak bodies, Local Health Districts and Primary Health Networks, hospitals, consumers and industry experts. Feedback was both constructive and positive, particularly from consumers who also attended a separate symposium the following day designed to better harness consumer input into AIHI's research agenda.

The feedback received from the audience can be read in conjunction with the presentations given by all Lead Investigators available at: **healthsystemsustainability.com.au/news-events-and-participation/event-outcomes/**

Contact the Centre Coordinator at **aihi.pchssadmin@mq.edu.au** to register your interest in the Centre's research program.

Childhood injury

Traumatic injury is the leading cause of death and is a leading cause of hospitalisation and long-term disability among children aged 1 to 16 years in Australia. Many of the serious injuries sustained by children can have long-term implications, such as physical disabilities and chronic pain.

"Medical and safety advances, pre-hospital interventions, legislative change and the introduction of safety initiatives have all contributed to increasing the survival of children following an injury and reducing the severity of injuries sustained. Yet, in Australia there has been no comprehensive examination of injury characteristics and survival over time for injured children."

"Having accurate and timely information on child injury hospitalisations is essential for identifying the injury burden, determining healthcare costs and evaluating the impact of injury prevention measures" explains Associate Professor Rebecca Mitchell.

A recent research study funded by the Day of Difference Foundation aimed to examine patterns of injury and hospitalisation costs in children between 2002 and 2012.

Fall-related injuries, poisoning and burns and scalds were common among 0-5 year olds, falls from playground equipment common among 6-10 year olds and falls and road transport injuries were common among children aged 11-16 years. Children under 10 were identified to be at a higher risk of mortality within 30 days after the injury. Children who sustained head injuries, who resided in regional Australia or who were injured following road transport incidents or drowning or submersion all had a higher risk of mortality.

Although childhood injury has been a national public health priority in Australia for 30 years, the results indicate that childhood injury has not significantly decreased over this 10-year period, with hospital treatment cost estimated to be $2.1 billion over this period.

"Childhood injury is preventable. If it does not reduce, it will continue to remain a burden to the Australian community. The development of a national multi-sectorial childhood injury prevention strategy in Australia is long overdue." Associate Professor Mitchell says.

Associate Professor Rebecca Mitchell
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Identification and surgical intervention for refractory epilepsy

Epilepsy is the most common serious brain disorder in the world. Refractory epilepsy is a complex type of epilepsy that leads to high rates of co-morbidity, decreased life expectancy, stigmatisation, reduced quality of life and extensive psychosocial problems. One third of all refractory patients may be eligible for resective surgical intervention, which removes part of the brain. This can lead to positive clinical outcomes if efficiently managed.

In Australia, however, a critical gap of between six months to two years or more exists between the initial assessment for surgery and the surgical procedure, leading to extensive impact on the burden of disease and on hospital service use, in-patient treatments and costs, patient contacts and interpersonal relationships.

Professor Frances Rapport and her team are conducting a staged study in collaboration with neurology clinicians at Westmead, Royal North Shore, and Royal Prince Alfred Hospitals in an innovative mixed-methods approach to assessing gaps in treatment, clinical practices for refractory epilepsy patients and patient and healthcare professional experience during the period of initial patient assessments. This will be accompanied by a retrospective epidemiological study of all individuals hospitalised with a diagnosis of epilepsy in New South Wales in the last five years, examining health services' use and treatment, including refractory surgery outcomes.

"We will gather robust evidence about the treatment, clinical practices and outcomes for refractory epilepsy patients currently being assessed for surgery. This will provide a comprehensive understanding of epilepsy patient health service use, a review of health data, and most importantly, in-depth insights into the reported outcomes of patients and healthcare professionals who work closely with them," says Professor Rapport.

"We hope to examine the implications of delay in identifying and treating refractory epilepsy patients who may be eligible for surgical intervention. This will better inform the rationale for more effective referral and treatment in the future, and guide the development of a clinical support resource toolkit for use in the wider Australian context that will benefit patients and healthcare professionals alike".

Professor Rapport says this will be the first Australian study examining delays in early identification, surgical assessment, and treatment of refractory epilepsy patients. This will provide important detailed understanding of challenges facing practitioners working in complex epilepsy. The study has a unique combination of an epidemiological examination of service use alongside a year-long qualitative assessment of patient journeys through the healthcare system across key New South Wales clinics.

"The level of detail in this study will lend itself to the transferability of findings to other Australian jurisdictions, and international healthcare services," she says.

Professor
Frances Rapport
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Computerised decision support to improve antibiotic prescribing in hospitals

There is now little doubt that the inappropriate use of antibiotics contributes to the emergence of resistance and that improving antibiotic use is necessary for the containment of resistance. Studies have shown that up to 50% of antibiotics are prescribed inappropriately. Many interventions designed to improve antimicrobial prescribing in hospitals have been trialled with varying levels of success. One intervention shown to significantly increase appropriate use of antibiotics is computerised decision support embedded in electronic prescribing systems (ePS).

Computerised decision support can take many forms. For example, computerised alerts can trigger at the point of prescribing to warn prescribers that a particular antibiotic is restricted, or drop-down lists can restrict the use of antibiotics to particular indications (reasons for use). The design of decision support assumes that prescribers will record or select accurate indications in the ePS. For example, it is assumed that prescribers will select an indication from a drop-down list that accurately reflects what they intend to use the antibiotic for.

In this research, Dr Melissa Baysari and her team set out to determine whether this was actually the case. "Specifically, we aimed to determine whether the indications recorded by prescribers in an ePS reflected true indications for use. To do this, we audited 550 antibiotics prescribed over a 2-month period in a teaching hospital in Sydney, Australia, and compared the indications recorded in the ePS to the indications documented in patient medical records (i.e. their clinical notes). We found that an accurate indication was recorded in the electronic system in only 39% of the antibiotics reviewed. In 31% of cases, no indication was recorded in the electronic system at all, even though this information was mandatory. Instead, prescribers entered nonsensical text (e.g. "fsdf") or entered punctuation (e.g. ".") to move onto the next screen in the system," says Dr Baysari.

"Prescribers were interviewed and we identified that there were a number of reasons for inaccurate documentation of indications in the electronic system." A key factor was found to be that indications entered into the ePS were not monitored or followed-up. Although ePS enable greater visibility, and as a consequence, greater accountability than traditional paper-based systems, this research has shown that this benefit is realised only if computerised data are reviewed and followed-up. Thus, implementation of computerised decision support, although often viewed as a panacea to inappropriate antibiotic use, may require 'human' support and resources to achieve anticipated benefits.

Dr Melissa Baysari
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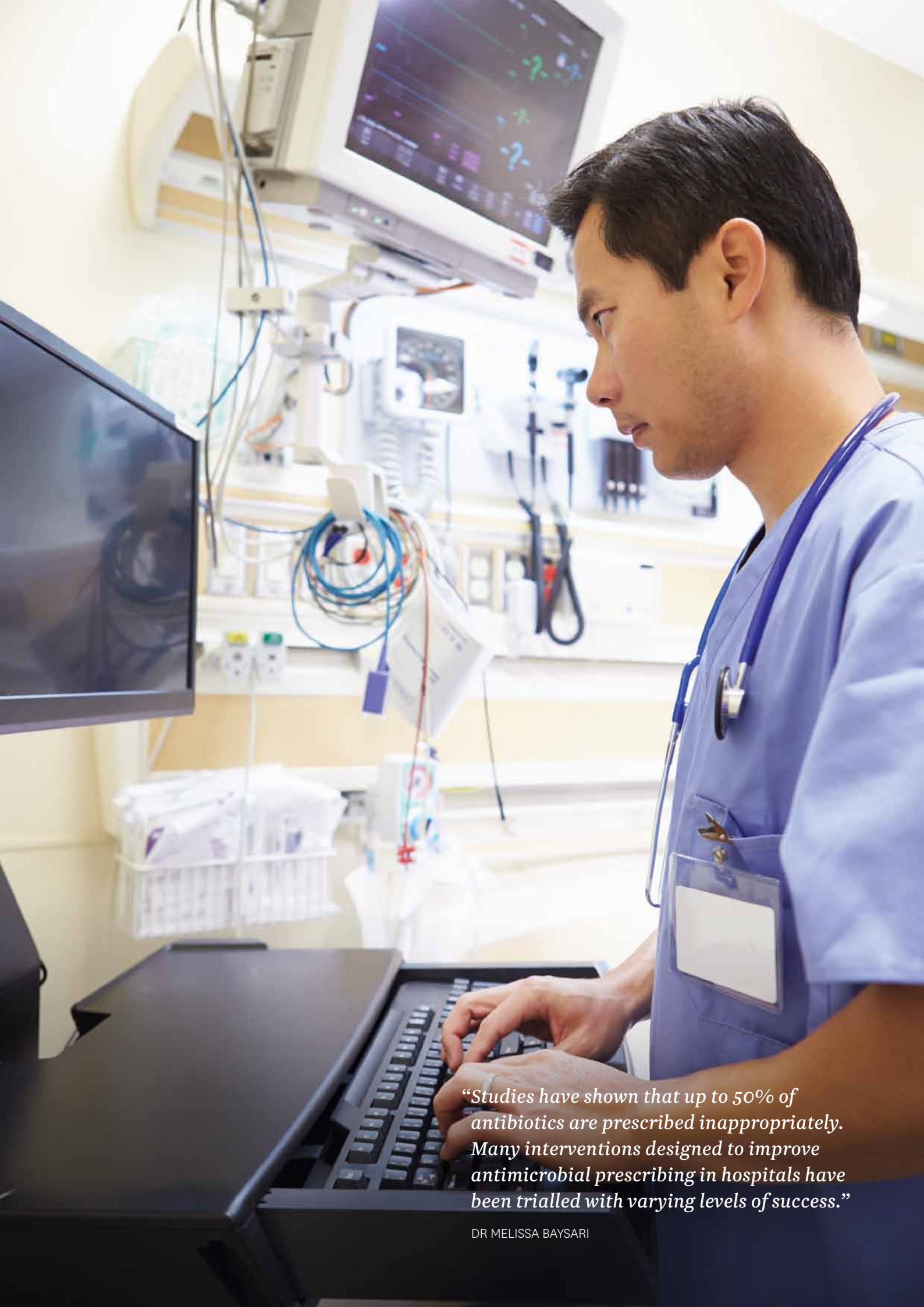

"Studies have shown that up to 50% of antibiotics are prescribed inappropriately. Many interventions designed to improve antimicrobial prescribing in hospitals have been trialled with varying levels of success."

DR MELISSA BAYSARI

Ageing well

IMPROVING SOCIAL ENGAGEMENT IN OLDER ADULTS

Older adults often feel fulfilled when they engage and participate in their community. Existing evidence shows that it contributes to increased quality of life.

However, as adults age they are more likely to suffer from social isolation and are often unable to participate like they once did in the community. Community aged care providers aim to improve service delivery to enhance social engagement and quality of life in older adults.

"Ideally, community care providers should be able to identify what older people need to reconnect with society," explains Professor Andrew Georgiou from the Centre for Health Systems and Safety Research. "This should involve a list of options that matches their requirements and successful pairing of activities and services to ensure that older adults are provided the opportunity to build long-lasting social networks and connections."

Professor Georgiou co-leads a team of researchers with Professor Johanna Westbrook aimed at using social engagement instruments to enhance the appropriateness and quality of community aged care service delivery.

"This is quite an exciting new area of research. There is a definite lack of focus on how we can integrate technology to improve social engagement and improve outcomes," says Dr Joyce Siette, a member of the research team.

"Our work so far has examined the levels of social engagement and quality of life of over 340 consumers in Sydney. We've received very positive feedback from community care staff that administered the tool, ranging from its ease of use, to finding out important information that they would otherwise not have known. Importantly, on a practical level, the staff were able to identify consumers' needs and utilise that information to deliver appropriate services."

This research is now undergoing additional analyses and will explore the relationships between social engagement and client outcomes such as quality of life, and health outcomes, such as hospitalisations, and transition to residential care.

"This is a great opportunity to harness the power of big data to monitor service use and outcomes, and to understand the profiles of older adults who are more or less socially engaged," says Dr Mikaela Jorgensen, a Research Fellow on the team.

From this work, an evidence base can be created to inform the community aged care sector about the specific factors which affect social engagement, the quality of care, and allow for future tailoring of quality improvement initiatives and interventions.

This research is funded by an ARC Linkage Grant with Uniting.

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Using Twitter as a signal of public opinion about HPV vaccines

Human papillomavirus (HPV) vaccines are a relatively recent introduction to the armament of public health and despite their potential to reduce rates of cancer (especially cervical cancer), coverage varies substantially across and within countries. The variable coverage partly relates to how easy it is for people to access the healthcare they need, and partly relates to acceptability – the perception of the risks and benefits of the vaccine in the public.

In our research in the area, we have been using very large scale datasets from Twitter to characterise the way HPV vaccines have been represented, how people in different locations might have been exposed to different types of information about HPV vaccines, and checked to see whether differences in populations' information diets can help explain differences in coverage.

Our most recent study used topic modelling – a machine learning method for grouping documents based on natural clusters in their language – to group more than 250,000 tweets about HPV vaccines posted in 2014 and 2015. We then looked at the locations of more than 34 million Twitter users who were based in the United States and followed users who posted tweets about HPV vaccines, to look at which topics were likely to have received more attention in each of the 50 states. We found that differences in exposure to certain topics could be used to explain differences in state-level HPV vaccine coverage, and models built from Twitter data could be used to explain more of the differences than models built from socioeconomic information like insurance coverage, poverty, and education.

The results of our research suggest that Twitter might be useful as a signal of vaccine acceptance. In the same way as rain gauges are spread out across a region to help estimate rainfall, our research suggests that monitoring the information diets of Twitter users might help us estimate public opinion by location or by community.

With new funding from the NHMRC to investigate vaccine misinformation in the public domain, we are now expanding on this work to help Australian public health organisations better track the specific vaccine concerns that cluster within certain communities in Australia, and better track the impact of their health promotion activities.

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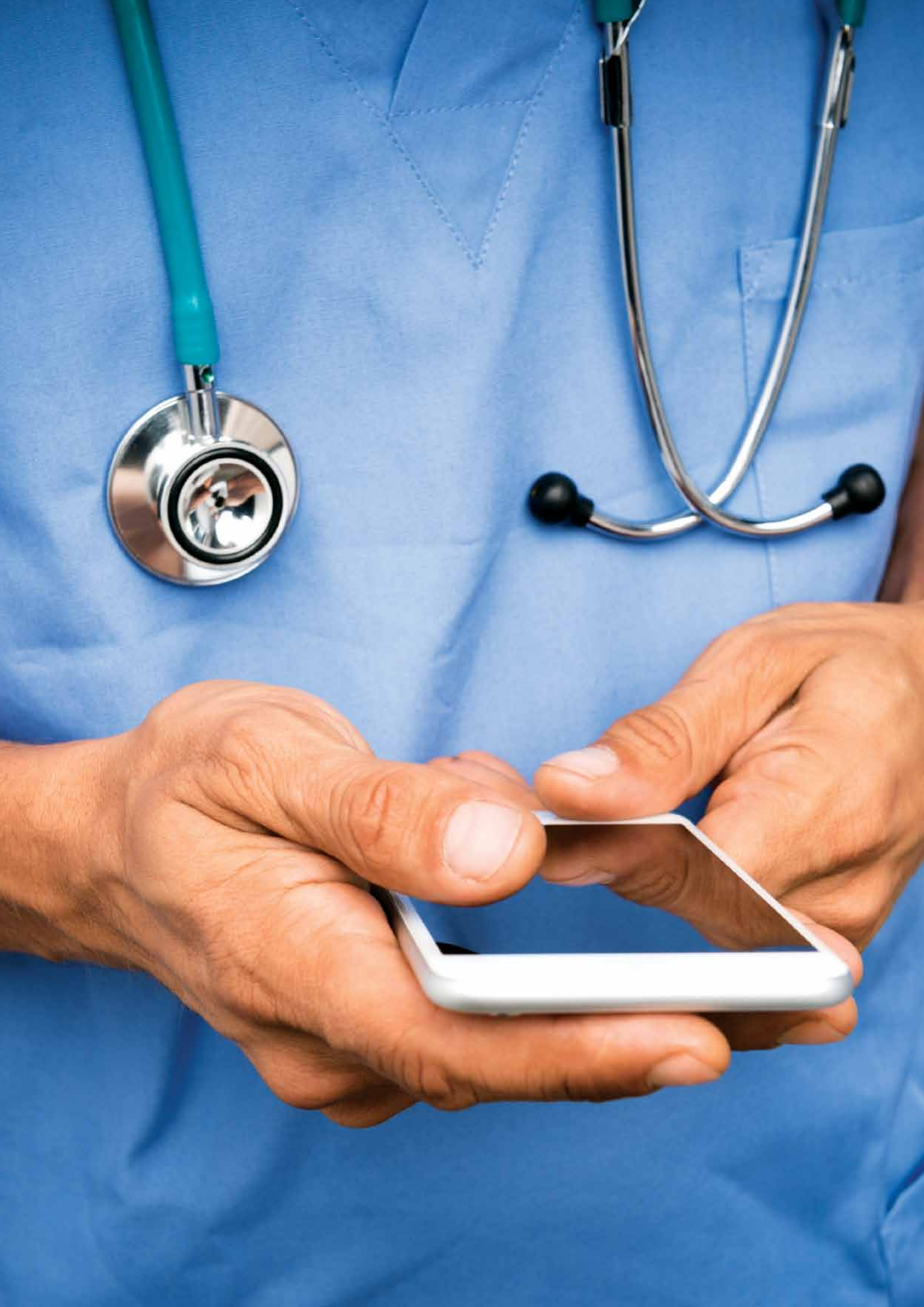

Improving the safety of digital health by understanding risks to patients

The use of information technology (IT) or digital health is revolutionising healthcare, with 97 per cent of GPs using electronic records systems and IT systems playing a mission-critical role in hospitals.

"IT has the potential to bring many benefits to quality and safety but we need to understand the risks as well," explains Associate Professor Farah Magrabi, who leads the Centre for Health Informatics' research program on Patient Safety Informatics.

Her team has pioneered the study of IT-related harms by looking at different data sets from both Australia and overseas to help identify the role IT plays in patient safety risk.

"We have made a major contribution to documenting the risks of IT to patient safety by examining incidents in Australia, the USA and England," she adds. "From our analysis of IT safety events, we have developed a new classification system for IT risks. This has become the de facto international standard for analysing IT safety events."

"Our work is also shaping policy to govern IT safety in Australia and overseas."

Risks arise when technology does not work as intended, for example, when a prescribing system fails to display important allergy information, patients can be harmed.

Risks also arise when technology does not fit with our bodies or cognitive abilities. "Our analyses of safety events across England over a five-year period revealed that human factor issues were proportionally higher in the events involving patient harm."

"For example, if prescribing systems require users to scroll through too many options, or they are not arranged intuitively, then patients may be prescribed the wrong medication simply through a pick list error."

"How many times have you hit the send button on your email and said 'oops', or mistakenly picked the wrong option when shopping online? It's easy to do, but when that happens in health there can be real consequences," she says.

Associate Professor Magrabi says that risks inherent in IT are also different from other sources of risk.

"A safety incident such as a fall is usually confined to one patient, but an IT incident has the potential to expose multiple patients to the risk of harm."

"In 2015 for example, an IT system failure affected hospitals across an Australian state. We know from our analysis of UK data that such events can disrupt the delivery of care and harm patients."

It's an issue we need to take seriously, she adds. "We need to be actively managing the risks of digital health alongside our efforts to introduce technology."

"By better understanding the origins of this risk, problems can be detected early and we can mitigate hazards ahead of harming patients."

Associate Professor Farah Magrabi
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Collaboration

RECENT INSTITUTE SEMINARS

MODERNISING PATIENT SAFETY: RECONCILING WORK-AS-IMAGINED AND WORK-AS-DONE

Presenter: Professor Jeffrey Braithwaite

Founding Director and Director of the Centre for Healthcare Resilience and Implementation Science, AIHI, Macquarie University

TOWARDS AN EXNOVATIVE TURN IN PATIENT SAFETY RESEARCH

Presenter: Associate Professor Jessica Mesman

Maastricht University, The Netherlands

DIAGNOSTIC ERRORS: A NEW CHAPTER IN PATIENT SAFETY IMPROVEMENT SCIENCE

Presenter: Associate Professor Hardeep Singh

Michael E. DeBakey VA Medical Center and Baylor College of Medicine, Houston, USA

WORKING WITH PATIENTS AND PROFESSIONALS IN SETTING RESEARCH PRIORITIES: THE CASE OF ENT, HEARING AND BALANCE

Presenter: Associate Professor Anne Schilder

Professor of Otorhinolaryngology at the UCL Ear Institute and at the University Medical Center, Utrecht, The Netherlands

THE RELATIONSHIP BETWEEN USING ELECTRONIC HEALTH RECORDS AND MEETING ACCREDITATION OUTCOMES IN AUSTRALIAN RESIDENTIAL AGED CARE HOMES

Presenter: Associate Professor Ping Yu

Director of the Centre for IT-enabled Transformation, Faculty of Engineering and Information Sciences at University of Wollongong, Australia

RESEARCH SOLUTION TO CHRONIC DISEASE BURDEN IN THE COMMUNITY: OSTEOARTHRITIS

Presenter: Professor David Hunter

Florance and Cope Chair of Rheumatology and Professor of Medicine at The University of Sydney, Australia

EVOLVING MODELS OF HEALTH CONSUMER AND COMMUNITY ENGAGEMENT IN THE AUSTRALIAN HEALTH SECTOR

Presenter: Ms Serena Joyner

Consumer Engagement Manager at Health Consumers NSW, Australia

THE MANY LENSES OF HPV VACCINE HESITANCY

Presenter: Ms Gilla Shapiro

PhD candidate in clinical psychology at McGill University, Canada

POPULATING PATIENT SAFETY: A NEW PERSPECTIVE ON INTERSECTIONAL PATTERNS OF IATROGENIC HARM

Presenter: Professor Joanne Travaglia

Professor of Health Management, and the Director of the Centre for Health Services Research, University of Technology, Sydney

NOT YOUR AVERAGE GUIDELINE: CLINICAL PATHWAY DISCOVERY FROM ELECTRONIC HEALTH RECORD DATA

Presenter: Professor Rema Padman

Professor of Management Science and Healthcare Informatics in the H. John Heinz III College at Carnegie Mellon University in Pittsburgh, USA

ANTIMICROBIAL STEWARDSHIP FOR UTI IN US NURSING HOMES

Presenter: Associate Professor Heidi Wald

Associate Professor of Medicine, University of Colorado, USA and Visiting Professor, AIHI, Macquarie University

CREATING LEARNING SYSTEMS FOR QUALITY IMPROVEMENT

Presenter: Ms Carrie Marr

Chief Executive, The Clinical Excellence Commission (CEC)

THE BRIGHT AND DARK SIDE OF KNOWLEDGE MOBILISATION: LEARNING FROM A LARGE-SCALE COLLABORATIVE RESEARCH PARTNERSHIP

Presenter: Dr Roman Kislov

Research Fellow in the Health Services Research, Manchester Business School, University of Manchester, UK

CLINICAL WORK PATTERNS, SAFETY AND HEALTH INFORMATION TECHNOLOGY

Presenter: Professor Johanna Westbrook

Director Centre for Health Systems and Safety Research, AIHI, Macquarie University

MAKING CARE SAFER THROUGH EHR'S

Presenter: Professor Chris Lehmann

Professor for Pediatrics and Biomedical Informatics, Vanderbilt University, USA

RESILIENT LEADERSHIP: EXPLORING THE MOST APPROPRIATE LEADERSHIP STYLE FOR RESILIENT ORGANIZATIONS WITHIN THE HEALTH CARE SECTOR

Presenter: Associate Professor Eric Arne Lofquist

BI Norwegian Business School, Bergen, Norway

MAKING GOOD QUALITY CARE HABITUAL: AN EXPLORATION OF THE CONCEPT HABIT IN RELATION TO HEALTHCARE PROFESSIONAL BEHAVIOUR

Presenter: Mr Sebastian Potthoff

Doctoral Research Fellow, Institute of Health and Society, Newcastle University, UK

INCREASING THE EFFECTIVENESS AND UNDERSTANDING OF HEALTH INFORMATICS INTERVENTIONS THROUGH THEORY-INFORMED, UNOBTRUSIVE QUANTITATIVE PROCESS EVALUATIONS

Presenter: Mr Wouter Gude

Department of Medical Informatics, Academic Medical Center, University of Amsterdam, The Netherlands

The Institute delivers a regular lunchtime seminar program to encourage the exchange of ideas across the Institute, University and health sector both nationally and internationally. We invite distinguished professionals to our offices at Macquarie University to give presentations on topics of current interest. Speakers may discuss recently completed or early-stage research they have undertaken or report other types of professional activity they are involved with. The topics presented align closely with the Institute's current research directions. Below is a list of seminars held in the last financial year ending 30 June 2017.

DELIVERING BEST PRACTICE IN GERMANY: SPECIALIST MULTIDISCIPLINARY CARE FOR MOTOR NEURONE DISEASE PATIENTS

Presenter(s): Dr Johannes Dorst and the MND Clinic Team

Department of Neurology, University of Ulm, Germany

ENHANCING THE VALIDITY OF THE CONCEPTUAL FRAMEWORK FOR A NEW PROM OF PERCEIVED LISTENING EFFORT IN HEARING LOSS

Presenter: Ms Sarah Hughes

South Wales Cochlear Implant Programme, UK

BEING WILLING TO SEE THINGS CLEARLY: LEADERSHIP LESSONS FOR QUALITY IMPROVEMENT

Presenter: Professor Paul Levy

Author, speaker and corporate adviser and former President and Chief Executive Officer of the Beth Israel Deaconess Medical Center, Boston, USA

THREE ISLANDS IN THE SEA OF DATA: OBSERVATIONS ON OUT OF POCKET EXPENDITURE, ALCOHOL CONSUMPTION AND HYSTERECTOMY

Presenter(s): Emeritus Professor Stephen Leeder and Emeritus Professor Farhat Yusuf

Menzies Centre for Health Policy, The University of Sydney, Australia

FROM THE BENCH TO THE BEDSIDE AND BACK, THE TCRN AS AN EXAMPLE OF FOSTERING TRANSLATIONAL RESEARCH

Presenter: Professor David Goldstein

Conjoint Clinical Professor, UNSW Sydney Prince of Wales Clinical school and Director UNSW Sydney Cancer Institute NSW Translational Cancer Research Centre (TCRN), Australia

A NEW INFORMATICS GEOGRAPHY

Presenter: Professor Enrico Coiera

Director Centre for Health Informatics, AIHI, Macquarie University

EXPEDITED DRUG APPROVAL PROGRAMS IN THE UNITED STATES AND CANADA

Presenter: Professor Emeritus Joel Lexchin

York University, Canada

CONFLICTS OF INTEREST IN MEDICINE: TAKING DIVERSITY SERIOUSLY

Presenter: Dr Wendy Lipworth

Senior Research Fellow, Centre for Values, Ethics and the Law in Medicine, The University of Sydney

PUBLIC, PRIVATE AND BOTH: ORGANISATIONAL HYBRIDS AND CHANGE IN HEALTHCARE

Presenter: Associate Professor Simon Bishop

Associate Professor in Organisational Behaviour, Nottingham University Business School, UK

SCALE UP SYSTEMS FOR FASTER MORE WIDESPREAD TAKE UP OF IMPROVEMENTS IN HEALTHCARE – RESEARCH AND DEVELOPMENT CHALLENGES AND SOLUTIONS

Presenter: Professor John Øvretveit

Professor John Øvretveit, Karolinska Institutet, Sweden, Visiting Professor AIHI, Macquarie University

ANALYSIS OF SKILLED NURSING FACILITY TRANSFERS USING A QUALITY IMPROVEMENT TOOL

Presenter: Professor Greg Alexander

University of Missouri, Sinclair School of Nursing, Fulbright Scholar, Visiting Professor, AIHI, Macquarie University

HEALTH SERVICES RESEARCH IN SOUTH WESTERN SYDNEY

Presenter: Professor Geoff Delaney

Director of Cancer Services for Sydney South West Area Health Service, Australia

THE ECONOMICS OF PATIENT SAFETY: OECD REPORT ON A VALUE-BASED APPROACH TO REDUCING PATIENT HARM

Presenter: Mr Luke Slawomirski

Health Economist, OECD Health Division, Paris, France

TAKING INNOVATION TO THE BEDSIDE TO IMPROVE OUTCOMES: EMPOWERED IMPROVERS AT CINCINNATI CHILDREN'S

Presenter: Professor Stephen Muething

Professor, Department of Pediatrics, University of Cincinnati, USA, Fulbright Scholar

CONSUMER PERSPECTIVES, TELEHEALTH AND THE IMPACT ON HEALTHCARE SYSTEMS

Presenter: Dr Malcolm Fisk

Senior Research Fellow, Centre for Computing and Responsible Research, De Montfort University, Leicester, UK

DATA MINING IN PATHOLOGY

Presenter: Dr Tony Badrick

Chief Executive, Royal College of Pathologists of Australasia Quality Assurance Programs (RCPAQAP)

STRATEGIES FOR CHANGING THE HEALTH SYSTEM: IMPLEMENTING A CLINICAL PATHWAY FOR ANXIETY AND DEPRESSION IN CANCER PATIENTS

Presenter: Professor Phyllis Butow AM

NHMRC Senior Principal Research Fellow, School of Psychology, The University of Sydney

‘Our work is shaping policy to govern IT safety in Australia and overseas.’

ASSOCIATE PROFESSOR FARAH MAGRABI

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