Centre for Quality and Patient Safety Research

AT A GLANCE

81 QPS members
191 Publications

44 Research projects in progress
139 completed
139 ongoing

24 Invited presentations

05 PhD completions
04 Visiting academics
About QPS
We improve the quality and safety of patient care through applied health services research conducted in a well-established, distinctive and internationally renowned integrated health service partnership network.

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It is my great pleasure to present the Centre for Quality and Patient Safety Research Annual Report 2020. This report highlights the work of our researchers within the School of Nursing and Midwifery at Deakin University and with Deakin Partners in Nursing and Midwifery: Alfred Health, Barwon Health, Eastern Health, Epworth HealthCare, Monash Health and Western Health.

The Centre for Quality and Patient Safety Research (Deakin-QPS) is one of four research domains within Deakin University’s Institute for Health Transformation. The work of researchers within the Centre is aligned with one or more of three pillars (patient experience, patient safety and health workforce) and spans health and aged care, encompassing research in residential, community, subacute and acute care settings.

The year 2020 was indeed an historic year, marked by the commencement of the global COVID-19 pandemic, which resulted in frequent and extended lockdowns requiring significant changes in the way Deakin-QPS researchers undertook their work. At this pivotal time, Deakin-QPS researchers embraced the challenge, maintaining high levels of productivity by rapidly adapting their research methods to enable their research to progress in a safe manner and by pursuing new areas of inquiry to investigate the effects of the pandemic on patients and the workforce. This ability to hastily adapt their research methods and programs to comply with frequently changing restrictions and the rapidly evolving healthcare environment was truly inspiring and nothing short of remarkable.

As I reflect on the past year, I feel immensely proud of the achievements of the Deakin-QPS researchers in undertaking meaningful health services research, generating and translating knowledge that contributes to the quality and safety of healthcare for the communities we serve.

Alfred Deakin Professor Alison Hutchinson
Director, Centre for Quality and Patient Safety Research
The Institute for Health Transformation was established in 2018 to drive translational research in health systems that supports evidence-informed policy and practice change leading to improved patient experience, population health and health system sustainability.

We bring together the expertise of more than 200 researchers in determinants of health, obesity prevention, health economics and quality and patient safety to address the key challenges facing our health systems. We aim to activate healthy populations and communities, innovate health service delivery and design, empower consumers as advocates for health system change, and drive equity and value in health and care.

Our collaborative model across Deakin’s Schools of Medicine, Health and Social Development, Nursing and Midwifery, and Psychology enables multidisciplinary research. Our partnerships with health services, government, community and industry allow us to translate that research into real impact and deliver solutions that will strengthen our health systems and contribute to the health and wellbeing of all Australians, now and in the future.

We’re committed to addressing today’s most complex and compelling health challenges. We consider the following challenges to be the most important for the future of health systems not only in this country, but globally:

- Adapting to the changing profile of Australia’s health needs.
- Capitalising on the rapid digitalisation of health.
- Supporting better integration of complex and fragmented service systems.
- Driving systemic improvements in the safety and quality of health service delivery.
- Reducing persistent health inequity.
- Improving sustainability of health systems.
- Advancing the case for prevention across the life course.

These challenges reflect the broad scope of experience and expertise within our Institute and sharpen our focus on delivering impact and solutions that contribute to the health and wellbeing of all Australians, now and in the future.
The Centre for Quality and Patient Safety Research (QPS) External Advisory Board provides advice to the Centre for Quality and Patient Safety Research Executive Committee on achieving the Centre’s mission and performance targets. Board membership is comprised of all members of the QPS Executive Committee and external representatives with experience and expertise in:

- health services or patient safety research
- research funding opportunities
- government and stakeholder relations
- non-government organisations
- research institutes
- international research
- health consumer patient safety issues.

Members are appointed based on their individual experience and expertise. They are not appointed as representatives of the organisation(s) in which they are employed or involved.

The Centre for Quality and Patient Safety Research External Advisory Board consisted of the following external members in 2020.

**Honorary Professor**
David Phillips (Chair)
Assistant Director, National Health and Medical Research Council

**Professor Euan Wallace**
Secretary, Department of Health and Human Services, Victoria

**Professor Edward Janus**
Honorary Professor, School of Medicine, Deakin University

**Alfred Deakin Professor**
Julie Owens
Deputy Vice-Chancellor Research, Deakin University

**Doctor Cathy Mead**
Council on the Ageing (COTA), Victoria

**Ms Merrin Bamert**
Director, Emergency Management, Population Health and Health Protection/South Division, Department of Health and Human Services, Victoria
Centre for Quality and Patient Safety Research
Executive Committee

Alfred Deakin
Professor Alison Hutchinson (Chair)
Director, Centre for Quality and Patient Safety Research
Chair in Nursing, Monash Health Partnership

Alfred Deakin
Professor Tracey Bucknall
Chair in Nursing, Alfred Health Partnership

Professor Julie Considine
Chair in Nursing, Eastern Health Partnership

Professor Trisha Dunning AM
Chair in Nursing, Barwon Health Partnership

Professor Ana Hutchinson
Chair in Nursing, Epworth HealthCare Partnership

Professor Trish Livingston
Associate Dean, Research

Professor Elizabeth Manias
Associate Head of School, Research

Professor Nikki Phillips
Head of School, Nursing and Midwifery

Professor Bodil Rasmussen
Chair in Nursing, Western Health Partnership
Centre for Quality and Patient Safety Research

Members

Professor Judy Currey
Director, Active learning, Deakin Learning Futures

Professor Andrea Driscoll
Professor in Nursing

Professor Linda Sweet
Chair in Midwifery, Western Health Partnership

Associate Professor Melissa Bloomer
Director, Postdoctoral Studies Mid-Career Fellow

Associate Professor Debra Kerr
Lecturer in Nursing

Associate Professor Jo McDonall
Director, Undergraduate Studies

Associate Professor Lauren McTier
Associate Head of School, Teaching and Learning

Associate Professor Pat Nicholson
Higher Research Degree Students Coordinator

Associate Professor Bernice Redley
Monash Health Partnership

Doctor Stéphane Bouchoucha
Associate Head of School, International

Doctor Anna Chapman
Postdoctoral Research Fellow

Doctor Robin Digby
Executive Dean’s Research Fellow, Alfred Health Partnership

Doctor Virginia Hagger
Lecturer in Nursing

Doctor Natalie Heynsbergh
Postdoctoral Research Fellow

Doctor Sara Holton
Research Fellow, Western Health Partnership

Doctor Lenore Ley
Lecturer in Nursing
Doctor Jac Kee Low  
Executive Dean’s Research Fellow  

Doctor Sharon Kramer  
Executive Dean’s Research Fellow  

Doctor Grainne Lowe  
Lecturer in Nursing  

Doctor Alemayehu Mekonnen  
Alfred Deakin Postdoctoral Research Fellow  

Doctor Lahiru Russell  
Postdoctoral Research Fellow, Eastern Health Partnership  

Doctor Maryann Street  
Senior Research Fellow, Eastern Health Partnership  

Doctor Elizabeth Oldland  
Lecturer in Nursing  

Doctor Emily Tomlinson  
Honours Coordinator, Lecturer in Nursing  

Doctor Anna Ugalde  
Senior Research Fellow  

Doctor Vidanka Vasilevski  
Research Fellow, Western Health Partnership  

Doctor Karen Wynter  
Research Fellow, Western Health Partnership  

Associate members  

Professor Peter Martin  
Director, Centre for Organisational Change in Person-Centred Healthcare  

Doctor Mohammadreza Mohebbi  
Senior Research Fellow, Biostatistics  

Doctor Adam Searby  
Lecturer in Nursing  

Higher Education Research Associate Members  

Mr Rami Aldwikat  
Mr Tigistu Alemu  

Mr Afizu Alhassan  
Mr Joshua Allen  
Mr Mohammed Amin  
Ms Theodora Dedo Azu  
Mrs Melissa Blake  
Ms Laura Brooks  
Ms Kathryn Felicity Brundell  
Ms Gabrielle Burdeu  
Dr Sudpita Chowdhury  
Ms Deana Copley  
Ms Michaela Coryla Cormack  
Ms Rachel Cross  
Mr Tendayi Bruce Dziruni  
Mr Abdul-Ganiyu Fuseini  
Ms Jessica Lillian Guinane  
Ms Madeline Kiernan Hawke  
Mrs Stephanie Hunter  
Ms Rebecca Jedwab  
Ms Mataya Kilpatrick  
Ms Sabine Kleissl-Muir  
Mrs Natalie Kondos  
Ms Fiona Kumar  
Mrs Elyse Ladbrook  
Mr Michael Le Grande  
Ms Jessica Lees  
Mrs Amy Licheni  
Ms Patricia Mant  
Mrs Michele McGrath  
Ms Karen McKenna  
Ms Rachel Susan McKittrick  
Ms Sharyn Milnes  
Ms Giuliana Murfet  
Ms Britt O’Keefe  
Ms Guncag Ozavci  
Ms Margaret Pollock  
Mrs Kerry Rigby  
Mrs Monica Schoch  
Ms Stephanie Sprogis  
Mr Owen Anthony Tebbs  
Mrs Olivia Gai Tierney  

Emeritus Professor  

Emeritus Professor  

Professor Maxine Duke  
Emeritus Professor  

Alfred Deakin  
Professor Mari Botti AM  

Alfred Deakin  

Deakin Partners in Nursing and Midwifery Research Network

The Centre for Quality and Patient Safety Research (QPS) was established in 2009 to conduct high-quality health services research. Focusing on quality of care and patient safety, QPS integrates the School of Nursing and Midwifery’s long-standing public and private health service partnerships with one of Australia’s largest schools of nursing and midwifery. QPS researchers are embedded within six major Victorian health services:

- Alfred Health
- Barwon Health
- Eastern Health
- Epworth HealthCare
- Monash Health
- Western Health.

The QPS health service partners:

- govern 29 acute and subacute care hospitals and 11 residential aged care facilities
- employ approximately 30,000 nurses and midwives
- provide care for in excess of 3 million Victorians annually.
In 2019 the Deakin University and Western Health Partnership commenced the inaugural Chair of Midwifery position based at Sunshine Hospital. The purpose of this position is to provide academic and professional leadership to clinical and academic staff and students and focus on clinical priorities to inform midwifery practice.

Professor Linda Sweet was appointed to this inaugural position, commencing in August 2019. Professor Sweet worked as a nurse for a decade before becoming a midwife. She made the move into education, and then academia, where she has amassed considerable experience across her 30+ years career. In her current role at Western Health, Professor Sweet is supported by Dr Vidanka Vasilevski, a Research Fellow who has a background in neuropsychology and an interest in women’s health.

Whether it’s postpartum haemorrhage, perineal trauma, breastfeeding rates, or homebirths, Professor Sweet is conducting research that directly assists the health service to find ways to address clinical challenges or assess the success of existing programs. Having commenced over 30 projects since her appointment, she is building capacity across the health service supporting not only midwives, but also nurses and medical staff to learn about and conduct research. Much of her work is collaborative and multidisciplinary. This is important because pregnant women are seen by a variety of services across the hospital and a range of professionals, and by working together, we can ensure midwifery has a voice in shaping the provision of care.

One of the largest projects she has been leading over the past year has been exploring the experience of women giving birth in our publicly funded homebirth program, which is the largest of only two services of this kind in Victoria. Other projects have included a pilot trial of a new lactation device for breastfeeding women to apply massage, heat and cold, and compression to the breast, and leading the evaluation of the Registered Undergraduate Student of Midwifery (RUSOM), which involves health services like Western Health employing students to work in their hospitals while they continue to study. There is no shortage of research opportunity and questions to be answered!

Professor Sweet is committed to ongoing research that supports and advocates for breastfeeding mothers, exploring ways to improve the outcomes for women (and their babies) who are overweight or obese, amongst other topics. It’s hard to believe that it has only been two years since Professor Sweet took up her position at Western Health, but already the impact of her expertise is having a positive impact on women and their families in the West and beyond.
The QPS Alfred Health Partnership provides clinical research opportunities for nurses across a variety of acute and specialty healthcare settings. The collaboration provides a unique opportunity for nurses seeking clinically-focused research training. It also supports clinicians seeking experience in multidisciplinary research projects in critical care, acute care and specialty healthcare contexts of:

- clinical decision making and patient safety
- alleviating patient symptoms
- increasing the uptake of research evidence in practice
Partnerships

CENTRE FOR QUALITY AND PATIENT SAFETY RESEARCH
Eastern Health Partnership

Lee Boyd
• Chief Nursing and Midwifery Officer, Eastern Health
• Professor, Executive Director, Learning and Teaching, Eastern Health

Julie Considine
• Chair in Nursing, Eastern Health Partnership
• Professor, School of Nursing and Midwifery, Deakin University

The QPS Eastern Health Partnership drives research to improve patient safety outcomes and patient experience of healthcare. The partnership between Eastern Health and Deakin University commenced in 1999 and our research spans acute, subacute, community and residential care settings. Our work informs strategic directions for clinical practice, education, research and healthcare policy development.

CENTRE FOR QUALITY AND PATIENT SAFETY RESEARCH
Epworth HealthCare Partnership

Paula Stephenson
• Executive Director of Clinical Services, Epworth HealthCare
• Chief Nursing Officer, Epworth HealthCare

Ana Hutchinson
• Chair in Nursing, Epworth HealthCare Partnership
• Professor, School of Nursing and Midwifery, Deakin University

The QPS Epworth HealthCare Partnership specialises in developing and implementing evidence for nursing practice to enhance quality and safety in the delivery of healthcare. In particular, our research program is currently evaluating the effect different models of nursing care delivery have on health outcomes, medication quality and safety issues, and the impact of emerging technologies on patients and carers.

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The QPS partnership with Monash Health promotes the nexus between research, education and practice. The themes of knowledge translation, person-centred care, decision making, patient safety and risk management underpin the research conducted. The partnership also provides a unique opportunity for nurses seeking clinically-focused research training or clinicians seeking experience in multidisciplinary research projects in critical care, acute care, and specialty healthcare contexts.

Alison Hutchinson
- Chair in Nursing, Monash Health Partnership
- Alfred Deakin Professor, School of Nursing and Midwifery, Deakin University

Katrina Nankervis
- Chief Nursing and Midwifery Officer, Monash Health
- Clinical Associate Professor, Executive Director, Residential Care and Support Services, Monash Health

Bodil Rasmussen
- Chair in Nursing, Western Health Partnership
- Professor, School of Nursing and Midwifery, Deakin University

Linda Sweet
- Chair in Midwifery, Western Health Partnership
- Professor, School of Nursing and Midwifery, Deakin University

Shane Crowe
- Executive Director, Nursing and Midwifery, Western Health
- Clinical Associate Professor, School of Nursing and Midwifery, Deakin University

The QPS Western Health Partnership provides academic and professional leadership to clinical and academic health staff. The partnership fosters a rich diversity of activities in health services research, with the aim to build capacity and enhance the research culture at Western Health. The research benefits patients and their families, staff, students and academics.
Innovative research

The Centre for Quality and Patient Safety Research is uniquely positioned within academic and healthcare environments to identify and rapidly respond to emerging complex care and patient safety issues. The Centre’s research programs are organised into the following focus areas: Patient Experience, Patient Safety and Health Workforce. The three research pillars have been generated by the needs of the QPS health service partners.

Centre for Quality and Patient Safety Research pillars

Patient Experience
Research focuses on patients’ and family members’ experiences of health services to understand their perspectives and the processes of care delivery – under the broad domain of health service evaluation. Patient experience research is central to quality healthcare, alongside clinical effectiveness, and safety.

Patient Safety
Research focuses on patient safety and minimising harm as part of improving the safety and quality of healthcare. Patient safety research has important implications for healthcare policy and practice across diverse settings, including acute, subacute, aged and community care, and consumer and health professional education.

Health Workforce
Research focuses on developing and evaluating innovations to improve the capacity, responsiveness and productivity of the health workforce. Health workforce research examines the effective use of technologies – such as telehealth – to provide improved quality of care. Research is conducted in partnership with the health sector to evaluate these initiatives.
An investigation of the patient experience of adverse events

The project was funded by the National Health and Medical Research Council, Project Grant Scheme (APP1025548) and led by Professor Merrilyn Walton, Professor Rick Ledema, Professor Elizabeth Manias, Dr Patrick Kelly, Associate Professor Jennifer Merry-Smith and Associate Professor Reema Harrison.

Few patients complain about their healthcare, but when they do complain following an adverse event, it is often associated with poor patient experience during their hospitalisation.

In healthcare, there has been increased moves towards patient participation. While patients are increasingly involved in decision making, research relating to the use of patient experience data in adverse safety events is uncommon. From patient-reported data, the project examined the relationships between patients’ experiences of adverse events, the disclosure of the adverse events from health professionals, and patients’ tendency for making complaints or seeking legal action.

A cross-sectional survey was administered to 20,000 participants randomly chosen from linked data comprising the Admitted Patient Data Collection, the Register of Births, Deaths and Marriages, and people registered on the 45 and Up Study database. Participants were older than 45 years and hospitalised during a six-month period in Australian hospitals.

Of the 20,000 patients, there were 7661 respondents of whom 474 participants (7%) reported experiencing an adverse event. Patients who did not receive an apology or expression of regret in the incident disclosure process from health professionals were significantly more likely to make a complaint (p < 0.05). Those who found out about the adverse event from health professionals but did not participate in a formal open disclosure process were significantly more likely to seek legal advice (p < 0.05). Patients who made a complaint generally perceived that they experienced more problems in their hospital care compared to those who did not make a complaint. There were significant differences between patients who did and did not make a complaint on 13 of the 15-item Picker Patient Experience Questionnaire.

Although incident disclosure was not associated with whether a complaint was made or legal action pursued, significant associations between key aspects of the disclosure process and these outcomes were noted. Significant differences between those who did and did not make a complaint were noted in relation to the timing and apology components of open disclosure. The critical role of overall patient experience in the context of optimal adverse event management was evident from these data.

Health professionals need to develop strong and open relationships with patients and families throughout the hospitalisation process, which then enables them to adopt appropriate judgement relating to appropriate timing of disclosure to patients.
Patient Experience

Enhancing patient participation in nursing handover

The project was supported by in-kind contributions from Eastern Health during the data collection process, and led by Dr Maryann Street, Ms Jenny Dempster, Ms Debra Berry, Ms Erika Gray, Ms Joanne Mapes, Mr Raj Liskaser, Ms Sia Papageorgiou and Professor Julie Considine.

Nursing handover is a fundamental patient safety activity that transfers accountability for patient care from one nurse to another and is one of the most frequent safety activities in hospitals. Patient participation in nursing handover is important for patient-centred care, and enhances shared decision-making, patient safety and a positive healthcare experience for the patient.

This study aimed to explore the level of active patient participation in nursing handover and strategies that patients’ and nurses’ perceived to enhance patient involvement in nursing handover.

This multi-site prospective study used a mixed methods design. In total, 117 morning-to-afternoon change of shift nursing handovers were observed on ten randomly selected wards at six geographically separate hospitals of one health service. Following observations, semi-structured interviews were conducted with patients (n = 33), and nurses (n = 20) from the observed handovers. The structured observation data were summarised using descriptive statistics and thematic analysis was used for data from the interviews. Data were then triangulated to develop a greater understanding of patient participation in nursing handover.

Almost half the patients were female (47%), and the median patient age was 77 years. Three-quarters, 76.9% (n = 90), of nursing handovers were conducted in the patient’s presence. Overall, patients actively participated in 25.6% (n = 30/117) of handovers. However, when comparing those handovers in the patient’s presence, patients were active participants in 33.3% (n = 30/90) and passive participants in 46.7% (n = 42/90) of handovers; in 20% of handovers (n = 18/90), the patient had no input at all. Active participation was more likely for women (versus men; p = 0.025) and surgical patients (versus medical patients; p = 0.046). There was also greater active patient participation when nurses displayed engagement behaviours, such as using eye contact, providing an opportunity to ask questions and giving explanations.

Three major themes were identified from the interviews: ‘Being involved’, ‘Layers of influence’ and ‘Information exchange’. Just over half the patients interviewed (n = 17/33) expressed that handover was ‘not for me’, as they trusted the nurses’ care and communication. Patients described nurses working in a team and being helpful and caring during the shift as influencing their participation in handover. Nurses expressed that handover was an opportunity for patients to be informed but acknowledged the need to build rapport and be selective about the information shared.

Handover is an essential tool in the provision of safe patient care. There was a tension between the view of some patients who do not want information withheld, and nurses’ concern to protect sensitive information. Patient participation in handover was low. Factors including patient and nurse preferences, perceptions and nurse behaviours influenced patient participation. Patients were able to actively participate in nursing handover when they understood the purpose and timing of handover and felt an affinity with nurses.

Patients were able to actively participate in nursing handover when they understood the purpose and timing of handover and had rapport with nurses.
Emergency department length of stay and anxiety, comfort and safety in older persons

The project was funded by the Eastern Health Foundation and led by Professor Julie Considine, Ms Debra Berry, Professor Bodil Rasmussen, Alfred Deakin Professor Alison Hutchinson, Associate Professor Helen Rawson, Mr Peter Jordan and Dr Maryann Street.

Emergency nurses play a key role in a patient’s experience of, and safety during, emergency care. While the study results were positive, emergency nurses should still strive to reduce anxiety, promote comfort, and ensure patient safety.

Older emergency department (ED) patients are more likely to have higher levels of acuity on ED arrival, need hospital admission, and have longer ED length of stay (LOS) compared to younger people. Further, older ED patients are more likely to have cognitive impairment, anxiety, depression, and are at risk of unrecognised functional decline, cognitive impairment, and delirium. The aim of this study was to determine whether ED length of stay had an impact on older people’s (aged ≥65 years) anxiety, comfort, and adverse events.

This prospective observational study was conducted in three emergency departments in Melbourne, Australia. Patients (n = 301) were classified according to ED LOS: ≤4-hours (n = 89), 4–8 hours (n = 136) and >8-hours (n = 76). State anxiety (anxiety at the moment in time) and trait anxiety (how anxious a person generally feels) and comfort were measured in ED. Adverse event data were collected from medical records. LOS groups were compared using chi-square and Kruskal-Wallis test.

There was no significant difference in Trait Anxiety Scores, indicating the level of general anxiety was similar for the patient groups. However, patients with ED LOS ≤4 hours had lower median State Anxiety Scores (p = 0.003), were less likely to require ward admission (p < 0.001), and more likely to be admitted to a short stay unit (p < 0.001). There was no significant difference between groups in comfort measures, even though there was a trend towards longer ED stay and lower comfort levels. Adverse events during ED care and rate of hospital admission were not significantly different between groups.

Levels of state and trait anxiety in this cohort of older ED patients were relatively low, so the impact of ED LOS on the anxiety for this cohort appears minimal. There was no association identified between ED LOS and comfort during ED care, but this warrants further investigation as there was a trend towards lower comfort levels for longer stay. Adverse events during ED care or hospital admission for admitted patients were infrequent. The major limitations were: the need to exclude patients with cognitive impairment; the need for infection control precautions; clinical instability and communication restrictions. It may be argued that these patients may have higher levels of anxiety, and particularly state anxiety, by virtue of their clinical status. Further research should focus on methods to ensure these patient groups are represented in future studies.
Patient Experience

Improving health literacy levels in patients diagnosed with heart failure: A randomised control trial

The project was funded by the Department of Health and led by Professor Andrea Driscoll, Dr Alison Beauchamp, Ms Sharon Meagher and Ms Rhona Kennedy.

Heart failure continues to have a high burden of disease with high mortality and hospitalisation rates in the elderly. Patients with heart failure experience debilitating symptoms such as shortness of breath, increasing exercise intolerance and lethargy, which impacts on their everyday life. In an effort to reduce these symptoms and hospitalisations, patients must learn how to manage their heart failure through adhering to several self-management strategies. However, low health literacy can result in poor understanding of information about heart failure and is related to adverse health outcomes. There are few interventions to improve outcomes for patients with heart failure that focus on the broader domains of health literacy. This study measures a patient’s level of health literacy, tailoring educational interventions about heart failure based on their level of health literacy to improve their self-management of heart failure.

A randomised control pilot trial was undertaken to determine the effectiveness of a health literacy toolkit focusing on heart failure management for patients diagnosed with heart failure. Patients were randomised to one of two groups:

- the control group who received usual care utilising a standard heart failure patient resource
- the intervention group who received usual care and tailored education based on their level of health literacy, utilising the investigator developed heart failure health literacy toolkit.

Fifty patients diagnosed with heart failure were recruited into the study (control group = 25 patients and intervention group = 26 patients). Data is currently being analysed.

Patient education tailored to the patient’s level of health literacy can reduce hospitalisations and improve self-management of chronic conditions such as heart failure.
Patient Experience

Experiences of receiving and providing maternity care during the COVID-19 pandemic in Australia

The project was funded by the Institute for Health Transformation COVID-19 grant and led by Dr Zoe Bradfield, Professor Yvonne Hauck, Dr Lesley Kuliukas, Professor Linda Sweet, Dr Vidanka Vasilevski, Dr Karen Wynter, Professor Caroline Homer, Dr Alyce Wilson and Dr Rebecca Szabo.

The COVID-19 pandemic has radically changed the way healthcare is delivered in many countries around the world. Evidence on the experience of those receiving or providing maternity care is important to guide practice through this challenging time.

The study aimed to explore and describe the experiences of receiving and providing maternity care in Australia during the COVID-19 pandemic.

A cross-sectional study was conducted in Australia. Five key stakeholder cohorts were included to explore and compare the experiences of those receiving or providing care during the COVID-19 pandemic. Women, their partners, midwives, medical practitioners, and midwifery students who had received or provided maternity care from March 2020 onwards in Australia were invited to participate in an online survey. A total of 3701 completed responses were received between 13 May and 24 June 2020.

While anxiety related to COVID-19 was high among all five cohorts, there were statistically significant differences between the responses from each cohort for most survey items. Women were more likely to indicate concern about their own health and their family’s health and safety in relation to COVID-19 whereas midwives, doctors and midwifery students were more likely to be concerned about occupational exposure to COVID-19 through working in a health setting than those receiving care through attending these environments. Midwifery students and women’s partners were more likely to respond that they felt isolated because of the changes to the way care was provided. Despite concerns about care received or provided not meeting expectations, most respondents were satisfied with the quality of care provided, although midwives and midwifery students were less likely to agree.

This study provides a unique exploration and comparison of experiences of receiving and providing maternity care during the COVID-19 pandemic in Australia. Findings are useful to support further service changes and future service redesign.

The new evidence provided offers unique insights into key stakeholders’ experiences of the rapid changes to health services.

Understanding the human experience of maternity services system changes in response to COVID-19 is vital to minimise the negative and optimise the positive impact of changes on those receiving and providing maternity care.
Patient Experience

Caring for patients in isolation

The project was supported by in-kind contributions from Alfred Health and funding by the Centre for Quality and Patient Safety Research, and led by Alfred Deakin Professor Tracey Bucknall, Dr Robin Digby, and Dr Sharon Kramer in collaboration for the systematic review with Alfred Deakin Professor Alison Hutchinson, Ms Debra Berry, Professors Julie Considine, Professor Trisha Dunning, Professor Ana Hutchinson, Professor Elizabeth Manias and Professor Bodil Rasmussen.

Knowing the most effective interventions in caring for patients in isolation has never been more important than during the COVID-19 pandemic.

Before the COVID-19 pandemic, approximately 12% of patients were isolated in Victorian hospitals. During the global pandemic, the number of isolated patients rapidly increased with demand being greater than supply. Patients were in either preventative or protective isolation; in both cases restrictions and precautions are placed on clinicians and visitors entering a patient’s room.

Isolation can have negative outcomes for patients and their families, including: anxiety, depression, preventable hospital complications, decreased patient satisfaction, and communication failures between patients, families and staff. Effective management strategies are needed to prevent these negative effects of isolation.

This program of research aims to understand and counter the impacts of patient isolation on care and health outcomes. The study encompasses several research projects that began during the COVID-19 pandemic in response to a lack of evidence in caring for isolated patients. Studies included:

• A systematic review to summarise the effects of interventions to improve patient safety and outcomes for patients in preventative and protective isolation.
• An investigation of clinical and non-clinical staff perceptions of care, communication, and treatment of isolated patients in acute and critical care settings during COVID-19.
• An exploratory study of families of critical care patients’ perceptions of care, communication, and restricted visitation during the COVID-19 pandemic.

Multiple approaches were used to address the program aims including a systematic literature review, focus groups and video interviews. Eighty-eight participants including family members, interdisciplinary health professionals and non-clinical support staff from Alfred Health were interviewed.

We found a lack of quality research evidence with only six studies addressing the research aims. Interventions were mostly targeted towards patients in protective isolation and included music therapy, psychological counselling, and exercise training. Our qualitative analyses revealed the following themes:

• Organisational communication with patients, families and staff, and the use of new communication technologies.
• Isolation impacts both families and patients.
• Maintaining standards of care, patient safety, nutrition, and mobility was highly challenging.
• Staff experiences were impacted by workloads, support, teamwork, and personal protective equipment.
• Rapidly changing situations influenced policies, decision-makers, and clinical practice.

Isolating large numbers of patients and restricting most visitors resulted in good pandemic management, but staff and families perceived it came at a considerable cost to patients, families, and staff; impacting standards of care and adding significant stress to patients, families, and staff. Research evidence to support improved patient outcomes and workforce models of care is urgently needed to deal with the current and future pandemics.
Evaluation of the acceptability, usability and feasibility of a patient engagement strategy (MyStay Cardiac) among patients and nurses – Phase 2 pilot implementation

MyStay is an evidence-based multimedia program co-designed with patients and clinicians to facilitate patient engagement in their postoperative care and recovery. MyStay is available for patients after a range of surgeries including Total Knee Replacement, Total Hip Replacement, Cardiac surgery via sternotomy and Spinal procedures. Designed to be self-navigated by patients, MyStay facilitates communication between patients and their nurses, physiotherapists and doctors and makes explicit the daily goals of care, enabling patients to actively participate in achieving optimum recovery.

A mixed methods study design is currently being used to evaluate consumers’ and nurses’ views on the acceptability, usability and feasibility of using the MyStay multimedia modules in clinical care. In 2020, the Cardiac MyStay was made available to patients undergoing open-heart surgery. Semi-structured interviews were conducted with both clinicians and patients.

Patients reported that the Cardiac MyStay was easy to access and that the daily recovery goals increased their motivation to participate in exercise and early mobilisation while in hospital.

Cardiac nurse educators found that the MyStay multimedia resources were easy to integrate into their clinical practice:

“Cardiac MyStay is a fantastic resource – we use it all the time, the cardiac patients love it!”
– Cardiac Nurse Educator

and,

“One of my patients was really anxious before his cardiac surgery, providing him with access to Cardiac MyStay really helped him understand the steps in recovery and helped decrease his anxiety.”
– Cardiac Nurse Educator

Multimedia applications provide an accessible medium to provide clinicians and patients with resources to support their recovery in the immediate postoperative period.
Validation of the ‘Dignity in Care for Hospitalised Older People’ Survey

This project was funded by the Health Issues Centre, Practice Partners Program and was led by Associate Professor Debra Kerr, Professor Trisha Dunning and Dr Rosie Crone.

Older people’s dignity is often compromised during acute hospital care. Evidence suggests dignity-related training for healthcare staff is needed to deliver dignified care. However, there are no appropriate validated tools to measure older people’s dignity during hospitalisation. Existing tools do not meet readability and design criteria relevant to older people. In Phase 1 of this study, older people and their carers at Barwon Health were interviewed about their understanding of dignity-related care. Analysis of qualitative data identified three main themes: ‘Involve me in decisions about my care and treatment’, ‘Provide me with safe and quality care’, and ‘Speak to me with respect’. In collaboration with two Consumer Advisory Groups, these findings were used to devise the ‘Dignity in Care for Hospitalised Older People Survey’ (Dignity Survey).

The aim of this Phase 2 study was to evaluate the validity and reliability of the Dignity Survey for measuring dignity in care for hospitalised older people. Content validity was assessed by a panel of six experts. Face validity was assessed by surveying 10 consumers, older people hospitalised in acute care at University Hospital Geelong. Internal validity of the tool was tested by asking participants to complete the survey twice over a two-hour period.

After expert and consumer review, all items were retained. However, the wording of some items were modified to enhance readability. One additional item was added. The final survey comprised 14 questions. Test re-test reliability found the mean difference in paired items was similar for all items. An acceptable level of internal consistency (α=0.784) was found. The removal of one item, the only negatively worded item and related to concerns about provision of care, noticeably improved the internal consistency of the scale (α=0.827).

With further validation and refinement, the 14-item Dignity Survey could be used as a reliable Patient Reported Outcome Measure, providing healthcare organisations with real-time data about levels of dignity for hospitalised older people. This feedback could lead to the evaluation of strategies to enhance older persons’ dignity, such as communication skills training and continence management.

The Dignity Survey is a reliable tool that can be used to measure older patients’ satisfaction with dignified care.
Improving communication with older patients about managing medications across transitions of care

The project was funded by the Australian Research Council Discovery Project Grant Scheme (DP170100308) and led by Professor Elizabeth Manias, Alfred Deakin Professor Tracey Bucknall, Professor Robyn Woodward-Kron, Professor Carmel Hughes, Professor Christine Jorm and Ms Guncag Ozavci.

The project aimed to:
- identify possible communication problems with how medications are managed as older patients move across transitions of care
- understand how reflexivity can be applied to improve understanding of patients’ and families’ needs and to clarify possibilities for improvement in how communication about medications is managed as older patients move across transitions of care

A reflexive ethnographic methodology was used for this project. During focus groups with patients and families, we presented our findings from interviews and observations to gauge their reflections of how managing medications could be improved across transitions of care to create opportunities for increased patient involvement.

Fifty older patients and 31 family members participated in semi-structured interviews; 203 hours of observation were conducted where 111 older patients were observed, and 20 patients and 13 family members participated in focus groups. While patients and families trusted health professionals in how medication decisions were made, they provided recommendations about how medication activities across transitions could be improved. Health professionals asked repeated questions about medications, which at times, confused patients who wondered if they conveyed what was required of them. Patients with many medications experienced communication problems in terms of lack of medical specialists talking with each other about their medication regimen. This situation meant that patients had to convey the same information in different environments. Medication decisions were often made as patients moved from one environment to another, without considering what patients and families may have thought. There were also gaps in information in doctors conveying medication changes to patients, and of how these changes could lead to therapeutic and unwanted effects.

Guidelines for practice have been developed, which include patients being alerted to medication changes so that they can self-monitor their health, therefore preventing subsequent hospital admission, and patients and families having opportunities to contribute to medication decisions as patients move between environments. Patients and families were involved in the implementation of our project as information we gathered in interviews and observations with these individuals was then taken back to patients and families in focus groups. In these focus groups, we sought out clarification of what we found, and of how communication about managing medications across transitions of care could be improved.

Using the process of reflexivity with patients and families, guidelines for practice have been developed which are derived from actual experiences in the messiness of everyday communication in clinical settings.
Discharge medication safety strategies: What is the patient’s role?

The project was funded by the Gold Coast Hospital and Health Service and the Gold Coast Hospital Foundation Research Grant Scheme, and led by Dr Georgia Tabiano, Professor Wendy Chaboyer, Ms Trudy Teasdale, Professor Lukman Thalib and Professor Elizabeth Manias.

Older hospitalised patients are at an increased risk of experiencing medication errors in hospital. Patient engagement is a way in which patients can be involved with managing their medications, while at the same time helping to reduce medication harm.

The study took place in six wards in an Australian metropolitan tertiary hospital, measuring older patients’ preferred and reported medication safety behaviours, identifying the relationship between these preferred and reported medication safety behaviours and comparing whether perceptions of medication safety behaviours differed between groups of patients who were young–old (65–74 years), middle–old (75–84 years) and old–old (≥ 85 years). The Inpatient Medication Safety Involvement Scale (IMSIS) was administered to 200 hospitalised older patients.

Of the 200 older patients, 60.5% were men, and the reasons for admission were of a medical (87.5%) or surgical (12.5%) nature. Older patients had a median total of 12 discharge medications prescribed (IQR 9, 16). Patients reported that they wished to ask questions about their medications (59.5% n = 119) and to check with health professionals if a medication was wrong (86.5% n = 173) or forgotten (87.0% n = 174). Most disagreed that they would like to view their medication administration chart while in hospital (74.5%, n = 149), and most disagreed that they wished to keep and administer their own medicines while in hospital (77.0% n = 154).

Preferred and reported medication safety behaviours correlated positively ($r = 0.46–0.58$, $n = 200$, $p \leq 0.001$), whereby young–old patients preferred notifying health professionals of perceived medication errors more than middle–old and old–old patients ($p \leq 0.05$). Older patients may prefer verbal medication safety behaviours like asking questions and notifying health professionals about medication errors, over viewing medication charts and self-administering medications. The young–old group appear to identify perceived medication errors more than other age groups.

Older patients are willing to engage in medication safety behaviours, and healthcare professionals need to embrace their desire to engage effort to reduce medication harm.
Modifications to medical emergency team activation criteria and implications for patient safety: A point prevalence study

The project was funded by the Eastern Health Foundation and led by Ms Stephanie Sprogis, Dr Maryann Street, Professor Judy Currey, Associate Professor Daryl Jones, Associate Professor Evan Newnham and Professor Julie Considine.

Medical emergency team (MET) activation criteria are sometimes modified to minimise unnecessary MET calls in patients who have chronic physiological derangements, have limitation of medical treatment orders in place, or have recently received treatment for clinical deterioration. However, the safety implications of modifying MET activation criteria are poorly understood.

The aim of the study was to examine the safety of modifying MET activation criteria. The specific project objectives were to examine the frequency and nature of modifications to MET activation criteria, and compare characteristics and outcomes of patients with and without modifications to MET activation criteria.

A point prevalence study was conducted and data were collected using a retrospective medical record audit. Patients admitted to 14 wards at two acute-care hospitals of one health service in Melbourne, on November 7, 2018 were included (n = 430). The point prevalence date was randomly selected. Data were analysed using descriptive and inferential statistics (chi-square test, Fisher’s exact test and Mann-Whitney U test). The main outcome measures included frequency and nature of modifications to MET activation criteria on a specified date, MET calls, intensive care unit admission, in-hospital cardiac arrest, and in-hospital death.

A total of 430 inpatients were included in the study. There were 30 modifications to MET activation criteria in 26 (6.0%) patients. All modifications were intended to trigger METs at more extreme levels of physiological derangement. Most modifications pertained to tachypnoea (26.7%; n = 8/30) and bradycardia (23.3%; n = 7/30). A limited duration was documented for 66.7% (n = 20/30) of modifications to MET activation criteria.

Of patients with modifications, 80.8% (n = 21/26) had a vital sign parameter modified. In the remaining 19.2% (n = 5/26), the modification was ‘MET calls for distress only’, which meant a MET call would be triggered by patient distress instead of vital sign abnormalities. Eleven patients (2.6%) had 12 MET calls on the study day. Patients with modifications to MET activation criteria were significantly more likely to have a MET call on the study day than those without modifications (11.5%, n = 3/26 vs 2.0%, n = 8/404, p = 0.023). Patients with modifications were more likely to have documented physiological deterioration that fulfilled MET (47.8%, n = 11; p < 0.001) or pre-MET (87.0%, n = 20; p < 0.001) criteria in the preceding 24-hour period than patients without modifications. Of patients with modifications to MET activation criteria, none died in hospital, had an in-hospital cardiac arrest, or were admitted to an intensive care unit. There were no differences in hospital length of stay or discharge destination between patients with and without modifications.

In this point prevalence study, modifications to MET activation criteria were infrequent and did not negatively impact patient safety, hospital length of stay, or discharge destination.

Medical emergency team (MET) activation criteria were infrequent and did not negatively impact patient safety, hospital length of stay, or discharge destination.

Modifications to medical emergency team activation criteria were infrequent and did not negatively impact patient safety, hospital length of stay, or discharge destination.
Patient Safety

Preventing harm to older people in acute hospitals: Supporting quality in complex nursing work

The project was funded by the National Health and Medical Research Council under the Translating Research into Practice (TRIP) Fellowship scheme and the Nurses Board of Victoria Legacy Limited Mona Menzies Postdoctoral Research Grant and led by Associate Professor Bernice Redley.

This research addresses the gap between the recommended evidence and nursing practices to prevent harms commonly experienced by older people (>65 years) in hospital. Hospital strategies for comprehensive nursing care to prevent harm to older people in hospital are complex and poorly defined, and health information technology solutions have a poor history of efficiently and effectively supporting complex nursing work.

The research aims were to develop and test an integrated harm prevention model and co-design a suitable technology solution to support nurses’ decision-making and care to prevent harm to older people in hospital. The research uses a framework of eight factors identified as sensitive contributors to the quality of nursing and care, which also contribute to patient harm in hospital.

The three-stage design included participatory co-design methods to collaborate with researchers, decision-makers, nurse and patient end-users to develop an innovative solution. Stage 1 examined existing practices and synthesised best evidence; Stage 2 co-designed a novel harm prevention model; and Stage 3 examined the feasibility and usability of the solution prototype technology for clinician use.

The outcomes include:
- An understanding of strengths and gaps on harm prevention practices by nurses.
- A synthesis of recommended bundles or groupings of practical strategies for common combinations of factors contributing to patient risk (e.g. delirium, incontinence and falls) that are readily integrated into local practice contexts.
- A model for comprehensive harm prevention by nurses.
- A technology prototype to assist nurses use the model in clinical practice when admitting a new patient to hospital.

Potential impacts of this research include: assisting nurses to rapidly identify those most vulnerable to preventable harm in hospital and implement a comprehensive harm prevention plan; streamline risk assessments to reduced nurse workloads; and optimisation of hospital electronic medical records (EMRs) to support nurses with comprehensive harm prevention.
Advancing the science of knowledge translation: Measuring context

The project was funded by the Canadian Institutes of Health Research, co-led by Professor Janet Squires and Alfred Deakin Professor Alison Hutchinson, in collaboration with Professor Ian Graham and a large international team of researchers and knowledge users.

Use of research evidence in practice by healthcare professionals is suboptimal; this is despite the availability and awareness of evidence as well as knowledge of gaps in its use. Knowledge translation interventions are used to facilitate the translation of evidence into practice. Importantly, evidence exists to confirm that context plays a critical role in influencing the success of knowledge translation interventions. Our prior work to provide conceptual clarity on the meaning of context for knowledge translation resulted in the development of the Implementation in CONtext (ICON) framework, comprising six broad domains of context. Measurement of context is important to informing the modification of knowledge translation intervention design and the delivery of the intervention, as well as understanding the effects of the intervention. The present study is designed to build on this work, by advancing the measurement of context in knowledge translation in healthcare. The specific objectives of the study are to:

• Systematically search for and critically review measures of context attributes identified in the ICON framework.
• Assess the development, psychometric and pragmatic properties of the measures.
• Develop and assess the usability of an electronic Context Measure Resource Centre with an online decision support tool.
• Inform an international research agenda to guide future context measurement studies in knowledge translation in healthcare.

This study will result in a dynamic online resource centre containing measures of context attributes for use in knowledge translation efforts in healthcare.

This project will result in the first ever repository (the Context Measure Resource Centre) for context measurement in knowledge translation in healthcare, which will include:

• access to curated high-quality measures of context
• profiles of context measures, tailored to users’ requests and comprising key information such as measurement properties, uses, strengths and limitations
• a decision support tool to assist individuals in selecting context measures for use in their setting and project
• a research priority tree, outlining attributes for which measures do not exist or those that require further testing.

The study is due to conclude in 2022.
Pilot trial of a new lactation device ‘Lactamo’ to apply massage, temperature (heat and cold), and compression to the breast

The project was led by Professor Linda Sweet and Dr Vidanka Vasilevski.

International feeding guidelines recommend that infants be exclusively breastfed until six months of age and continue to breastfeed with additional foods for two years and beyond. Supporting women to breastfeed is therefore a major public health activity. The first four to six weeks after birth is critical for successful lactation. This period is associated with common lactation concerns including the greatest risk for breastfeeding cessation. Lactamo is a newly-invented lactation aid that has the potential to directly address several common breastfeeding problems and therefore, assist breastfeeding mothers.

The study aimed to conduct a pre-market pilot trial to determine preliminary safety, use, and performance of Lactamo, a lactation device for massage, temperature (heat or cold), and compression to the breast.

An exploratory approach pre-market pilot for unapproved therapeutic goods was conducted. Participants were women over 18 years of age who had recently commenced breastfeeding or expressing breastmilk with the intention to continue for at least four weeks and spoke conversational English. Following informed consent, participants were provided with a Lactamo device, along with a research information flyer that described how it should be used. Structured telephone surveys at 1- and 4-weeks post supply of Lactamo were conducted. Questions included demographic information, safety, usage, and feedback about Lactamo.

Lactamo was found to be a safe and valuable aid for breastfeeding women.

The cohort (n = 30) consisted of an equal number of primiparous and multiparous women, 50% were born in Australia and the remainder from 11, mostly Asia-Pacific, countries. A total of 41 telephone surveys were conducted with 27 women. Of these, 26 (96%) had used Lactamo, and the one that did not, felt she did not have a lactation concern to warrant it. All women indicated that the device was safe to use and there were no concerns raised about the product. Most women used it at room temperature or warmed. The frequency of use varied from once per week (17%) to daily (33%), and use was often prompted by a lactation concern such as pain, blocked ducts, and under or oversupply.

All participants would recommend the device, especially in the early weeks of establishing lactation. Lactamo was found to be safe, and a valuable aid for breastfeeding women.
Patient Safety

Unexpected death and serious patient deterioration in hospital: An examination of communication and decision-making in sentinel events

The project was funded by the Executive Dean’s Health Research Fellowships, Deakin University, and led by Dr Robin Digby (recipient of award), Alfred Deakin Professor Tracey Bucknall and Alfred Deakin Professor Alison Hutchinson.

Failure to recognise, interpret and manage the signs of patient deterioration can potentially result in serious adverse outcomes and in some cases death. Some patients are unnecessarily harmed, sometimes seriously or fatally during hospital admission. Mismanagement is estimated to contribute to a third of patient-safety related deaths. Many of these deaths resulted from poor communication between health professionals, and with patients and families. A large concern for patients and families is that health professionals and leaders in health services fail to listen to, or seek, their opinions and that this failure results in worse patient outcomes.

The aim of this research is to examine decision-making and communication resulting in failure to escalate patient deterioration in acute hospitals leading to unexpected deaths.

We used narrative inquiry to examine coroners’ inquest transcripts of patients who died following unexpected deterioration in acute hospitals in Victoria between 2010 and 2018.

Three main stories were identified:

• Being heard – family members gave evidence at the inquests that healthcare professionals had not sought or listened to their opinion about their relatives’ illness or condition. The parents of young children, carers of people with disabilities and spouses all complained that they had tried to contribute valuable information about the patient and had been ignored.

• Making mistakes – clinicians involved in these cases described stories of doing their best despite the tragic outcomes. Often there was a very heavy workload in a busy department combined with inexperience or failure to escalate the problem to senior colleagues. Patients’ symptoms could be vague or fluctuating and easily attributable to a range of conditions. Unclear communication between pathologists or radiologists and clinicians could result in serious diagnoses being missed. Emergency treatment was often delayed or not initiated despite obvious patient deterioration.

• The rare condition – uncommon diagnoses are more common in coroner’s inquest transcripts because clinicians tend to remain with their initial impression without exploring patient symptoms further despite new information emerging. Frequently an obvious cause for the complaint was explored such as internal bleeding following surgery, ignoring rare conditions, which could also explain the symptoms.

Our research identified communication failures, flawed decision-making, and organisational pressures across cases. These factors influenced decision-making and communication, which guide appropriate patient care and escalation of deterioration.

Patients and families need to be heard, health professionals need to be aware of their decision-making biases and organisations need to support staff with appropriate supervision.
Patient Safety

Consumers’ and nurses’ awareness and experiences using a consumer escalation of care process. A mixed methods study

The project was funded by Epworth HealthCare and led by Professor Ana Hutchinson, Mr Stuart Shakespeare, Ms Sheila Daly, Ms Michelle Yu, Ms Jane Lynch, Ms Paula Stephenson and Mr Nik Zeps.

Rapid response systems facilitate early identification and intervention for clinical deterioration. Patient and family activated escalation systems have been implemented to decrease the likelihood of failures in recognition and response to clinical deterioration. The study purpose was to explore consumers’ and clinicians’ awareness, perceptions and understanding of the consumer escalation of care process.

A sequential mixed methods study was conducted that included two phases. Phase 1 was an exploratory descriptive qualitative study that involved focus group discussions and semi-structured interviews with consumers and nurses. Phase 2 was a cross-sectional survey of consumers and clinicians. The current process for informing consumers is through posters placed in public areas of the hospital and discussions with consumers during routine leader rounds.

Consumer perspectives: In Phase 1 the key themes identified were: (i) High levels of confidence in their clinical team, and (ii) Consumer escalation process was for isolated or vulnerable patients.

The outcomes of this study will inform development of a structured communication strategy that articulates the place of consumer escalation of care as a core component of safe, patient-centred care.

In Phase 2, 158 consumers completed a post discharge survey, the majority endorsed the importance of consumer escalation systems but reported being unaware of the process commenting:

“While my treatment was outstanding, I would have appreciated knowing about the escalation process. I believe it is essential to give patients extra level of reassurance if they feel concerned about possible deterioration in their condition.”

– Survey participant

In both the interviews (n = 28) and staff surveys (n = 62), clinicians raised concerns about low levels of awareness and understanding of consumer escalation of care processes.

Although consumers have confidence in their treating team, the ability to escalate their concerns to a ‘fresh set of eyes’ is highly valued and should be actively promoted by clinicians.
There is a wide breadth of application of team-based learning in nursing education and variability in the outcomes reported. To date, team-based learning is associated with positive learning outcomes, positive student experience, high levels of student engagement, and the development of teamwork and collaboration skills.

The student outcomes most commonly reported were:
- knowledge or academic performance (n = 21)
- student experience, satisfaction or perceptions of team-based learning (n = 20)
- student engagement with behaviours or attitudes towards team-based learning (n = 12)
- effect of team-based learning on teamwork, team performance or collective efficacy (n = 6).

Only three studies reported clinical outcomes.

There is an emerging body of knowledge related to the use of team-based learning in nursing education. The major gaps identified in this scoping review were the lack of randomised controlled trials and the dearth of studies of team-based learning in postgraduate and hospital contexts.
PsychoSocial impact of COVID-19 on healthcare workers, students and patients

The project was funded by the Institute for Health Transformation, the Victoria Hospital Association, and the Centre for Quality and Patient Safety Research, Western Health. The project was led by Dr Sara Holton, Professor Bodil Rasmussen and Dr Karen Wynter.

The Western Health Partnership established a research program to investigate the psychosocial impact of the COVID-19 pandemic on healthcare workers, students, and patients. The research is being undertaken in collaboration with various Australian and international health services. Projects include:

- The psychosocial impact of COVID-19 on hospital clinical and community health service staff.
- The COVID-19 pandemic: Perspectives and experiences of nursing and midwifery educators.
- Understanding the impact of COVID-19 on psychosocial wellbeing and learning for nursing and midwifery undergraduate students.
- Evaluation of the Western Health COVID-19 Staff Wellbeing and Support Initiatives, including the COVID-19 Staff Enquiry Service.
- Experiences of health, disability, and recovery after COVID-19 diagnosis.
- Returning to work after parental leave during the COVID-19 pandemic.
- Consumers’ perceptions, experiences and use of telehealth.

Targeted wellbeing interventions are required to support health service staff and students during the current and future outbreaks of infectious diseases and other ‘crises’ or adverse events.

The study assessing the psychological wellbeing of Australian hospital clinical staff during the COVID-19 pandemic conducted an anonymous online cross-sectional survey in a large metropolitan tertiary health service located in Melbourne, Australia. The survey was completed by nurses, midwives, doctors and allied health (AH) staff between 15 May and 10 June 2020. The Depression, Anxiety and Stress Scale – 21 items (DASS-21) assessed the psychological wellbeing of respondents in the previous week.

In all, 668 people responded to the survey. Of these, 108 (16.2%) had direct contact with people with a COVID-19 diagnosis. Approximately one-quarter of respondents reported symptoms of psychological distress. Between 11% (AH staff) and 29% (nurses/midwives) had anxiety scores in the mild to extremely severe ranges.

Nurses and midwives had significantly higher anxiety scores than doctors (p < 0.001) and AH staff (p < 0.001). Direct contact with people with a COVID-19 diagnosis (p < 0.001) and being a nurse or midwife (p < 0.001) were associated with higher anxiety scores.

The COVID-19 pandemic had a significant effect on the psychological wellbeing of hospital clinical staff, particularly nurses and midwives. Staff would benefit from (additional) targeted supportive interventions.
Health Workforce

Nurse motivation, engagement and wellbeing before and after the implementation of an electronic medical record system

The PhD project was supported by funding from the Australian Government Research Training Program Scholarship through Deakin University’s Institute for Health for Transformation, the Monash Health Emerging Researcher Fellowship Grant, the Nurses Board of Victoria Legacy Limited Leadership grant: Informatics and the Australian Nurses Memorial Centre Australian Legion of Ex-Servicemen and Women Scholarship. The project was led by Ms Rebecca Jedwab, Associate Professor Bernice Redley, Alfred Deakin Professor Alison Hutchinson, and Professor Elizabeth Manias.

New technology such as electronic medical record (EMR) systems has been implemented throughout hospitals worldwide, and more recently throughout Australia.

Although EMR systems aim to facilitate efficient care, they have had detrimental effects on healthcare professionals’ wellbeing and engagement and have been attributed to clinician burnout.

Nurses are at the forefront of EMR use and adoption, and are crucial to the success of EMR implementations. Although the addition of new technology into an already complex healthcare system may affect nurses’ work and wellbeing, EMR implementations are poorly understood and have not been examined concurrently, nor in an Australian context.

This project addresses the issue: ‘How are nurse motivation, engagement and wellbeing associated with an EMR system implementation?’ The three aims are to:

- investigate changes in nurse motivation, engagement and wellbeing pre- and post-implementation of an EMR
- investigate the relationships between nurse motivation, engagement and wellbeing and the implementation of an EMR system
- develop and empirically test theoretical models to explain the relationships between nurse motivation, engagement and wellbeing and an EMR implementation.

This study focused on an organisation-wide EMR implementation at Monash Health:

- Phase one: survey and focus group interviews pre- and post-EMR implementation.
- Phase two: a systematic realist review to develop a conceptual model that synthesises the multiple complex components and interactions between an EMR implementation and nurse engagement, motivation and wellbeing.
- Phase three: structural equation modelling to develop and test models between the concepts to explain how nurse motivation, engagement, and wellbeing impact EMR implementation.

Most nurses were engaged and satisfied in their work before the EMR implementation and intended to stay in their roles. However, some nurses had low wellbeing scores and were experiencing symptoms of burnout.

Nurses’ adoption of EMR systems is crucial to successful and sustained implementation. Some groups of nurses may be particularly vulnerable to the potential negative impacts of an EMR implementation on their wellbeing.
Health Workforce

Cost-effectiveness of an inpatient heart failure nurse practitioner service

The project was funded by the Department of Health and led by Professor Andrea Driscoll, Associate Professor Jennifer Watts, Mrs Sharon Meagher, Ms Rhoda Kennedy, Mr Ronald Mar, Associate Professor Douglas Johnson, Professor David Hare, Associate Professor Omar Farouque, Ms Melodie Heland, Ms Bernadette Twomey and Dr Lan Gao.

Heart failure (HF) nurse practitioners (NP) are part of the HF specialist workforce and to date their impact on improving the management of people with HF is unknown. The study aimed to determine the cost effectiveness of a HF NP inpatient service compared to current practice of no HF NP service from a health system perspective at 12 months and three years.

This is a post-hoc analysis of a retrospective cohort study using a Markov model. Costs, effects and cost-effectiveness were estimated for patients in the HF NP group compared to usual care at 12 months and three years. Transition probabilities and utilities were derived from published studies.

At 12 months, the HF NP group was less costly and more effective compared to no HF NP ($23,031 vs $25,111 respectively; quality adjusted life-years (QALYs) were 0.68 in the HF NP group compared to 0.66 in the usual care) and had lower readmissions (73.7% in the HF NP group compared to 81.7% in the usual care group, p = 0.03). The incremental cost effectiveness ratio for the HF NP versus usual care was a savings of $109,474 per QALY gained at 12 months and a savings of $270,667 per QALY gained at three years.

Heart failure nurse practitioners are cost-effective and have the potential to reduce rehospitalisations and save the lives of patients diagnosed with heart failure.

The HF NP service was cost-effective with a lower cost and increased QALYs shown in the HF NP service compared to no HF NP service. However, this economic evaluation was based on a cohort study so additional evaluations conducted alongside randomised control trials are warranted.
Health Workforce

Evaluation of an older person’s nurse practitioner service

The project was funded by the Centre for Quality and Patient Safety Research and led by Professor Andrea Driscoll, Dr Grainnie Lowe, Mrs Sharon Meagher, Ms Rhoda Kennedy, Ms Jayne Dohrmann, Mr Lee Stanford and Ms Juliette Chapman.

The older adult population is a rapidly growing demographic in Australia, with the 65 years and older population set to reach 22.5% of the total population by 2050. One strategy to improve service delivery in the older person population was the introduction of an Older Person Complex Care (OPCC) nurse practitioner. These models have now been implemented statewide but to date they have not been evaluated.

The aim of this study was to evaluate the effectiveness of the OPCC nurse practitioner service to improve three-month survival and hospital readmission rates in elderly complex patients admitted to hospital.

A retrospective clinical audit of the medical records of all patients referred to the OPCC nurse practitioner service from January 2018 to April 2019 was undertaken.

A total of 77 patients were referred to the OPCC nurse practitioner service. The age of clients to the OPCC nurse practitioner service ranged from 64–98 years, with a mean of 83.56 (SD 7.197) years.

The number of patients requiring admission post OPCC nurse practitioner service decreased significantly from 90 admissions prior to the OPCC service compared to 51 post OPCC service. Of the 51 admissions post OPCC review, nine were planned. Results show that 30% of patients had no admissions prior to the nurse practitioner service compared with almost 50% having no admissions post review by the OPCC nurse practitioner service. Changes to medications were made in 47 (61%) cases. Medication changes included dose changes 28 (36%), new medication added 29 (38%) and ceasing medications 29 (38%).

The OPCC nurse practitioner service can potentially reduce re-hospitalisations and medication errors through improved prescribing and particularly personalised medicine. However, more robust evidence is warranted in a multisite randomised control trial.

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The Older Person Complex Care nurse practitioner service has the potential to reduce re-hospitalisations and medication errors in the elderly.

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Examining nurses’ and midwives’ attitudes, perceptions, acceptance and use of an electronic medical record system (and comparing their responses with those of allied health professionals at Western Health)

The project was led by Dr Karen Wynter, Associate Professor Lemai Nguyen, Dr Sara Holton, Ms Helen Sinnott, Professor Nilmini Wickramasinghe, Adjunct Professor Shane Crowe and Professor Bodil Rasmussen.

There is inconsistent evidence about nurses’ and midwives’ experiences of using electronic medical records (EMR). Little is known about their perspectives in countries like Australia where owing to cost constraints, EMR is often implemented in phases, initially alongside legacy systems.

The project aimed to describe nurses’ and midwives’ perceptions and experiences following the first phase of an EMR implementation at multiple sites of a large public health service in metropolitan Melbourne, Australia.

Nurses and midwives employed at the health service were invited to participate in a focus group. Four focus groups were held between August and October 2019. Transcripts were analysed using thematic analysis.

Of thirty-nine participants, most were nurses (n = 25, 64%) and female (n = 31, 80%). Mean (SD, range) years of clinical experience was 15.6 (12.2, 2–40). Three main themes were identified, relating to both the positive and negative impacts of the EMR on:

- nurses’ and midwives’ workflow
- patient care and communication
- personal wellbeing.

While some participants reported that EMR facilitates easier access to real-time patient data, others indicated that workflow is disrupted by the EMR being slow and difficult to navigate, system outages and lack of interoperability between the EMR and other systems. These factors contributed to frustration, stress and exhaustion among nurses and midwives. Some participants reported that the EMR improved their communication with patients and reduced medication errors; others indicated a negative impact on patient care and communication.

Although an EMR can make nurses’ and midwives’ work easier and improve patient communication, this study indicates that in the early stages after a partial implementation, the EMR can negatively impact nurses’ and midwives’ workflow and ability to provide high-quality patient care.

Significant resources are required to support nurses and midwives in the first 12 months after electronic medical records implementation.
Facilitating the translation of research into practice can lead to improved patient and organisational outcomes.

Vital signs are the primary indicator of physiological status and for determining the need for urgent clinical treatment. Yet if physiological signs of deterioration are missed, misinterpreted, or mismanaged, then critical illness, unplanned intensive care admissions, cardiac arrest, and death may result. After decades of research on recognition and response to clinical deterioration, raised international awareness and implementation of new models of response, the problem of failure to rescue remains.

A pragmatic cluster randomised controlled trial design was used to measure clinical effectiveness and cost of a facilitation intervention to improve nurses’ vital sign measurement, interpretation, treatment, and escalation of care for patients with abnormal vital signs. We compared clinical outcomes and costs from standard implementation of clinical practice guidelines (CPGs) to facilitated implementation of CPGs. The study was conducted in four Australian major metropolitan teaching hospitals, 36 wards were randomly allocated to either intervention or control groups. Control wards received standard implementation of CPGs, while intervention wards received standard CPG implementation plus facilitation to apply the CPGs into practice, tailored to the ward context for six months. We also measured if the intervention changes were sustained after the withdrawal of the facilitators.

In total 6065 patient records were reviewed, across 10,383 days. Although there were no significant differences in the escalation of care as per hospital policy, unplanned ICU admissions or mortality, between study groups, there was evidence of improvement in support of the intervention. Importantly, a significant shorter length of stay was found in the intervention group at 12 months post-intervention that equated to a significant hospital cost savings.

We set out to measure the effectiveness of a facilitation intervention that targeted nurses’ early recognition and response to clinical deterioration in patients. Although there were trends toward greater adherence by nurses in the intervention group, the changes were not statistically significant. However, a clinically important outcome for patients and health services was the reduced length of stay. Further research is required to understand the level and type of interprofessional facilitation required to impact clinical practice behaviours and patient outcomes.
Health Workforce

Evaluation of the Epworth HealthCare nurse consultant-led liaison psychiatry service in an acute non-mental health care facility

The project was funded by Epworth HealthCare and led by Ms Julia Segal, Ms Suzie Hooper, Dr Rosalind Lau and Professor Ana Hutchinson.

As the prevalence of mental illness in the community rises, the number of patients admitted to acute care services with a comorbid mental health condition is increasing. Providing person-centred care and effective management of patients’ acute medical condition and their mental health can be challenging for staff working in acute care. This study explored the effectiveness of the support provided to acute care staff by a specialist mental health nurse consultant-led inpatient liaison service.

A mixed methods study design that involved three phases of data collection was used. Service activity data capturing the number, type and outcomes of referrals to the service were collected prospectively. A cross-sectional survey and focus groups with nurses from the emergency department and three inpatient wards were used to explore nurses’ experiences when accessing the service.

Over the first 12 months, 570 patients were reviewed by the service a total of 646 times, with 99% of referrals reviewed within 24 hours. Reasons for referral to the service were heterogeneous including: depression and anxiety, delirium, acute psychosis and suicidal ideation.

The mental health liaison nurse also conducted regular in-service education to support nurses working in the Emergency Department (ED), General Medical and Surgical wards. Fifty nurses from the following wards were surveyed: medical wards n = 12, orthopaedic wards n = 28, and ED n = 10. Sixty percent (n = 30) agreed that the mental health nurse consultant had provided them with strategies to improve the care of patients experiencing a mental health deterioration, 46% (n = 23) agreed that their own clinical skills had been advanced, and 40% (n = 20) reported being more confident managing patients with a mental health comorbidity.

The introduction of a mental nurse consultant in patient liaison services was well received by staff and may offer an effective strategy to improve clinical care of mental health deterioration.

“...The study findings are being used to inform supported implementation of the mental health deterioration standard across the health service.
Health Workforce

Responding to nurses’ communication challenges: Evaluating a blended learning program for communication knowledge and skills for nurses

The project was led by Associate Professor Debra Kerr, Ms Sharyn Milnes, Professor Peter Martin, Professor Jette Ammentorp, Dr Maiken Wolderslund and Ms Meg Chiswell.

Whilst nurses spend considerable time with patients during hospitalisation, there are reports they feel challenged to engage in specific types of conversations and respond to prognostic questions. In a focus group study undertaken at Barwon Health in 2019, nurses employed in medical and surgical wards, and in-patient palliative care settings, were found to have a lack of awareness of evidence-based communication structures (such as the Calgary Cambridge Guide) and the full repertoire of communication micro-skills that can be used to enhance the nurse/patient verbal interaction.

Individuals with life-limiting illness are likely to experience significant psychosocial, psychological, and spiritual difficulties. The term life-limiting illness is used to describe medical conditions that are likely to cause death as a direct consequence of that illness, and can include conditions such as cancer, heart disease, dementia, heart failure and renal disease, amongst others. Nurses are ideally positioned to have meaningful conversations with patients who have life-limiting illness, and their relatives. However, barriers exist to effective clinical communication between individuals with life-limiting illness and healthcare clinicians.

The purpose of this study was to implement and undertake evaluation of the Blended Communication Skills Training Program for Nurses (Blended CSTN). The primary outcome was to measure for improvement in nurses’ knowledge of communication skills and structure. The Blended CSTN aims to improve nurses’ knowledge about communication skills and structure for interactions with individuals who have life-limiting illness.

This was a quasi-experimental study using a pre- and post-test quiz and self-efficacy questionnaire undertaken in Victoria, Australia. Nurses employed across three wards at Barwon Health participated. The Blended CSTN comprised two major components: Asynchronous Web-Based Education Program and an Experiential Workshop. The program focused on specific communication challenges: Gathering Information, Dealing with Difficult Questions, and Articulating Empathy. The primary outcome was improvement in knowledge of communication skills and structure. Self-efficacy and perceived importance of communication skills were assessed as secondary outcomes.

Eighteen nurses completed both Web-Based and Workshop components. Statistically significant increases in knowledge regarding communication skills and structure were found, with a large effect size for: Gathering Information ($r = 0.80$), Articulating Empathy ($r = 0.62$), and Responding to Difficult Questions ($r = 0.53$). Self-efficacy significantly increased for all measured communication skills.

Improved knowledge and perceived self-efficacy in communication were observed after nurses participated in a blended education program. A blended CSTN may improve nurse-patient communication in the clinical setting and is worthy of further study.

Confidence and knowledge of useful communication skills and structure may be improved for nurses through a blended educational approach.
**Socially distanced nursing and midwifery simulation during the COVID-19 pandemic**

*Australian Nursing and Midwifery Journal*

Associate Professor Jo McDonall, Associate Professor Lauren McTier, Professor Nikki Phillips

**Deakin researchers bloom at the prestigious 2020 Tall Poppy Awards**

*Deakin University, media release*

Dr Anna Ugalde

**Patients with COVID-19 shouldn’t have to die alone. Here’s how a loved one could be there at the end**

*The Toorak Times*

Associate Professor Melissa Bloomer, Dr Stephane Bouchoucha

The article was also picked up by the *Daily Bulletin, viv magazine, Medical Xpress, The Conversation* and an interview on *Joy radio – ‘Visiting COVID patients’.*

Other related news articles were *‘What does the outbreak of COVID-19 reveal about palliative care in aged care?’* by Aged Care Insite and *Nursing Review* and *‘How to start a conversation about end of life care’* by Hello Care.

**Thermal cameras to spot COVID-19 are everywhere. They are far from perfect**

Published in *The Age*, was also picked up by *The Sydney Morning Herald, WA today, Saturday Age, Brisbane Times* and *Focus Technica.*

Alfred Deakin Professor Tracey Bucknall

**Dads’ sleep deprivation and fatigue at ‘pathological’ levels**

*Deakin University, media release*

The media release was also reported in the *Pakenham Gazette, Essential Baby, The National Tribune, Mirage News, Geelong Advertiser* with radio interviews on the *3AW Breakfast Show.*

Dr Karen Wynter

**Interrupted sleep a disheartening reality for many new parents**

*Disruptr*

Dr Karen Wynter
Where to next for telehealth in Australia’s Health services?

Insight plus

Professor Bodil Rasmussen, Professor Linda Sweet

The ‘hospital in the home’ revolution has been stalled by COVID-19

Health Times and The Conversation

Professor Bodil Rasmussen, Alfred Deakin Professor Maxine Duke

Helping frontline protectors

Geelong Advertiser

Australian Ageing Agenda published an article featuring the presentation "Enablers and barriers to undertaking dementia specific education: A cross sectional survey" delivered at the Australian Association of Ageing conference on the 19th November 2020.

Alfred Deakin Professor Alison Hutchinson

Honouring our nurses on the frontline

Disruptr

Reports an interview with Alfred Deakin Professor Alison Hutchinson.
"Chronically ill, vulnerable urged to keep doctors in the loop as many avoid doing so due to pandemic"

Published in the *Cairns Post* and was also reported in the *Gold Coast Bulletin, The Mercury, NT News, The Courier Mail, Geelong Advertiser, The Daily Telegraph, Adelaide Now* and *The Herald Sun.*

Professor Elizabeth Manias

"The need for self-awareness in times of social distancing and isolation"

*Disruptr*

Dr Lahiru Russell

"Who cares for the carers? Psychological wellbeing of nurses and midwives during the COVID-19 pandemic"

*Institute for Health Transformation*  
*EMCR Think Tank*

Dr Sara Holton, Professor Bodil Rasmusse

"You can’t see if it’s off: advice on storing breastmilk confusing, review finds"

Published in *The Sydney Morning Herald, WA Today, Brisbane Times and The Age.*

Professor Linda Sweet

"Expressing breast milk this summer? Storing it safely will protect your baby’s health"

*The Conversation*

Professor Linda Sweet
## Projects and funding

### External successful funding

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<td>MRFF (DISER) – Coronavirus Research Response Communication Strategies and Approaches During Outbreaks Grant</td>
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<td>Angela Dew, A/Prof. Patsie Frawley, Dr Amie O’Shea, A/Prof. Melissa Bloomer, Prof. Catherine Bennett</td>
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<tr>
<td><strong>Improving the mental health of cancer survivors with an outline mindfulness program: A partnership model to impact on cancer care</strong></td>
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<td>NHMRC – Partnership Grant</td>
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<td><strong>Development of a white paper: Examining integrative oncology and wellbeing services in Australia</strong></td>
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<td>Prof. Vicki White, Dr Anna Ugalde, Dr Lahiru Russell, Prof. Trish Livingston</td>
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<tr>
<td>Prof. Amanda Carter, Prof. Linda Sweet, Dr Kristen Graham, A/Prof. Michelle Gray, Ms Tanya Fleming</td>
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QPS members are highlighted in bold.

### Project categories:

- **Cat 1** – Australian competitive grants
- **Cat 2** – Other public sector research income
- **Cat 3** – Industry and other research income
Projects and funding

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<td>Preventing patient falls overnight using live and portable video monitoring</td>
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<td>Bariatric surgery before or after pregnancy</td>
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Project categories:

CAT 1 – Australian competitive grants | CAT 2 – Other public sector research income | CAT 3 – Industry and other research income

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<td><strong>Good Life – Victorian Cancer Survivorship Program: Expanding a program for effective self-management in cancer within a community health setting</strong>&lt;br&gt;Dr Lahiru Russell, Ms Rebecca McIntosh, Ms Carina Martin, Ms Fiona Wallace, Ms Bernadette Zappa, Dr Wee-Kheng Soo, Dr Bianca Devitt, Dr Penny Gaskell, Ms Katherine Simmons</td>
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<td><strong>Key informant interviews for Quitline evaluation</strong>&lt;br&gt;Dr Anna Ugalde, Dr Lahiru Russell</td>
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<td><strong>Clinician experience of virtual care modalities</strong>&lt;br&gt;A/Prof. Reema Harrison, Prof. Elizabeth Manias, Dr Ben Harris-Roxas, Dr Ramesh Walpora, Ms Laura Mimmo, Mr Tim Dobbins</td>
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<td><strong>Development of online guided self-determination resources to support low SES student transition to university</strong>&lt;br&gt;Prof. Bodil Rasmussen, Prof. Judy Currey, Dr Karen Wynter</td>
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<td>Alcohol consumption in Australian nurses: An action-design study</td>
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<td>Dr Adam Searby, A/Prof. Bernice Redley, Mr Glenn Taylor</td>
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<td>Dr Jac Kee Low, Prof. Elizabeth Manias, A/Prof. Kevin McNamara, A/Prof. Anna Wong Shee</td>
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Visiting academics

**Professor Tonda Hughes (RN, PhD, FAAN)**
Professor Tonda Hughes is the Henrik H. Bendixen Professor of International Nursing and Associate Head for Global Health Research – School of Nursing, Columbia University. She also has an interdisciplinary appointment as Professor in the Department of Psychiatry. In addition to Deakin University, she holds/has held honorary or visiting professorships at the University of Melbourne and the University of Technology Sydney as well as at Oxford-Brookes University (England) and the University of Pennsylvania (USA).

Professor Hughes has a distinguished research career focusing on sexual minority women’s mental health and substance use. Her pioneering studies on alcohol use among sexual minority women have received nearly continuous funding since 1999 from the U.S. National Institutes of Health.

She has served as co-investigator on numerous other funded studies with multidisciplinary researchers from major U.S. and Australian institutions, including the University of Melbourne and Deakin University. Professor Hughes also serves or has served as a consultant to many U.S. Federal agencies and institutes such as the Substance Abuse and Mental Health Services Administration, National Institute on Drug Abuse, National Institute on Mental Health, and National Institute on Alcohol Abuse and Alcoholism.

**Dr Ditte Høgsgaard (RN, PhD)**
Dr Ditte Høgsgaard is a registered nurse and postdoctoral researcher from the University of Southern Denmark/Region Zeeland, Denmark. Dr Høgsgaard visited the Centre for Quality and Patient Safety Research from 20 January to 14 February, 2020.

Dr Høgsgaard’s research focuses on the collaboration and coordination of care between health professionals in hospital and community settings when older patients are discharged from hospital to home care. Her research involves health professionals, patients and relatives.

During her visit to Melbourne, Dr Høgsgaard facilitated workshops with health professionals to explore the Australian perspective of collaboration and coordination of care between the hospital and community settings. This included a presentation on her research on care for older patients with chronic conditions when they are discharged from hospital to home care in Denmark.
Dr Nicholas Giordano (PhD)
Dr Nicholas Giordano’s research focuses on implementing and assessing interdisciplinary, multimodal, pain management interventions that span from the point of injury to outpatient community care settings. Currently, as a postdoctoral fellow, Nicholas and his colleagues are implementing patient-reported pain outcome registries across the United States’ military health system in order to identify symptom trajectories after surgery and inform providers of patients at risk for poor care outcomes.
As a Fulbright Scholar at Deakin University and Alfred Health under the supervision of Professor Tracey Bucknall PhD RN FAAN, he is interested in assessing the feasibility of leveraging patient-reported biospsychosocial assessments in clinical practice to guide care decision making for opioid sparing pain management after surgery.
Nicholas earned a BSN, AM in Statistics, and PhD from the University of Pennsylvania, where he was a Hillman Scholar in Nursing Innovation and National Institutes of Health funded Predoctoral Fellow. On his return to America, he was appointed as an Assistant Professor at the Nell Hodgson Woodruff School of Nursing, Emory University, Atlanta, Georgia.

Dr Rebecca Munt (RN, PhD)
Dr Rebecca Munt is a registered nurse with a PhD that focused on the self-management experiences of people living with type 1 diabetes while in hospital. Rebecca has undertaken a number of research projects in the area of diabetes and disseminated the research findings at conferences and in peer reviewed publications.
Dr Munt currently has a joint appointment as a Research Nurse with Central Adelaide Local Health Network and the Adelaide Nursing School, University of Adelaide. In this role Rebecca has supported and mentored nurses to undertake research projects to improve outcomes for nurses and patients as well as supervised students.
Dr Munt visited the Centre for Quality and Patient Safety in March 2020. She has collaborated with members of QPS to research the experiences of nursing and midwifery educators during COVID-19 and to present this research in a virtual event on the psychosocial impacts of COVID-19 on frontline health workers in Australia and Denmark. Dr Munt and Professor Rasmussen recently were invited to be panel members at the Australasian Diabetes Congress in a Research Masterclass session.
Awards, prizes and achievements

Deakin University’s online course
‘Caring for Older People: A Partnership Model’
(featured on the FutureLearn platform) ranked top 10 in the top 25 online courses in Australia.

Professor Andrea Driscoll
- Inducted into the Sigma Theta Tau International Nurse Researcher Hall of Fame for 2020.

Professor Elizabeth Manias
- Appointed member of the Editorial Advisory Board of *Expert Opinion on Drug Safety* medical journal.
- Appointed Chair of the Medication Adherence and Persistence Special Interest Group of the International Society for Pharmacoeconomics and Outcomes Research.
- Invited member of the Nightingale 2020 Conference, King’s College London. Chair of Track 1: Embracing digital health technology.
- Represented the Australian College of Nursing at a meeting of key stakeholders at Parliament House with the Minister for Health and Aged Care and policy officers from the Australian Government, Department of Health to discuss revisions to the National Medicines Policy and Quality Use of Medicines initiative. January 30, 2020.

Associate Professor Melissa Bloomer
- Received the European Association for Palliative Care Researchers award 2020 in the Post-Doctoral category, followed by an interview.
- Was invited to participate as a nursing representative alongside Western Australia parliamentary and health workforce representative to contribute to development and consultation for the WA Voluntary Assisted Dying (VAD) Practitioner Guidelines and WA VAD Care Navigator Service Model Consultation.
- Awarded a Faculty Mid-Career Fellowship for 2021.
- Awarded ‘Highly Commended, Mid-Career Researcher’ by the Institute for Health Transformation at the inaugural Future Leaders Awards for Research Excellence.

Associate Professor Melissa Bloomer, Alfred Deakin Professor Alison Hutchinson and Alfred Deakin Professor Mari Botti
- Publication was used by GovernancePlus as an education tool to support health services who provide end-of-life care.

Professor Trisha Dunning
- Honoured with an inaugural Diabetes Victoria Trisha Dunning nursing PhD focused research on diabetes related projects.
- Awarded the Federation of European Nurses in Diabetes (FEND) 25th Anniversary Recognition Award for her significant contributions to diabetes care, research and education.
- Awarded the Diabetes Australia Outstanding Achievement Award at the International Year of the Nurse.

Dr Stèphane Bouchoucha and Associate Professor Melissa Bloomer
- Developed a new Position Statement titled ‘Facilitating next-of-kin presence for patients dying from COVID-19 in the ICU’ that is now endorsed by the Australian College of Critical Care Nurses (ACCCN) and the Australasian College for Infection Prevention and Control (ACIPC). This important piece of work promoted nationally provides specific guidance for critical care nurses and unit teams.
Professor Bodil Rasmussen
• Honoured with the title of ‘Professor in Nursing and Diabetes’ by the University of Southern Denmark, Department of Clinical Research and Steno Diabetes Odense.

Professor Linda Sweet
• Awarded second prize for the best poster presentation at the 15th International Normal Labour and Birth Research Conference, India (attended virtually).

Professor Judy Currey
• Awarded Principal Fellow, The Higher Education Academy (UK) for international leadership and research scholarship in teaching and learning.
• Invited by the Victorian Department of Health and Human Services to co-design the ICU Surge Taskforce and Workforce planning for ICU as part of the Government’s COVID-19 response.

Associate Professor Pat Nicholson
• Elected by the Australian College of Perioperative Nurses (ACORN) Board to Chair the Research Work Stream Team for the ACORN Standards of Perioperative Nursing ‘Roadmap to National Recognition’ project. This project is designed to help ACORN continue to set and improve the standards of perioperative nursing care in all hospitals across Australia.

Dr Anna Ugalde
• Received the Young Tall Poppy award 2020, which recognises the achievements of young scientific researchers.
• Awarded the Future Leaders Award for Research Impact by the Institute for Health Transformation at the inaugural Future Leaders Awards for Research Impact.
• Awarded the Research Award 2020 winner in recognition for the project, ‘Identification of actionable health research priorities in the Grampians Region that can be rapidly translated into practice’ from Ballarat Health Services. The research team included Anna Wong Shee, Renee Clapham, John Aitken, Jaithri Ananthapavan, Professor Kevin McNamara, Dr Anna Ugalde, Alex Donaldson, Vincent Versace.

Dr Anna Chapman
• Awarded ‘Highly Commended, Early Career Researcher’ by the Institute for Health Transformation at the inaugural Future Leaders Awards for Research Impact.

Dr Stéphane Bouchoucha
• Elected to the Universities Academic Board as a member representing academic staff from the Faculty of Health, IHT, IPAN and IMPACT.
• Made Fellow of the Australasian College for Infection Prevention and Control.

Ms Rebecca Jedwab
• Awarded an Australian Nurses Memorial Centre Australian Legion of Ex-Servicemen and Women Scholarship to support PhD research on nurse engagement, motivation and wellbeing pre and post electronic medical record (EMR).

Dr Grainne Lowe
• Appointed as a Visiting lecturer/Assistant Professor at the University College Dublin until March 2025.

Dr Karen Wynter
• Awarded second prize for an oral presentation at the 15th International Normal Labour and Birth Research Conference, India (attended virtually).

Mr Olumuyiwa Omonaiye
• Awarded a Future Leader Award for Research Excellence by the Institute for Health Transformation for his PhD contribution to international health.

Ms Stephanie Sprogis
• Awarded the ANMF (Vic Branch) $5000 Annual Higher Education and Research Grant. The award is available to a Masters or PhD student undertaking a research project of clinical nursing significance. It was awarded to Stephanie in December 2020 at the ANMF (Vic Branch) Annual General Meeting.
Invited and keynote presentations

Dr Sara Holton (presenter), Dr Karen Wynter, Prof Bodil Rasmussen

Dr Lahiru Russell

Dr Virginia Hagger

Associate Professor Melissa Bloomer
- European Association of Palliative Care World Research Congress, ‘Contextualising Constraints to Improve Palliative Care’. October 2020.

Professor Linda Sweet

Professor Linda Sweet, Dr Vidanka Vasilevski, Dr Karen Wynter
- Khesar Gyalpo University of Medical Sciences of Bhutan, 6th International Conference on Medical and Health Sciences 2020 e-Conference, ‘What’s it like to have a baby during COVID-19 in Australia? Experiences of women and partners, midwives, doctors, and students’. November 2020.

Dr Karen Wynter

Professor Judy Currey

Professor Bodil Rasmussen

Professor Elizabeth Manias
- Continulus (online video-learning platform), ‘Interventions to address medication safety in the ICU’. August 2020.

Ms Monica Schoch (PhD student)

Ms Melissa Blake (PhD student)
- Australian College of Neonatal Nurses National Conference, ‘The influences on mothers when breastfeeding a late preterm infant within the context of a Special Care Nursery’. September 2020.
- Children’s Inpatient Research Collaboration of Australia and New Zealand virtual symposium, ‘The influences on mothers when breastfeeding a late preterm infant within the context of a Special Care Nursery’. October 2020.
PhD completions

Ms Vanessa Watkins
Title: Labouring Together: Collaborative alliances in maternity care in Victoria, Australia

Supervisors: Alfred Deakin Professor Alison Hutchinson, Professor Cate Nagle, Professor Bridie Kent, Dr Maryann Street

Summary: Effective collaboration is crucial for the provision of maternity care to promote a positive experience and avoid preventable harm. However, the concept of collaboration is complex and poorly understood in the context of maternity care. To evaluate collaboration in maternity care in Victoria, Australia, the Labouring Together study explored:

- perceptions of collaboration held by stakeholders of maternity care (clinicians and women)
- how the essential elements of the concept of collaboration are reflected in the perceptions and experiences of stakeholders
- women’s preferences for and experiences of their decision-making role during maternity care.

A mixed method, multi-site case study approach was used, with four case studies selected to represent a range of models of maternity care in metropolitan and regional Victoria, Australia. Results of the Labouring Together study indicate that genuine collaboration and shared decision-making are not routine in maternity care in Victoria. Fundamental, macro-level factors were identified as obstacles, including: systemic barriers to individual stakeholder autonomy; continuity of carer and care team; the historical legacy of power imbalances; and the dominant discourses of risk avoidance and bureaucratic style decision-making that can ultimately veto the woman’s choice.

Ms Susan Hunter
Title: Communicating acute postoperative pain (CAPP): Clinically significant meanings underpinning numerical ratings

Supervisors: Alfred Deakin Professor Mari Botti and Professor Ana Hutchinson

Summary: This research provides preliminary evidence that the reliability and clinical utility of intensity rating scales can be enhanced by incorporating empirically derived descriptors of pain quality and the emotional, social and physical impact of pain.

The research was conducted as two sequential studies:

- Study 1 had a cross-sectional design, using qualitative content analysis methodology with the aim to provide empirical evidence of the pain dimensions and descriptors representative of postoperative acute pain after total knee joint replacement (TKJR) surgery.
- Study 2 was to empirically assess the set of detailed clinical descriptors identified in Study 1, employing a cross-sectional, observational design in a new sample of patients stratified a priori according to their reported pain intensity rating. Exploratory Factor Analysis (EFA) was performed to assess the construct validity and internal consistency of the clinical descriptors.

Findings from this initial exploratory work have shown the four-dimensional model and descriptor items have construct validity, internal consistency and a good model fit confirming ‘proof of concept’ of the dimensions associated with pain in this context. This early work suggests that the dimensions and descriptors may be useful in discriminating between mild, moderate and severe pain if incorporated into pain intensity assessment.
Mr Olumuyiwa Omonaiye

Title: Medication adherence among pregnant women with human immunodeficiency virus receiving antiretroviral therapy in Nigeria

Supervisors: Professor Elizabeth Manias, Associate Professor Pat Nicholson, Dr Snezana Kuslijic

Summary: Nigeria has consistently had one of the highest rates of mother to child transmission of human immunodeficiency virus (HIV) in the world. The overall aim of this study was to investigate antiretroviral medication adherence of pregnant women living with HIV in Nigeria. A mixed methods research design was also used for this study, involving qualitative and quantitative methods. The study comprised three phases. A systematic review and meta-analysis were also conducted.

The review showed there are multiple factors that could limit or define the extent of antiretroviral therapy (ART) adherence among pregnant women such as a woman’s disclosure or non-disclosure of her HIV status to a partner, family and the community. Interventions such as, a combination of social support and structural support showed significant impact on ART adherence during pregnancy.

In phase one and phase two, seven major themes were identified from the participant interview and focus group data; patient motivation; self-efficacy; partner, family and community factors; patient socio-economic status and belief system; fear of stigma and discrimination; therapy related concerns; and healthcare worker and health facility factors. Four themes were identified through stakeholder interviews revealing key strategies that contributed to the significant reduction in new HIV infections among the paediatric population in six countries in sub-Saharan Africa: committed political leadership; support structures within the community; innovation in service delivery; and robust monitoring and evaluation systems. In phase three, survey results showed, 32.7% (95% CI: 26.9–38.5) of pregnant women self-reported taking all ART doses in the past 96 hours. However, the medication refill adherence over a combined period of three months showed that 59.3% (95% CI: 53.1 to 65.5) were adherent to their ART refill schedule dates.

The low levels of adherence observed is a call to focus on strategies that improve adherence to antiretroviral therapy. Such strategies include active engagement of support structures within the community.

Ms Kesorn Promlek

Title: Evidence-based care for traumatic brain injury patients by Thai trauma nurses

Supervisors: Professor Julie Considine and Professor Judy Currey

Summary: Thai trauma nurses play a vital role in the initial neuro-protective nursing care of patients with moderate or severe traumatic brain injury (TBI). The aim of this study was to describe the initial (first four hours) neuroprotective nursing care provided by Thai trauma nurses to patients with moderate or severe TBI and apply these findings to develop an evidence-based care bundle and care bundle implementation plan feasible for use in a low-resource setting.

A multiphase mixed methods approach was used to conduct this study. The knowledge-to-action cycle was the conceptual framework that guided the study design and conduct. Data were collected over three different phases using surveys, observations of clinical practice, chart audits, individual interviews, individual and group meetings, and document reviews of Thai nursing governance documents from the Thailand Nursing and Midwifery Council, study hospital and affiliated University. The three phases of the study were:

- problem identification
- care bundle development
- development of the care bundle implementation plan.

The findings of this study demonstrated that a development of a care bundle for the neuro-protective nursing care of patients with moderate or severe TBI and care bundle implementation plan that is feasible for use in a low-resource setting was achievable. The care bundle and implementation plan were designed specifically for use in trauma ward, therefore, optimising the likelihood of successful care bundle implementation and sustainability of care bundle use. The focus of future research will be to implement the care bundle using the implementation plan developed in this study and evaluate the impact on processes of care, patient outcomes and staff perspectives.

The use of care bundles for guiding neuro-protective nursing care of patients with moderate or severe traumatic brain injury and implementation plans that are tailored to specific settings warrant further evaluation in other critical care settings in low-resource countries.
Dr Prashant Jarhyan

Title: Assessing disease-burden to develop a chronic obstructive pulmonary disease program in India

Supervisors: Professor Ana Hutchinson, Professor Sailesh Mohan and Alfred Deakin Professor Mari Botti

Summary: There was a dearth of high-quality epidemiological studies on the prevalence of chronic obstructive pulmonary disease (COPD) in India. This diagnostic accuracy study demonstrated that the sequential strategy of utilising community health workers for administering Lung Function Questionnaire followed by measuring lung function using a pocket spirometer was highly sensitive (sensitivity: 78.6%) and specific (specificity: 78.8%) for detecting COPD in the community. In the cross-sectional study, the age-standardised prevalence of COPD was 9.2% (95% CI: 8.0–10.4) with a higher burden of COPD, its risk factors, and symptoms as well as poor treatment and control rates in rural areas. The systematic review and meta-analysis of the randomised control trials from low to middle-income countries (LMICs) showed that integrated pulmonary rehabilitation programs that included aerobic exercises or meditative movement therapy were effective in improving functional exercise capacity and health related quality of life of people with COPD.

There is an urgent need to conduct robust studies to accurately assess the chronic obstructive pulmonary disease prevalence in India and to develop, implement and evaluate community-based interventions utilising community health workers for providing non-pharmacological management of the disease.
Publications

Summary:
- Research reports – 8
- Books and book chapters – 10
- Peer reviewed journal articles – 173

Research reports

Books and book chapters
Journal articles


Publications


Publications


Publications

64 Centre for Quality and Patient Safety Research

