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FROM THE DIRECTOR

Deakin-QPS was established in late 2009. Since that time the Centre has flourished, achieving national and international recognition for its world-leading health care research.

As you will note when reading through this biennial report, the research environment created in QPS is achieved in many ways. Its strong partnerships with major health care services not only fosters sustainable success in securing competitive grants and high impact publications, but provides fertile terrain for early (ECR) and mid career (MRC) researchers to develop research acumen. We have a critical mass of researchers who are at the top of their field and who contribute their expertise in a myriad of ways directly into Victoria’s public and private health care system.

As you read through our report for 2015-16 you will see that that the research programs are led by an internationally renowned clinical professoriate who are respected not only as researchers but as expert clinicians and educators. QPS members bring a broad range of methodological, policy and clinical skills to the team. In addition, our work is enhanced by the multidisciplinary nature of our collaborations.

Our work is clustered under three major themes:
• Patient experience
• Patient safety
• Health workforce

And as such aims to inform the delivery of safe, high-quality care in hospital, aged care and community care settings. Cognisant of the renewed global emphasis on knowledge translation research in health care domains, QPS’s vision is to be a world leader in health service research, particularly knowledge translation research, and focusing on comprehensive care including clinical effectiveness, quality, safety and risk management.

The broad range of activities summarised in this report demonstrate a high functioning research team focussed on best practice in the care of patients and residents across a wide range of care environments.

I encourage you to take note of our commitment to early career and mid career researcher development through mentored seeding grants, the important work funded by the NHMRC and ARC schemes and the impact of our research on nursing practice, patient safety, policy and procedures. More information on our most recent work can be found on the QPS website: deakin.edu.au/qps

I hope you will find this report informative and that it will enable you to gain an appreciation of the substantive work achieved by our strategic research centre over the past few years.

Maxine Duke
Director of Centre for Quality and Patient Safety Research (QPS)

OUR VISION: Our goal is to produce world-leading research that has a positive impact on the communities we serve. Through our unique partnerships with seven major health services in Victoria, we focus on improving clinical care, quality and patient safety. We work with clinicians to ensure that findings from research are translated to improve outcomes for health care users.
The Centre for Quality and Patient Safety (QPS)

Deakin QPS is a leading Australian centre for clinical research. The Centre is a world-leader in applied health services research, with a focus on knowledge translation in clinical care, quality and patient safety. Our researchers have a wide range of methodological expertise; in particular, they bring expertise in mixed methods design and a quality and safety focus that has high relevance to health services. This expertise facilitates developments in the delivery of health care, improvements in quality of care and effective translation of best practice and evidence based guidelines. Our staff are all highly respected researchers, discipline experts, academics and policy makers.

QPS is uniquely positioned within the School of Nursing and Midwifery and health care environments to identify and rapidly respond to emerging complex care and quality patient issues. We conduct our research within the only integrated health service partnership network nationally and internationally.

The Partnership Network

Together with the School of Nursing and Midwifery (SONM), QPS has built a unique and innovative network of seven health service partnerships that provide immediacy of access to the clinical point of care. The Deakin Nursing and Midwifery Partners in Research network that is the first of its kind, facilitating multidisciplinary, multi-site research that influences the practice of over 40,000 nurses and the care of over one million patient and aged care residents each year.

Our research spans public and private healthcare sectors in urban, regional and rural areas. Researchers lead a range of interrelated programs, which are organised into three areas that are integral to and generated by the needs of our health service partners:

- **Patient Experience**
- **Patient Safety**
- **Health Workforce**

The Patient Experience

Partnerships with industry form the basis for research in this area. The main focus is the investigation of patients’ and family members’ experiences of health services under the broad domain of health service evaluation. Patient experience is a central pillar of quality in health care alongside clinical effectiveness and safety. Research in this pillar is focused on:

- Understanding perspectives of health care recipients and determining what matters to people
- Processes of care delivery for minimising clinical risks
- Promoting continuity, integration and coordination of care
- Promotion of comfort
- Partnering with consumers

Researchers collaborate with clinicians to translate research knowledge into practice, to develop and implement innovations designed to reduce adverse events, facilitate consumer engagement and participation and to improve the safety and quality of care.

Patient Safety

This pillar reflects a program of research focused on patient safety and minimising harm with the overall goal of improving the safety and quality of healthcare. Research programs in this pillar concentrate on:

- Identifying events and circumstances that put patients at risk of harm
- Establishing the prevalence and incidence of clinical risks, and the extent of harm associated with such risks
- Establishing predictors of clinical risk
- Developing, evaluating and testing interventions to prevent, reduce, manage or eliminate risk
- Undertaking economic analyses of interventions to control clinical risk
- Reviewing organisational governance, including guidelines, policies and procedures, to prevent and manage clinical risk

Research within this pillar has important implications for healthcare policy and practice across diverse settings including acute, sub-acute, aged and community care, and consumer and health professional education.

Health Workforce

A major challenge facing the Australian health system is how to use limited resources effectively and efficiently to meet the growing health demands of an ageing population with an increasing burden of chronic disease. The program of research clustered under this pillar is focused on:

- Developing and evaluating innovations to improve the capacity, responsiveness and productivity of the health workforce
- Effective use of technologies such as tele-health to provide improved quality of care
- Critical examination the health workforce to ensure that health professionals are working to their full scope of practice and are used effectively and appropriately
- Evaluation of initiatives aimed at increasing the productivity, responsiveness and capacity of the health workforce
- Evaluation of new workforce models, new roles for health professionals and the redesign of existing roles
MAXINE DUKE
Alfred Deakin Professor Maxine Duke is Head, School of Nursing and Midwifery (SONM), Deakin University, Chair in Nursing Development, Director of Centre for Quality and Patient Safety Research (QPS) and Deputy Executive Dean of the Faculty of Health. Under Professor Duke’s leadership the SONM has been ranked in the Top 1% of world’s universities in the recent Quacquarelli Symonds (QS) Rankings. Professor Duke is an expert in nursing education with vast experience in higher education. She has led innovations in curriculum development across undergraduate and postgraduate courses and has particular expertise in education and nursing leadership.

As Director and founding member of QPS, Professor Duke has overseen the significant growth of the Centre such that it is nationally recognized as producing world leading research. Under her leadership the QPS partnerships with seven health services have become a unique, sustainable and performance focused network. Her own research program is centred on quality, safe patient outcomes.

The focus of Professor Duke’s research is on:

- Alternative care delivery models such as hospital in the home
- Pain management
- Clinical learning outcomes

Professor Duke plays an active role on both university and professional committees sitting on numerous professional committees including the Australian Nursing and Midwifery Accreditation Council’s Nurse Practitioner.

ALISON HUTCHINSON
Professor Alison Hutchinson is Chair in Nursing and Director of the Monash Health - Deakin Partnership and Deputy Director of QPS. She is also Co-director of the Deakin University Centre for Innovation and Education in Aged Care. Professor Hutchinson has the distinction of being one of only a few Australian nurses to have successfully completed a formal postdoctoral fellowship program overseas. She completed her fellowship in the Knowledge Utilization Studies Program at the University of Alberta, Canada between 2007 and 2009. Professor Hutchinson has attracted competitive research funding from the Australian Research Council, the National Health and Medical Research Council, the Department of Health and Aging, Alberta Heritage Foundation for Medical Research and the Canadian Institutes of Health Research.

The broad aim of the Centre for Quality and Safety Research – Monash Health Partnership is to conduct high quality research that informs clinical practice, policy development and education.

The focus of Professor Hutchinson’s research is on:

- Knowledge translation
- Person-centred care
- Patient safety and risk management
- Decision making
- Experience of care and care delivery

‘All the Nursing Chairs are experts as both practitioners and researchers – often a unique mix in academia. There is a seamlessness between the Chairs’ academic and clinical roles. We generate and translate knowledge, which is the antithesis of the traditional ‘ivory tower’ approach.’ – Professor Maxine Duke
TRACEY BUCKNALL

Professor Tracey Bucknall is a founding member of QPS and Chair in Nursing in the Alfred Health Deakin Partnership. She is chief investigator on a number of major research projects including five category one nationally competitive grants in the last five years. As a decision scientist Professor Bucknall has successfully obtained more than $11 M in competitive research funding and published over 150 scholarly publications in critical care, pain, nursing and knowledge translation. By focusing on improving clinical decision making and the uptake of research evidence in practice.

Professor Bucknall's research aims to:
• Improve patient safety
• Alleviate patient symptoms
• Enhance the patient experience

Externally she serves on National Health and Medical Research Council (NHMRC) grant review panels and advisory committees for the Australian Commission on Safety and Quality in Health Care. She is principal investigator on the NHMRC funded ‘Prioritising Responses of Nurses to Deteriorating Patient Observations (PRONTO)’ study that examines nurses’ use of clinical guidelines to manage deteriorating clinical signs in critically ill patients and the ARC funded ‘Listen to me, I really am sick! Understanding patient and family perspectives in triggering responses to medical emergencies.’

MARI BOTTI

Alfred Deakin Professor Mari Botti AM is a founding member of QPS, holds the prestigious Alfred Deakin Professor position at Deakin University and is Chair of the Epworth-Deakin Partnership. She has research interests that cross a number of clinical practice domains, and is renowned for her work in postoperative pain management, models of care delivery that encourage patient and family engagement in their care, safety and wellbeing, and the use of clinical data to improve quality and safety in healthcare.

Professor Botti’s current research program includes:
• Projects to improve the patient experience during transitions of care
• Reducing variations in the experience of pain and improving pain management
• Multimedia interventions for managing patient experience following joint replacement surgery
• Partnering with patients in medication administration

Professor Botti was awarded Research Leader of the Year, 2016- Epworth Research Institute Achievement Award and was recognised as a Member of the Order of Australia for significant service to nursing, and medical education, as an academic and author, and to pain management research.

JULIE CONSIDINE

Professor Julie Considine is a founding member of QPS and Chair of the Eastern Health-Deakin Partnership. Her research interests concentrate on improving patient safety.

The focus of Professor Considine’s research is on:
• Clinical decision-making, particularly recognising and responding to deteriorating patients and use of research evidence in clinical practice
• Health workforce including the effectiveness of advanced nursing practice and nurse practitioner roles, and educational preparation of specialist nurses

In 2015/16, Professor Considine and her team at Eastern Health conducted the first Australian studies related to predictors of deterioration in patients admitted to hospital wards via the emergency department and factors influencing emergency department length of stay for older people.
JUDY CURREY
Professor Judy Currey is an expert critical care educator and a QPS researcher. Her research in the area of curriculum design and development is highly innovative as is her work in clinical decision-making for patient safety.

Professor Currey’s research experience and interests include:
- Processes and outcomes of nurses’ decision making for acutely and critically ill patients
- The educational strategies required to develop a skilled nursing workforce who can manage clinical risk
- Exploring the relationships between clinician attributes, risk management decisions, workforce factors, systems and processes of healthcare delivery, and patient outcomes

She has pioneered Team-Based Learning in Australia and is a Board member of Team-Based Learning Collaborative (USA).

ANDREA DRISCOLL
Professor Andrea Driscoll joined QPS in 2012 bringing a wealth of clinical and research experience in heart disease. She is a heart failure nurse practitioner and has won national and international awards for her research work.

Professor Driscoll’s program of research focusses on:
- Heart failure
- Acute and chronic cardiovascular disease
- Nurse practitioner
- Workforce
- Systems/models of care
- Critical care and
- Chronic disease management

Professor Driscoll’s research focusses on the translation of evidence into clinical practice. She is particularly interested in ensuring her work improves the systems and models of care for patients both in hospital and the community. She has been awarded a Heart Foundation Future Leader Fellowship. The aim of this project is to look at information collected on patients admitted to hospital with heart failure to examine the quality of care and access to specialist services. This project will generate vital information about improving equity in access and prioritisation of services to improve heart failure care.

TRISHA DUNNING
Professor Trisha Dunning AM, is a credentialed diabetes educator and internationally renowned for her research in diabetes education and clinical practice. Professor Dunning is the Chair in Nursing in the Barwon Health - Deakin Partnership. Her research program focuses on the safe evidence-based management of older people with diabetes, which encompasses identifying and managing risks and end of life care, quality use of medicines, particularly glucose lowering and complementary (herbal) medicines, and developing therapeutic relationships with people with diabetes and family carers.

Professor Dunning uses a range of methods to undertake her research. These include qualitative methods such as interviews and focus groups and evaluation studies that include clinical audits. She actively engages with key stakeholders, especially people with diabetes to develop and validate questionnaires, recruitment methods, resources, and clinical guidelines.

Professor Dunning’s research foci include:
- Safety and quality in care of older people with diabetes
- Palliative and end of life care of people with diabetes
- Safe use of glucose lowering medicines
- Developing therapeutic relationships and personalised care with older people with diabetes and family carers
TRISH LIVINGSTON

Professor Trish Livingston is Associate Dean (Research) in the Faculty of Health and a member of QPS. She has an active research program and has over 20 years’ experience in oncology research.

Professor Livingston’s program of research includes:

- Understanding the impact of chemotherapy symptoms on health outcomes among people diagnosed with cancer
- The significant role of caregivers in the patients’ treatment trajectory
- Addressing the impact of exercise on symptom management
- Mapping the information pathway in health services for people with cancer
- Mapping emergency department presentations among cancer patients

The outcomes of her research have resulted in policy changes, health service improvements, and changes in practice. Professor Currey’s Livingston is currently the Principal Investigator on a NHMRC Partnership grant investigating smartphone technology to support people diagnosed with cancer and Principal Investigator on a multi-state, multi-centre NHMRC-funded randomised controlled trial investigating carer burden among carers of cancer patients.

ELIZABETH MANIAS

Professor Elizabeth Manias is Research Professor in the School of Nursing and Midwifery and QPS and is internationally renowned for her work on medication safety and consumer participation. She is a registered nurse and pharmacist, and also a Board Certified Geriatric Pharmacist. With many years of research and teaching experience, Professor Manias brings diverse insights to her scholarly work.

Professor Manias’ research program comprises the following aspects:

- Medication safety from multifaceted perspectives including nurses, doctors, pharmacists, patients and family members
- Medication adherence
- Communication processes between health professionals, patients and family members, and patient safety and risk management
- Organisational, environmental and consumer aspects of patient safety, through the development and testing of risk assessment tools
- Consumer participation in care, involving the development and testing of patient-centred resources to improve medication safety

BODIL RASMUSSEN

Professor Bodil Rasmussen is Chair in Nursing in the Western Health-Deakin Partnership. Her research priorities focus on strategies to improve the quality of care and patient safety at this service, with a focus on the impact of diabetes during life transitions including into adulthood and motherhood whilst living with a chronic conditions.

Professor Rasmussen’s research program is concentrated on self-management strategies related to:

- e-health and online education models based on empowering people living with chronic conditions
- Enhancing health literacy in people with chronic conditions from CALD populations
- Reducing risks for developing foot ulcers among people with diabetes
- Sleep patterns in people with cancer

Professor Rasmussen’s methodological expertise includes qualitative research methods, especially grounded theory and other interpretative qualitative methodologies, and large survey analysis. She is an international leader in diabetes nursing research and education and a member of the Scandinavian Translational Research in Chronic Conditions (SCAN-TRICC) Group.
RESEARCHERS contd.

HELEN FORBES
Associate Professor Helen Forbes is an experienced nurse educator and researcher who has significant experience in the areas of teaching and learning and administration of academic nursing programs. She is committed to improving student outcomes through facilitation of student-centred learning, constructive alignment of curriculum, learning design and inquiry-based learning to ensure students are well prepared for practice. Dr Forbes also conducts research in the area of workforce development particularly aged care.

Her research is focused on:
- Student learning and decision making in simulation and clinical contexts
- Clinical facilitator approaches to facilitating student learning in the clinical setting
- Student clinical decision making in simulated and real patient deterioration scenarios
- Use of technology to support student skill development and clinical decision making
- Care of the older person, their families and residential aged care workers

In particular, a recent collaboration with Deakin Engineering colleagues has resulted in a ‘first of its kind’ task trainer combined with a virtual reality scenario for midwifery student to support skill development in assessment and clinical decision making.

ANA HUTCHINSON
Associate Professor Ana Hutchinson’s research program focuses on patient participation in care and respiratory health across the continuum from primary care to critical illness.

Current projects focus on:
(i) evaluation of the effectiveness of chronic disease management programs,
(ii) the prevention and management of respiratory and other severe infections and (iii) interventions to facilitate patient participation in care.

Her current research includes projects investigating:
- Excess oxygen delivery to mechanically ventilated patients and clinicians’ decision making
- Evaluation of current practice in Australian ICUs for the prevention and management of Ventilator Associated Pneumonia in critical care patients
- Evaluation of the implementation of bundle of care for prevention of Ventilator Associated Pneumonia in ventilated ICU patients
- Evaluation of the effectiveness of disease management programs for patients with COPD, asthma and obesity
- A collaborative project with the Public Health Foundation of India developing a community-based Chronic Obstructive Pulmonary Disease (COPD) control and management program
- A collaborative project with Northern Health to improving adherence to guidelines for management of sepsis
DEBRA KERR
Associate Professor Debra Kerr joined QPS in 2016. Her clinical specialty is acute cardiac and emergency nursing. Her research focuses on decision support and communication with applied research to enhance the safety and quality of health care.

Her specific research interests include:
- The process of communication between nurses and patients in clinical contexts such as bedside nursing handover and clinical practice
- Development and validation of evidence based practice and decision support tools in the clinical context
- Intranasal medical administration as a novel and safe mode of drug delivery for naloxone and fentanyl

Dr Kerr’s methodological approaches have predominantly focused on quantitative methods including randomised controlled trials, feasibility studies, audits and surveys. She has had over ten years’ experience as an ethics committee member, including chair roles.

CATE NAGLE
Associate Professor Cate Nagle is an educator in the School of Nursing and Midwifery at the Waterfront campus in Geelong and researcher within the Deakin University -Western Health Partnership.

Dr Nagle’s research program encompasses quality and safety in midwifery care with a particular focus on public health midwifery.

Dr Nagle’s current projects include:
- Development of the Nursing and Midwifery Board of Australia’s Midwife Standards for Practice
- Measuring the foetal effects of low to moderate alcohol use in pregnancy
- Decreasing the incidence of postpartum haemorrhage (PPH)
- Improving recognition and response to clinical deterioration in maternity care
- Increasing breastfeeding rates in vulnerable populations
- Identifying best practice for pregnant teenagers
- Promoting physiological birth

PAT NICHOLSON
Associate Professor Pat Nicholson is a member of QPS and Director of the Perioperative Course in the School of Nursing and Midwifery. She holds an honorary academic position at the University of Melbourne and honorary research position at Peter MacCallum Cancer Centre.

Dr Nicholson’s current research includes:
- Development and validation of competencies in the operating suite using Rasch Modeling
- Factors associated with the development of pressure injuries (PIs) in surgical patients
- Medication safety in the perioperative setting and the impact of chronic medication compliance and consequent prevalence of postoperative complications
- Indigenous Health Assessment at Australian Qualifications Framework Level 9
- Graduate registered nurses readiness for clinical practice

In 2016 Dr Nicholson was awarded the ACORN Excellence in Perioperative Nursing and she is the current Victorian Perioperative Nurses Group President. She is a member of the Australian College of Perioperative Nurses (ACORN) Standards Faculty and Team Lead for developing ACORN Standards.
NIKKI PHILLIPS
Associate Professor Nikki Phillips is the Deputy Head of School and Director of Undergraduate Studies. She is an experienced educator and registered nurse with an acute care nursing background. Her program of research is focused on evidence-based risk management strategies to prepare graduates to deliver quality and safe patient care. Dr Phillips’ teaching and learning research investigates best practice approaches to learning and teaching within a quality and safety framework for curricula.

Dr Phillips’ research program includes:
• Quality of care and risk management for patients following surgery; giving nurses in the post anaesthetic care unit a better tool for patient assessment to improve patient outcomes and reduce adverse events
• Projects investigating clinical facilitator strategies to best support student learning in the clinical setting, and strategies that enhance student learning and decision making both in the clinical setting and simulated environments

BERNICE REDLEY
Associate Professor Bernice Redley is a member of QPS and a researcher in the Monash Health -Deakin partnership. With over 12 years working in industry-university partnerships and 25 years in acute, clinical, academic and government health care settings she brings a unique combination of knowledge and skills.

Her key strengths are in addressing complex research problems in clinical practice, building the research skill and capability in clinical staff and students through high quality clinical research, and developing and maintain interdisciplinary research collaborations. Dr Redley is widely recognised as a leader in emergency nursing practice and research, health service policy development related to service models and health services research and evaluation.

Dr Redley’s program of research includes four interrelated areas:
• Interprofessional clinical communication for safe transitions in care, within and between teams, in complex settings
• Teamwork and the performance of front line clinical teams to enhance care delivery
• Patient and family experiences, engagement and participation to ensure safe high quality healthcare in acute settings
• Information technology solutions to support communication and acute care delivery

A particular emphasis of her work has been to develop tools useful for both researchers and clinicians that are ecologically valid, feasible and useful in complex clinical contexts.

Dr Redley is an investigator on several research projects including a study to improve care for older people with neuro cognitive decline, and research to improve the quality of bedside handover.

NATISHA SANDS
Associate Professor Natisha Sands is a renowned mental health expert and historian. Her program of research is focused on mental health nursing assessment particularly in emergency departments. Her mental health triage scale is internationally recognised.

Specifically Dr Sands work is focussed on:
• Quality and safety of emergency mental health care
• Occupational violence
• History of mental health nursing in Australia

Dr Sands has also developed the Code Grey Violence Prevention program, an online interactive initiative which helps nurses and health care workers identify evidence based risk factors for violence in health care. This project was shortlisted for a Barwon Health Quality Award in 2015.
ROCHELLE WYNNE

Associate Professor Rochelle Wynne is a new member to QPS and the School of Nursing and Midwifery. Dr Wynne is an experienced educator and researcher. A quantitative researcher, with expertise in logistic and multivariate regression, repeated measures analyses, risk prediction modelling and propensity analyses. Her program of research is primarily focused on cardiothoracic patients with an emphasis on patterns of care during postoperative recovery.

Topics of interest within her program include:
- The trajectory of pulmonary dysfunction after cardiac surgery in adults
- Indicators for nurse led chest tube removal after cardiothoracic surgery
- Post cardiac surgical arrhythmia management; are MET calls for atrial fibrillation necessary
- Risk factors for representation or unplanned readmission after cardiothoracic surgery

A key theme of Dr Wynne’s research is patient recovery trajectory. Investigating the recovery trajectory generates evidence to benchmark nursing practice and to identify points of variation. Dr Wynne has a keen interest in reducing unnecessary variation in patient recovery with a view to developing and testing interventions to optimise patient outcome.

MELISSA BLOOMER

Dr Melissa Bloomer joined Deakin University in 2016 with a strong research track in the area of end of life care. Dr Bloomer’s research spans adult, paediatric and neonatal populations in acute care, critical care and subacute care settings. With expertise in qualitative and mixed-methods research,

Dr Bloomer’s research focuses on:
- Clinician recognition and response to dying
- Nurses’ preparedness for death and dying
- Nursing care at the end of life
- Communication and decision-making
- Family care
- Care of the older person approaching end of life
- Clinical management of dying across care settings
- The impact of health service delivery models on end of life care

With more than 40 publications in this field, and a growing national and international profile, Dr Bloomer has been able to build relationships with key professional bodies and influence change in how dying is recognised and how end of life care is provided. Dr Bloomer holds an Alfred Deakin Postdoctoral Research Fellowship and is the Director of Postgraduate Studies and Course Director for the Master of Nursing Practice course. She is also an Editor for Collegian: The Australian Journal of Nursing Practice, Scholarship and Research and Editorial Advisor for Intensive and Critical Care Nursing.

STEPHANE BOUCHOUCHA

Dr Stéphane Bouchoucha has over 20 years’ experience as a clinician, academic and researcher in critical care, public health, and infection prevention and control.

Dr Bouchoucha’s research focus is:
- Infection prevention and control
- Healthcare workers protection behaviours and adherence to guidelines
- Health behaviours, stress and exercise
- Students assessment in the simulated setting

He supervises Honours and Masters projects in a range of areas including critical care and infection prevention. Dr Bouchoucha has active collaborations with researchers from Charles Darwin University, Federation University and Melbourne Health.
LISA KUHN
Dr Lisa Kuhn is an Alfred Deakin Postdoctoral Research Fellow in the Eastern Health-Deakin Partnership. Dr Kuhn is an emergency nurse with more than 25 years of experience in clinical, academic and research nursing. Heart disease is women’s leading killer and Dr Kuhn’s previous research has identified areas in early assessment and management of the disease in need of targeted strategies to improve quality and safety in patient care. Dr Kuhn’s postdoctoral research project is a two-phased study to develop a predictive model to reduce unwarranted variation from evidence-based practice for the most severe types of heart attacks in women.

The two phases are:
- A retrospective medical record audit across three large metropolitan health services in order to develop a predictive model for practice variation from evidence-based management of women’s heart attack
- A prospective study to test the newly developed model
- Future research will involve translating the model into practice to improve outcomes in women’s heart disease

GRAINNE LOWE
Dr Grainne Lowe is an early career researcher in QPS, an emergency nurse practitioner (NP) and a lecturer in nursing.

Dr Lowe’s areas of research include:
- NP scope of practice
- Policy guiding NP practice
- Clinical leadership and organisational change
- Emergency nursing practice

Dr Lowe is an active member and Fellow of the Australian College of Nurse Practitioners and was elected National President in 2016.

LAUREN MCTIER
Dr Lauren McTier is an early career researcher with a clinical background in critical care. She completed her undergraduate, honours and PhD at Deakin University with the latter examining patient participation in treatment following cardiac surgery. As Director of Clinical Studies in the School of Nursing and Midwifery she also has an interest in improving the clinical learning experience for students and facilitators.

Dr McTier’s research is focused on:
- Understanding the role patients play in improving the quality and safety of healthcare
- Patient participation in various aspects of acute care including pain management, ward rounds and discharge planning
- Effective clinical learning strategies and clinical teaching attributes
HELEN RAWSON
Dr Helen Rawson is a Research Fellow in the Monash Health-Deakin Partnership. She has an interest in the delivery of safe, quality and evidence-based nursing care to ensure optimal health and wellbeing outcomes for older people in clinical and aged care settings.

Her current research foci includes:
• Engaging older people and family members as partners in care in acute and residential care settings
• Understanding nurses needs to support the holistic care needs of older patients in acute care environments
• Reducing harm in the hospital setting for patients experiencing symptoms associated with a cognitive impairment
• Understanding and supporting the care needs of culturally and linguistically diverse older population groups in the acute setting
• Community engagement and participation in age care provision
• Workforce development for high quality residential aged care

PHIL RUSSO
Dr Philip Russo joined QPS in October 2016 as a Research Fellow at the Alfred Health - Deakin Partnership. Dr Russo has over 30 years experience in nursing, and the majority of his work has focussed on healthcare associated infection (HAI) prevention and control.

Dr Russo has worked in HAI prevention at several major hospitals, was Operations Director for the Victorian Healthcare Associated Infection Surveillance System (VICNISS) for six years and National Manager of Hand Hygiene Australia. He is a Board Member of the Australasian College for Infection Prevention and Control, advises the Australian Commission for Safety and Quality in Health Care and is currently on the NHMRC Infection Control Guidelines Advisory Committee.

His research interests include:
• Evidence based practices for HAI prevention
• Nurse led HIA prevention interventions
• Using HAI surveillance data to measure effect of interventions
• Linking databases to identify HAIs
• Validation of HAI surveillance data
• Consumer involvement in HAI prevention
• Public reporting of HAI surveillance data
MARYANN STREET
Dr Maryann Street is a Senior Research Fellow in the Eastern Health-Deakin Partnership. Her research is focused on the delivery of safe, quality, and evidence-based healthcare during transitions in care, especially by nurses. Dr Street has initiated research studies that inform health service policy development. She has developed tools to identify patient safety and quality of care indicators, enhanced research capacity within the health service, and engaged with health service management to improve service delivery. She is committed to research excellence and integrity.

Her research program includes:
• Emergency care for older people transferred from Aged care, Geriatric and rehabilitation hospitals and the community
• Developing a clinical predictive model to improve the time of hospital admission or discharge from the Emergency Department
• The role of Advance Care Directives and their impact on the care provided in the Emergency Department
• Quality of care and risk management for patients following surgery; giving nurses a better tool for patient assessment to improve patient outcomes and reduce adverse events, thus reducing health care costs
• Evaluating the patient experience and satisfaction with hospital care

EMILY TOMLINSON
Dr Emily Tomlinson is an early career researcher and lecturer in the School of Nursing and Midwifery. She completed her PhD in 2015 on incident delirium in the acute medical setting.

Dr Tomlinson teaches undergraduate students in the Bachelor of Nursing course and is engaged in research around cognitive care in older people.

Her main research interested include:
• Nursing management of people with delirium in acute hospital settings
• Optimising outcomes for people who develop delirium in hospital
• Antipsychotic use in the management of delirium
• Nursing decision making in caring for older people with delirium
• Optimising cognitive function in older people

Dr Tomlinson was the recipient of the Babe Norman Scholarship (2013-2015) from the Nurses Memorial Centre and was a recipient of the 2015 Deakin University, Faculty of Health HDR publication award.
ANNA UGALDE

Dr Anna Ugalde is an Alfred Deakin Postdoctoral Research Fellow and her three year fellowship is focussed on research that explores the best ways to support cancer patients and their caregivers. She has a background in psychology and applied research in cancer care.

Her areas of interest include:
- Psycho-oncology, including the evaluation of interventions
- Evaluations of models of care in cancer and other chronic conditions
- Understanding the caregiver experience
- Exploration of strategies to assist patients manage their diagnosis and treatments
- Identifying how people with cancer and their caregivers can use services or support programs to improve their cancer experience

Dr Ugalde is the lead investigator on a Victorian Cancer Agency project to improve supports for people with cancer and their caregivers in rural and regional communities. She is a co-investigator on an NHMRC partnership grant to investigate the efficacy and cost-effectiveness of a smartphone app to reduce unmet needs and distress in people with cancer. She also is involved in a program of work on evaluations of health services and supports.

PAULINE WONG

Dr Pauline Wong is an early career researcher in QPS and Course Director of the critical care suite of courses in the Master of Nursing Practice. Dr Wong has a clinical background in trauma and intensive care nursing. She worked in the intensive care unit at Alfred Health for over 10 years, where she held a range of clinical, management and educational roles.

Dr Wong completed her doctoral studies in 2016 while working as an academic lecturing in a variety of nursing practice specialities. Her thesis is titled ‘Heightened Emotional Vulnerability and Regaining Control: A Grounded Theory of Family Resilience in the ICU’. Pauline’s research program aligns with the QPS ‘patient experience’ research pillar. Using qualitative and mixed methods, as well as translational research, Dr Wong’s research integrates relevant evidence-based practice in ICU to develop an understanding of stakeholders’ views on partnering with families.

Her research program includes:
- Consumer involvement in health and social care decision-making
- The National Safety and Quality Health Service Standards: #2 Partnering with Consumers
- Approaches to partnering with families
- Exploring the outcomes and experiences of healthcare consumers with regards to patient- and family-centred care practices in ICU
CLINICAL PARTNERSHIPS

ALFRED HEALTH

Alfred Health is a major metropolitan health service serving communities in southern and bayside Melbourne as well as the broader Victorian community through many state-wide services.

In 2015-16 the hospital provided 108,520 episodes of inpatient care and almost 95,000 people were treated in the emergency department. The Alfred Health-Deakin Partnership began in 1998 and is now led by Professor Tracey Bucknall, Chair in Nursing Research. Dr Phil Russo is also a member of this partnership.

The partnership aims to:
• Conduct programmatic research that makes a substantive contribution to scientific knowledge, clinical nursing practice and quality, patient-centred care.
• Develop a systematic organisational process for integrating and evaluating nursing research implementation into practice
• Support, mentorship and training to clinicians in research appraisal, implementation of research into practice and research methods

BARWON HEALTH

Barwon Health is Victoria’s largest regional integrated healthcare provider of services across 21 sites including acute and rehabilitation services, paediatric, maternity care, aged care and palliative care services. The Barwon Deakin Partnership began in 2004 and enables multidisciplinary research teams to work together to plan and implement research that is relevant to Barwon’s unique healthcare environment.

Barwon Health serves a population of 350,000, which extends to 500,000 for some tertiary services. Its specialist services extend to Werribee and to the South Australian border. In 2015 and 2016 the partnership was led by Professor Trisha Dunning, and the research team included Dr Sue Streat and Dr Sally Savage with the aim of mentoring and supporting nurses and other health professionals to participate in research activities.

Current programs of research include:
• Diabetes management issues in particular among older people with diabetes, family carers and palliative/end-of-life care
• Diabetes self-care, which encompasses medication management, beliefs and attitudes, and their effects on health, safety and wellbeing
• Healthcare delivery models encompassing evaluation and data utilisation studies in residential aged care

MS JANET WEIR-PHYLAND: ADJUNCT PROFESSOR, DEAKIN UNIVERSITY
Executive Director Nursing Services, Chief Nursing Officer Alfred Health Executive

‘The Alfred Deakin partnership provides clinical research opportunities for nurses across a variety of acute and specialty health care settings. This collaborative provides a unique opportunity for nurses who seek clinically focussed research training or clinicians who seek experience and involvement in research projects at Alfred Health. The partnership has helped improve patient outcomes in key areas across our health service and has led to higher professional recognition for Alfred Health, Deakin University and the nursing profession.’

PROFESSOR LUCY CUDDIHY: ADJUNCT PROFESSOR, DEAKIN UNIVERSITY
Chief Nursing and Midwifery Officer, Barwon Health

‘Our strong research partnership fosters innovation in nursing practice that is based on local evidence. I believe the research in the partnership is fundamental to ensuring the development of nursing practice at Barwon Health. The value of our research partnership enables the development of thought leaders in nursing who can lead change and integrate research into practice.’
**EASTERN HEALTH**

Eastern Health is the major provider of public health services in 21 locations. It serves a community of 750,000 people across 2816 square kms. The Eastern Health – Deakin Partnership began in 1999.

The team is led by Professor Julie Considine, Chair in Nursing who works with senior research fellow Dr Maryann Street, and research fellows Dr Lisa Kuhn and Ms Debra Berry.

The goals of the partnership include strengthening the use of research findings in clinical practice, education programs and health care policy by effective knowledge implementation strategies and increasing research capacity among staff. This is achieved by responding to clinical challenges at the point of clinical care, and, offering expert supervision of post graduate nursing students and mentoring for clinicians.

The program of research at Eastern Health includes:

- Clinical decision making and evidence-based practice in general medical and surgical care
- Emergency care, Perioperative and post- anaesthesia care, Subacute care, Maternity and women’s health, Mental health

**EPWORTH HEALTHCARE**

Epworth HealthCare is Victoria’s largest private not for profit health service provider with eight hospitals and specialty centres around the Melbourne metropolitan area, Geelong and Warrnambool. It was the first private hospital in Australia to appoint a Professor of Nursing, in conjunction with Deakin University. The current partnership between Deakin and Epworth is now in its 13th year. The Epworth-Deakin Partnership is led by Chair of Nursing, Alfred Deakin Professor Mari Botti AM and a team of researchers including Associate Professor Ana Hutchinson. Professor Botti was awarded the 2016 Epworth research leader of the year. The nursing research strategy at Epworth HealthCare is to lead discovery, dissemination and application of nursing knowledge, and to prepare future clinical nursing leaders in research. The research initiatives at Epworth include multi-site projects funded by competitive grants allowing collaboration with other major health services as well as projects supporting Epworth’s quality and safety priorities.

**KATH RIDDELL:** ADJUNCT ASSOCIATE PROFESSOR, DEAKIN UNIVERSITY

Acting Chief Nursing and Midwifery Officer Director Practice

‘The Deakin University and Eastern Health partnership is built on a foundation of shared vision and endeavour. It supports and drives a contemporary and translatable research agenda through fostering connections to frontline clinicians and the real challenges they face in minimising patient harm and integrating best practice improvement. In addition we share a commitment to educate the future health care professionals to achieve excellence and embrace life long learning. Our partnership is tangible in the fabric of Eastern Health and focuses on sharing research capability, investment and knowledge transfer to realise effective and efficient solutions.’

**SHARON DONOVAN:** ADJUNCT PROFESSOR, EPWORTH HEALTHCARE

Executive Director of Clinical Services

‘The partnership with Deakin and Epworth is incredibly valuable to ensure quality outcomes based on innovative relevant research embedded into daily practice.’
CLINICAL PARTNERSHIPS contd.

MONASH HEALTH
Monash Health is situated in one of the fastest growing areas of Australia—Melbourne’s outer east. The population is diverse with areas of significant social disadvantage. People using the service are born in more than 180 different countries, speaking 100 different languages. The Deakin Monash Health Partnership was established in 2006. The team of researchers, led by Professor Alison Hutchinson and including Associate Professor Bernice Redley and Dr Helen Rawson are jointly funded by Deakin and Monash Health and conduct high-quality research that informs clinical practice, policy development and education. Research within the Centre focuses on the themes of caring for the older person, workforce development, symptom management and service improvement models.

WESTERN HEALTH
The research done by QPS influences the practice of over 40,000 nurses as well as the care of over one million patient and aged care residents in Victoria each year.

Western Health provides a comprehensive, integrated range of services from its various sites; ranging from acute tertiary services in areas of emergency medicine, intensive care, medical and surgical services, through to subacute care and specialist ambulatory clinics. Employing nearly 6500 staff Western Health has a strong philosophy of working with its local community to deliver excellence in patient care. Western Health serves one of the fastest growing population areas in Australia with a catchment area of 1,569 square kilometres. Its population is culturally diverse, speaking more than 100 different languages and dialects. The Western Health–Deakin partnership was established in 2014 and its purpose is to conduct collaborative clinical research and provide staff and students with the opportunity to engage in, multidisciplinary research and training across acute, chronic, rehabilitation, primary and community healthcare settings. The partnership is led by Professor Bodil Rasmussen who commenced her appointment in May 2016. Dr Wai Wang worked with dialysis patients and exercise programs. Associate Professor Cate Nagle led numerous projects concerning midwifery and woman’s health, especially focusing on improving clinical outcomes and women’s experience of maternity care.

NORTHERN HEALTH
Northern Health is the major provider of acute, sub-acute and ambulatory specialist services in Melbourne’s northern suburbs. The catchment area includes three significant growth areas and the region is projected to grow by 59% between 2016 and 2031. The North Health emergency department treats over 85,000 patients each year. The Deakin-Northern Health partnership was established in 2007 and during 2015-16, the applied research program focused on work in the emergency department (ED), aged care, chronic disease and the nursing response to the deteriorating patient.

There has also been a strong focus on workforce development particularly providing novice nurse researchers with opportunities to develop their research skills and expertise.

CHEYNE CHALMERS: ADJUNCT PROFESSOR DEAKIN UNIVERSITY
Chief Nursing & Midwifery Officer, Monash Health
‘Through our partnership, we have raised the profile of nursing research at Monash Health, and we actively encourage nurses at the bedside to develop an interest and capability in research.’

DENISE PATTERSON: CLINICAL ASSOCIATE PROFESSOR DEAKIN UNIVERSITY
Executive Director of Nursing, Western Health
‘Although a relatively new partnership at Western Health, the collaboration has played a significant role in raising the profile of nursing research in the organisation. The partnership drives a research agenda of best practice, connecting with nurses at the bedside and the multidisciplinary team to support evidence based, safe patient care. The structure of the partnership within a wider network has meant the relationship is much more than the sum of its parts and this has been especially helpful to the patient experience and the professional development and capability of nursing at Western Health.’

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RESEARCH PROGRAMS AND PROJECTS

The research programs of QPS are located within its three quality and safety pillars of patient experience, patient safety and workforce development.

PATIENT EXPERIENCE
Partnerships with industry form the basis for research in this area. Patient experience is a central pillar of quality in health care alongside clinical effectiveness and safety.

Research is focused on:
1) Understanding peoples’ perspectives of health care and determining what matters to them, and; 2) Processes of care delivery for minimising clinical risks, promoting continuity, integration and coordination of care, promotion of comfort, and partnering with consumers.

QPS researchers are engaged in several programs of research to improve outcomes for people with chronic diseases across the life span and enhancing patient participation in episodic care to improve quality and safety outcomes.

PATIENTS’ EXPERIENCE OF DIABETES
Diabetes is the fastest growing chronic disease in Australia with 1.7m Australians living with the condition. If diabetes continues to rise at the current rates, up to 3 million Australians over the age of 25 years will have diabetes by the year 2025.

Two of our clinical chairs, Professor Trisha Dunning AM and Professor Bodil Rasmussen are internationally renowned for their diabetes research and have extensive collaborations with diabetes organisations and with world renowned researchers in the US, UK, Denmark, Norway and Sweden.

Research programs have and will inform practice guidelines and include identifying the best ways to involve people with diabetes in self-care decisions, supporting children and young adults with diabetes, and informing communication around end of life care decisions.

The McKellar Guidelines
Professor Dunning led the development of guidelines for managing older people with diabetes in residential and other care settings. These guidelines became the official policy for managing older people with diabetes in residential aged-care across Barwon Health in 2015. The McKellar Guidelines were shortlisted for the Victorian Public health awards and are available on the Australian Disease Management Association (ADMA) Integrated Chronic Disease Management Online Clearinghouse.

Guided self-determination online project
Professor Bodil Rasmussen and Professor Judy Currey are working with a technical team from Deakin Health on an internationally significant project of guided self-determination (GSD) for people with diabetes. The interactive and flexible education program has significant potential for improving healthcare access for young people with diabetes in rural areas, people with disabilities or other access barriers.

The program enhances diabetes control resulting in fewer diabetes complications, lowering healthcare costs and improving lifestyle for individuals.

Quality Use of Glucose Lowering Medicines: The Q-Med Study
Led by Professor Trisha Dunning and colleagues from Barwon Health, the Q-Med study was conducted in three sites in two Australian states. The sites were: the McKellar Centre, Regional Victoria; Helping Hand, rural and metropolitan South Australia; and Uniting Care LifeAssist, Metropolitan Victoria.

This innovative five-phase project involved developing a user-friendly evidence based suite of information (Q-Med booklets) about glucose-lowering medicines (GLM) for older people with diabetes, their family/carers and health care staff.

The Q-Med booklets are designed to be tailored according to the specific needs of the person with diabetes. The online learning module for nurses can be used as self-directed learning and/or be incorporated into undergraduate, post graduate and continuing professional development programs.

Participants were actively involved in developing and evaluating the information that was underpinned by the principles of Quality Use of Medicines. Feedback from the evaluation phase of the project indicates older people with diabetes and health professionals found the information helpful.

Transition into motherhood in women with diabetes
Professor Bodil Rasmussen and Associate Professor Cate Nagle are working with a multidisciplinary team from the Royal Melbourne Hospital, Mercy Hospital, Western Health and psychology at Deakin University to investigate the facilitators and barriers to breastfeeding among Victorian women with Type 1 diabetes and Type 2 diabetes. It is the first study in Victoria to systematically collect data about breastfeeding in women with diabetes.

The study aims to identify physical, psychosocial and cultural risks and protective factors associated with the cessation of breast feeding among women with diabetes during the first six months following birth.

Islamic women and fasting during Ramadan
Associate Professor Ana Hutchinson has explored the attitudes of Islamic women to fasting and the management of gestational diabetes during Ramadan and found that many women with gestational diabetes chose to fast during Ramadan. This finding highlights the need for nurses to develop tailored diabetes management plans that meet the unique needs of this community.
PATIENTS’ EXPERIENCE OF CANCER
The incidence of cancer in Australia is increasing and cancer survivors are often cared for by loved ones at home with little formal support from the health care system or the community. By 2020, almost 20% of Australians will be aged over 60 and most new cancer diagnoses occur in this age group. Given the demographic realities faced by the health system and community, there will be a significant increase in cancer survivors living with the condition, and simultaneously an increase in the number of people caring for someone with cancer.

Improving the quality of life of people with cancer and their carers is a major area of research for QPS researchers Professor Trish Livingston, Professor Mari Botti AM and Dr Anna Ugalde.

In this area of research, studies are focused on informing and improving the long term management of people with cancer and supporting families and carers. The cancer care program includes projects focussed identifying long term outcomes of cancer and its treatment, carer burden among carers of cancer patients, existing services and barriers to information and support for people with cancer and their carers; optimal models of social support in protecting against psychological distress in cancer caregiving; the use of mobile and smart phone technology to deliver improved cancer care for newly diagnosed cancer patients and carers and an evaluation of models of cancer support.

Exercise program helps men with prostate cancer
This randomised controlled study led by Professor Trish Livingston, recruited 147 men with prostate cancer to investigate the impact of their involvement in a 12-week community-based exercise training program. The secondary purpose was to determine whether androgen deprivation therapy (ADT) modified responses to exercise training.

Compared to the control condition, men in the intervention significantly improved their vigorous intensity exercise. A significant difference in favour of men in the intervention group was also found for resting heart rate.

Men with prostate cancer who act upon clinician referrals to community-based exercise training programs can improve their strength, physical functioning, and, potentially, cardiovascular health, irrespective of whether or not they are treated with ADT.

The trial highlighted that clinicians were ideally placed to provide a ‘teachable moment’ to men with prostate cancer about the benefits of exercise and refer them to appropriately qualified exercise practitioners and suitable community-based programs. This study was funded by the Australian Research Council and Prostate Cancer Foundation of Australia.

Telephone outreach reduces the burden on carers of people with cancer
Carers provide extended and often unrecognized support to people with cancer. The aim of this study led by Professor Trish Livingston and Professor Mari Botti was to test whether excessive carer burden is modifiable through a telephone outcall intervention that includes supportive care, information and referral to appropriate psycho-social services.

This multi-centre, randomized controlled trial of four outcalls by cancer nurses to carers of newly diagnosed cancer patients recruited patients through oncology outpatient clinics across four major public health services across Melbourne, Victoria and in Adelaide, South Australia.

The program had a significant impact on carers with signs of depression. Carers also reported the telephone outcall program was highly acceptable and perceived as beneficial. Distress levels decreased significantly.

This study, funded by an NHMRC project grant, contributes to our understanding of the role of community based telephone programs on carer burden and distress and provides new evidence on an approach for improving the wellbeing of carers of people living with cancer.
Reducing stress among cancer survivors with a smartphone app

Smartphone-based interventions offer new possibilities for health promotion and treatment management and represent a potentially revolutionary platform for supporting interventions to reduce cancer patients’ unmet needs and distress, and improve their participation in health care.

The ACE study, led by Professor Livingston, is investigating whether the ACE app reduces unmet needs of people diagnosed with cancer in a cost effective way. It will explore whether the app increases patients’ ability to participate in their own health management using an easy-to-understand entry point with seamless connection to appointment schedules and information to guide participants on health service navigation using maps, tumour specific information and improved access to the Cancer Helpline and other support services.

This study funded by an NHMRC partnership grant, is believed to be the first study, internationally, to rigorously test the effectiveness and cost effectiveness of a smartphone intervention that is integrated within a health service.

Self-management for people with cancer experiencing distress – evaluating the evidence

Around one third of all adult cancer patients will experience psychological distress at some point during their illness. Not all receive support to manage their distress.

In 2015, Alfred Deakin Research Fellow Dr Anna Ugalde led a review brokered by the Sax Institute for Cancer Institute NSW to assess the evidence for the effectiveness of self-management resources to address psychological distress in adult cancer survivors. This ‘rapid review’ found that self-management resources are diverse and there was insufficient evidence to recommend implementation of one particular type of intervention.

The review recommended a need to generate evidence to understand the impact of self-management resources, for:
- a) the ideal entry point in the disease trajectory,
- b) key patient groups,
- c) settings,
- d) content and
- e) mode of delivery (online, interactive resource).

Effective programs may already be used in practice, but are not well documented and there is no body of evidence for these. Investing in understanding the evidence base for existing resources is likely to contribute to the knowledge of what is most suitable and result in benefits to patients.

Predictors of functioning in people with advanced cancer

Informal caregivers in rural and regional communities provide substantial social and economic support to people with advanced cancer, but at a cost to their own physical and psychological wellbeing. Some people in caregiving roles are able to manage well whereas others experience high levels of distress.

This research conducted by Dr Anna Ugalde will establish recommendations that will best engage caregivers in important supportive programs to improve their quality of life. Through a variety of approaches including data collection from caregivers, consultation with health professionals and review of the existing literature, guidelines will be developed which will make recommendations about the direction of this body of work.

This study is funded by the Victorian Cancer Agency and results will identify key research priorities and optimal approaches to supporting informal caregivers.

Patient outcomes after open and minimally invasive surgery for prostate cancer

In Australia, prostate cancer is the most commonly diagnosed cancer in men and the second most common cause of cancer deaths in men. The treatment for localised prostate cancer is most often radical prostatectomy surgery. Prostatectomy surgery involves traditional open radical prostatectomy and minimally invasive surgery including robotic-assisted prostatectomy surgery and laparoscopic surgery. The physiological, functional, psychosocial and cognitive outcomes associated with the long term trajectory of recovery from these different types of surgery have previously not been investigated adequately in Australia.

Alfred Deakin Professor Mari Botti has lead a multidisciplinary team undertaking a longitudinal, comparative study of over 1000 men in Victoria, to examine patient reported outcomes after open and minimally invasive surgery for localised prostate cancer. The findings indicate that men who undergo radical prostatectomy have a distinct pattern of functional sexual and urinary outcomes after surgery irrespective of surgical technique.

These outcomes have significant implications for the quality of life of men with localised prostate cancer in the context of a relative five year survival rate approaching 100% in some countries. These findings can be used to support treatment decision making that accommodates individual preferences. The study was funded by the Prostate Cancer Foundation of Australia.
PATIENTS’ EXPERIENCE OF ACUTE AND CHRONIC HEART DISEASE

Nurse-led heart failure management in hospital and community

QPS researchers are conducting several large research projects which aim to improve outcomes for people with heart failure and acute coronary syndrome.

Professor Andrea Driscoll has a Heart Foundation Future Leader Fellowship and is investigating ways to reduce the burden of disease and disparities in care among people with heart failure. She has developed a tool that can be used to predict which patients with coronary heart disease are at the highest risk of developing heart failure. This tool can be used to guide clinicians in implementing preventive therapy to reduce the risk of these patients developing heart failure. This study was funded by the Heart Foundation.

Professor Driscoll has developed and is currently evaluating an education toolkit for the management of heart failure for patients with low health literacy. This toolkit can be used by clinicians to educate patients about their heart failure. This study was funded by DHHS.

Professor Driscoll is also conducting a research program investigating the efficacy of a nurse practitioner service in managing heart failure patients at the Austin Hospital, Melbourne. The nurse practitioner research program is aimed at improving health outcomes for heart failure patients experiencing suboptimal access to health services and evidence-based practice as recommended in national clinical guidelines. This study was funded by DHHS.

‘Cardiovascular disease has one of the highest rates of mortality and burden of disease. If we are to improve outcomes in people with cardiovascular disease, it is imperative that there is equity in access to high quality, innovative specialist services.’

Gender differences in managing acute coronary syndrome (ACS)

Alfred Deakin Postdoctoral Research Fellow, Dr Lisa Kuhn is leading work to improve the safety and quality of emergency department care for women suffering heart attacks and will develop and test a predictive model to reduce unwarranted variation from current evidence-based guidelines and decrease delays in care.

Her research has revealed disparities between women and men with women presenting to hospital more often with atypical symptoms, receiving delayed treatment and lower likelihood of being admitted to coronary care or intensive care.

Dr Kuhn hopes the predictive model will identify which cohort of women are less likely to receive evidence-based care or have delays to treatment. She is investigating the influence of factors such as mode of arrival to the emergency department, age, co-morbid illness, locality and socio-economic status.

PATIENT PARTICIPATION IN EPISODIC CARE

Engaging patients in their care during episodes of acute illness requiring hospitalisation is in line with the aspiration of Australian and International peak bodies for patient-centred, respectful and compassionate care and ‘consumers as partners’ in health care delivery. Patient participation is considered key to providing safe and high quality care.

The MyStay Project

The purpose of this study was to improve patient outcomes after Total Knee Replacement (TKR) surgery by testing the effectiveness of a bedside, multimedia, nurse-facilitated intervention (MyStay TKR). The intervention was designed to increase the capability and opportunity for patients to participate in achieving their goals of recovery in the immediate postoperative period.

Conducted by PhD candidate Jo McDonall under the supervision of Professor Mari Botti AM, MyStay was tested in a randomised controlled trial using multimedia via iPadTM technology. The multimedia intervention was designed to deliver information that was explicit, actionable, unambiguous and tailored specifically to the goals of care following TKR surgery.

Patients who received the MyStay intervention reported lower postoperative pain intensity, stayed in hospital one day less, were more likely to refer a family or friend to the health service and reported higher overall satisfaction with care.

An incidental finding was that intervention patients returned to full time work sooner after discharge.

In 2016, Jo McDonall and the team received the Epworth Research Institute Brian Buxton Strategic Research Grant to progress this research tailoring MyStay for patients undergoing hip surgery.

‘The trial group experienced less pain, and went home a day earlier than the control group.’ – Professor Mari Botti
Patient participation in clinical handover by the bedside
Research evidence shows that patient participation in patient safety activities improves patient outcomes and can prevent adverse events. In the Australian health system alone, nursing handover occurs more than 40 million times per year (based on 54,810 public hospital beds). An Australian Research Council study conducted by Professor Tracey Bucknall and colleagues from Griffith University investigated nurses’ and patients’ preferences on handover.

The study of 401 adult patients and 200 nurses recruited from medical wards in one public and one private hospital found all participants strongly supported handover at the bedside and wanted patients to participate, although patient and nurse preferences for various aspects of bedside handover differed.

Nurses supported patients being invited to participate and strong two-way communication. However, contrary to patient preferences, having a family member, carer or friend present was not considered important by nurses. Nurses expressed a relatively strong preference for handover of sensitive information verbally away from the bedside. The study provided recommendations for improving the patient hospital experience and the consistent implementation of bedside handover as a safety initiative.

Listen to me, I really am sick – how patients perceive their own deteriorating condition
Significant research has focused on clinicians detecting and responding to patient deterioration; yet no research explores the patient’s perspective and role in initiating clinician and service responses to critical illness. By placing patients at the centre of care and by providing respect for, and response to, patient preferences, needs and immediate treatment requirements, patient safety is improved.

This Australian Research Council funded study led by Professor Tracey Bucknall, Professor Alison Hutchinson and PhD candidate Jessica Guinane and partner investigators investigated patient and family perceptions and roles in detecting and communicating their own deteriorating health status to clinicians in hospital.

Interviews with patients and family members provided unique insights into their personal stories and interpretations of events during their medical emergencies. Findings will be used to inform the development of strategies to prevent serious adverse events and improve health service planning and delivery in responding to clinical deterioration. In addition, stories will be used to create realistic learning scenarios for medical and nursing students to develop their clinical reasoning skills in detecting and managing clinical deterioration in hospitals.

Partnering with patients in medication administration
Medication errors are a ubiquitous problem in health care. Nurses are required to follow checking procedures when administering medications. However, evidence indicates that numerous errors relate to failures in adherence to checking procedures.

Professors Hutchinson, Bucknall, Manias and Botti along with Dr Helen Rawson are conducting a study, funded by the Nurses Board of Victoria Legacy Limited, to test the feasibility, and effect on medication administration error rates, of a knowledge translation (KT) patient engagement intervention in the acute care practice setting.

Nurses and patients from general medical wards in two public teaching hospitals are participating in this study. In the intervention wards, patients receive a brochure containing information about the checking procedures that nurses are required to follow when administering medications. Data relating to medication errors and observations of nurses’ medication administration practices are being collected.

Follow-up data include telephone interviews with patients following their discharge to explore their perceptions of the brochure and focus group interviews with registered and enrolled nurses to elicit their perceptions and experience of the intervention and how to improve future implementation of the intervention. It is anticipated that this simple intervention will enable patients to participate in the medication administration process and thereby help to reduce medication errors.

End of life care
The Australian population is ageing and chronic illness is now the leading cause of death. As the number of older Australians grows, the demand for end-of-life care will continue to escalate rapidly. Despite most people stating a preference to die at home, most people die in hospital, often receiving treatment aimed at resuscitation or cure, until death. There is a significant mismatch between the care people say they want as they approach death, and the care they receive in the final stages of life.

Dr Melissa Bloomer, senior lecturer and Alfred Deakin postdoctoral fellow, specialises in studying how end-of-life care is provided across the lifespan from neonates to older people, and across all inpatient care settings including critical care, acute care and sub-acute care settings. Her work has informed health service delivery frameworks and policy and makes recommendations to improve clinician preparedness to provide end-of-life care and end of life care delivery.

Another project on end of life care for people with diabetes is being led by Professor Trisha Dunning. The study funded by a Diabetes Australia Research Trust (DART) in 2016, will develop and evaluate three diabetes-specific decision aids that focus on the right time to discuss planning for palliative and/or end of life care for older people with diabetes, family members caring for older people with diabetes and clinicians.

The decision aids developed during the research using the Well Written Information for Consumers Criteria (2000) as a framework will be evaluated in a series of focus groups and subjected to independent review by experts in diabetes, palliative care and end of life care, before they are released into the public domain.
PATIENT SAFETY
The focus of the research in this area is patient safety and minimisation of harm with the overall goal of improving the safety and quality of healthcare. Specifically, this program of research includes identifying events and circumstances that put patients at risk of harm; establishing the prevalence and incidence of clinical risks, and the extent of harm associated with such risks; establishing the predictors of clinical risk; and developing, evaluating and testing interventions to prevent, reduce, manage or eliminate risk.

MANAGING SYMPTOMS
Developing a management algorithm for post-operative Pain (MAPP)
A major focus of the drive to improve the quality and safety of health care in our partnerships is to reduce unnecessary variation in care processes to ensure patients receive consistent high quality care based on the best available evidence.

Management of post-surgical pain is a care process known to be highly variable and often sub-optimal. In Australia, a significant proportion of post-surgical patients experience significant pain and hence, unnecessary suffering and increased associated risk.

In partnership with clinicians, the aim of a research program led by Alfred Deakin Professor Mari Botti AM at Epworth Health Care is to develop, implement and evaluate an improved method of treating pain using a clinical decision support system based on best available evidence for managing postoperative pain.

The MAPP study implementation methods are being tested to inform dissemination to other health services and sustainability of outcomes. This study was funded by an ARC Linkage grant and an Epworth Research Institute grant.

THE DETERIORATING PATIENT
Clinical decision making
In several QPS partnerships, researchers are investigating the way clinical decision-making influences patient outcomes. A QPS-led three year study headed by Professor Tracey Bucknall, Professor Alison Hutchinson and Professor Julie Considine is investigating ways to improve first line management of patient deterioration in hospitals.

The Prioritising Responses of Nurses to Deteriorating Patient Observations” (PRONTO) study– is focusing on identifying at-risk patients in the first hours, to minutes, before critical life-threatening events.

Vital signs are the most common assessment technique employed in healthcare and if they are missed, misinterpreted or mismanaged, then patient harm and death may result. Despite a growing body of evidence that shows the benefit of early recognition and management of patients, there is a gap between what the research is telling us needs to occur and what happens in the clinical setting. This study is looking at ways to close that gap.

The researchers are conducting a randomised trial in four Victorian hospitals, with the goal of improving nurses’ clinical decision-making and the uptake of clinical practice guidelines for identifying and managing deteriorating patients.

The PRONTO study has been funded through the National Health and Medical Research Council (NHMRC) Partnership Project Scheme and involves researchers from: Deakin’s Centre for Quality and Patient Safety Research; the University of Adelaide; Australian National University; Bangor University (UK); and the University of Ottawa, Canada. Partners in the project are: Alfred Health; Monash Health; Eastern Health – Victoria; The Australian Commission on Safety and Quality in Health Care; and SA Health. The study was funded by the NHMRC.

Deterioration in the emergency department – the EmERGE study
Australia’s first study of the predictors of deterioration in patients admitted to medical or surgical wards via the emergency department was led by Professors Julie Considine and Judy Currey. The aim of the EmERGE study (Emergency Evaluation of Risk Groups Entering hospital study) was to examine the relationship between emergency calls for clinical deterioration (medical emergency team and ‘respond blue’ calls) within the first 72 hours of hospital admission and patients’ physiological status during their emergency department episode of care.

One quarter of patients who deteriorated to the point of requiring an emergency call for clinical deterioration did so within 24 hours however these patients did better in terms of less recurrent deteriorations, admissions to intensive care and shorter hospital length of stay.

When compared to matched control patients, patients experiencing deterioration during the early stages of hospital admission were more likely to have abnormalities fulfilling emergency call criteria during their emergency department care. After adjusting for confounders, high breathing rates and low blood pressure during emergency department care was associated with increased risk of deterioration requiring an emergency call within 72 hours of admission. Patients who required an emergency call for deterioration during the first three days on a ward also had more in-hospital deaths (16.5 vs. 3.6%,) more intensive care admissions (11.8 vs. 0.7%,) and longer hospital stay (than control patients. Currently the team are working on testing the prospective accuracy of tachypnoea and hypotension during ED care in predicting deterioration on the ward. There is also a PhD student currently examining the handover of vital signs during patient transfer from the emergency department to the ward.

The study was funded by a Nurses Board of Victoria Legacy Limited 2013 Mona Menzies Postdoctoral research Grant and the Eastern Health Foundation.
PREVENTING INJURY

Care Bundle to prevent pressure area injury- the INTACT trial

Pressure injuries are a significant clinical and economic issue, affecting both patients and the health care system. They result in significant physical, social and physiological problems for patients and prolonged hospital stays. Many pressure injuries are acquired in hospital, and are largely preventable.

As a chief investigator, Professor Tracey Bucknall led the Victorian sites in a study to evaluate the effectiveness of a patient-centred care bundle to prevent pressure injuries (PIPCB) in ‘at-risk’ patients in eight Australian hospitals.

This is the first randomised study to incorporate a number of recognised pressure injury prevention strategies into a care bundle with a focus on patient engagement and nurse–patient partnership.

The Care Bundle had multiple components including three messages for patients; keep moving; look after your skin; and eat a healthy diet. Training aids for patients included a DVD, brochure and poster. Nurses in intervention hospitals were trained in partnering with patients in their pressure ulcer prevention care.

The study found patients accepted this PUPCB particularly as it involved personal and positive interactions with nurses and provision of information that was easy to understand and resonated with them.

The study was in collaboration with Professor Wendy Chaboyer from Griffith University and other researchers and was funded by a NHMRC Project Grant. Researchers are now working to disseminate the findings of their work.

Vital signs As Predictors of Aggression (VAPA) – factors associated with Code Grey calls in acute care

Violent and aggressive behaviour exhibited by patients in hospital is a significant and increasing problem. Aggressive behaviours are commonly seen in patients who are at risk of poor health outcomes, most commonly mental health patients; patients with delirium or dementia; and patients with substance abuse or substance withdrawal issues.

This study led by Professor Julie Considine and A/Professor Natisha Sands examined the relationship between physiological status (vital signs) and violent and aggressive behaviours in hospital patients by comparing patients who exhibited violent or aggressive behaviours (Code Grey) with control patients from the same wards without behavioural issues. The results of this study showed that 54% of Code Grey patients were from medical and surgical wards, 24% patients were from the emergency department and 22% were from mental health units.

Code Grey patients were significantly younger, more likely to be male and more likely to be arrive in hospital by ambulance or have police involvement with transport to hospital. They were less likely to be discharged home and more likely to be discharged to residential aged care, sub-acute care, supported care residence or custodial services. Code Grey patients had longer length of hospital stay and higher in-patient mortality and had significantly lower levels of assessment of respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, and pain score in the 12 hours preceding the Code Grey. After adjusting for confounders, the risk of Code Grey was highest for patients with confusion.

Researchers conclude that strategies are needed to improve physiological assessment of patients with behavioural disturbance while ensuring staff safety. Further, early recognition of, and response to, predictors of Code Grey should be a strategy to prevent behavioural escalation to the point of Code Grey.

MANAGING RISK

Medication safety

Communication breakdown contributes about 80% of all medication incidents that result in serious harm as older people make multiple moves between and within different settings.

Medication safety continues to be a significant problem in Australia’s health care system.

Professor Elizabeth Manias and other QPS researchers are involved in research to investigate medication management, which involves how health professionals communicate with each other and with patients in hospital and the community. Consumer participation in managing medications is an important component of this program of research.

A QPS led study funded by the Australian Research Council Discovery Project Scheme, is targeting these breakdowns in communication. Through the Alfred Health partnership, Professor Elizabeth Manias and Professor Tracey Bucknall are investigating ways in which medications are managed across transition points of care involving acute care and subacute care settings.

Using observations, interviews and focus groups, the project is examining how health professionals, older people and family members communicate with each other in managing medications. The project will lead to new knowledge about communication during these movements, and the links between communication problems and medication incidents. The study aims to find creative solutions to communication problems from reflective insights provided by health professionals, and notably, by older people and family members.
Care of older people in the emergency department
Older people seeking emergency care often remain longer in emergency departments and have higher hospital admission rates than younger people. Longer emergency department stays are associated with poorer patient outcomes, in particular longer hospital stays and higher in-patient mortality. The introduction of the National Emergency Access Target (NEAT) – known as the ‘four hour rule’ has been effective in reducing the proportion of patients staying in the emergency department longer than four hours but has fostered an increase in patients discharged within 20 minutes of the four-hour target, particularly older people.

A research project funded by the Eastern Health Foundation and led by research fellow Dr Maryann Street and team aimed to examine the factors that influence the length of time older people stay in the emergency department and to develop a clinically useful model to predict which older people will remain in the emergency department longer than four hours. Of the 33,926 emergency department attendances by older people (≥65 years) 57.5% (n=19,517) stayed longer than 4 hours in the emergency department.

The factors independently associated with older people remaining in emergency department longer than four hours were identified and prospective work is now being undertaken to further develop and validate the model in clinical practice.

Reducing harm for people displaying symptoms associated with a neurocognitive disorder
People who experience behavioural and psychological symptoms related to neurocognitive disorders (e.g. dementia, delirium) are at high risk of experiencing preventable harm during hospitalisation. Tailored and individualised interventions can help reduce these symptoms, and reduce the risk of harm. However, implementation of such approaches in acute hospitals, typically, is inconsistent with best practice recommendations. Hence, people with neurocognitive disorders experience unacceptably high rates of preventable harm.

Professor Alison Hutchinson, A/Professor Bernice Redley, Professor Tracey Bucknall, Dr Helen Rawson and Dr Emily Tomlinson are undertaking a study, funded by the Dementia Collaborative Research Centres, designed to improve nurses’ understanding and adoption of best practice in relation to people with a neurocognitive disorder in acute inpatient medical wards.

This will be achieved by developing, implementing and evaluating a knowledge translation strategy to promote use of best practice in caring for people experiencing behavioural and psychological symptoms. The knowledge translation strategy comprises facilitation, education and a decision support tool in the form of an App. It is anticipated that the knowledge translations strategy will engage and support clinicians in ‘real time’ with complex day-to-day decision-making to address behavioural and psychological symptoms displayed by people with a neurocognitive disorder.

Infection control – health care acquired infection and antimicrobial stewardship
Healthcare associated infections (HAI) are one of the most common, costly and preventable patient safety issues faced by health care consumers in Australia.

QPS researchers are leading several projects aimed at reducing harm from HAI and improving knowledge of infection prevention among health care providers.

Dr Philip Russo, works on projects involving national surveillance of HAIs and the burden of healthcare associated infections in Australia. He is a member of the HAI Advisory Committee for the Australian Commission on Safety and Quality in Health Care, and on the NHMRC Infection Control Guidelines Advisory Committee.

Lecturer and researcher Dr Stephane Bouchoucha’s work in HAI includes leading a project on consumers’ participation in infection prevention and a study to investigate the role and responsiveness of mass news media to the emergence of anti-microbial resistance. This study is also looking at the communication strategies used by authorities and health care professionals when speaking to the media, and processes for striking a balance between using fear and information as a means of changing public perceptions and behaviours about the nature and possible impact of AMR locally and globally.

Together with Dr Russo, Dr Bouchoucha has led a project to investigate healthcare workers’ behaviours relating to infection prevention and control and this is due for completion in 2017.

Step on Sepsis Project
A/Professor Ana Hutchinson and Yasmin Sungkar (research fellow) have collaborated with clinicians from the Northern Health emergency department and infectious disease specialists to develop the ‘Step on Sepsis’ project. The first phase of this project was a translational research project aimed to raise Emergency Department staff awareness of the importance of early targeted sepsis management in ED. After a sustained awareness raising and an education campaign there was an improvement in the identification of patients with sepsis presenting to the ED.

The Department of Health (Victoria) has provided funding to support this project. The Step on Sepsis project is now being rolled out across the other wards at Northern Health.
Asking questions about alcohol in pregnancy – landmark study
How much alcohol can a woman drink safely during pregnancy without causing harm to her unborn baby? A definitive answer to this question has often eluded health professionals. But that is about to change thanks to findings now being analysed from a large longitudinal cohort study of 1600 women conducted in Melbourne.

The ‘Asking Questions about Alcohol’ study (AQUA) study is led by a multidisciplinary team of pregnancy-related researchers including QPS A/Professor Cate Nagle.

It was funded by NHMRC and researchers have collected a large amount of data from women and babies during 2011-2015. Using detailed, prospective methods of data collection, the AQUA study examined the effects of low to moderate alcohol consumption throughout pregnancy on child health and development, including the role of contextual factors, moderators, key mediators and confounders.

Participants in this study completed a questionnaire at three stages during pregnancy and another one year after the child’s birth. These surveys included questions about pregnancy and conception, general health and lifestyle, drinking habits, diet during pregnancy and the child’s early development. Biological samples were also collected. Children were also followed up at one year of age and some at two years of age.

A/Professor Cate Nagle is a principal investigator and believes the findings, now being analysed and published, will provide important further guidance on the nature of alcohol related advice for pregnant women, providing more clarity for health professionals and making an important contribution to the body of knowledge on this public health issue.


Development of a breastfeeding resource for Vietnamese speaking women
The need for culturally and linguistically appropriate resources to support Vietnamese women to breastfeed is well recognised and consumer participation is integral to the development process. In the past, translation of existing English resources to the Vietnamese language has been a common response by maternity services.

Led by A/Professor Cate Nagle this study involved interviews with Vietnamese pregnant and postnatal women as well as focus groups of Vietnamese women elders and breastfeeding experts. The findings indicate there was strong agreement on the high use of social media, YouTube clips, mobile technology and high levels of information seeking behaviour among the women. Agreed barriers to breastfeeding included a need to return to work, lack of family supports, breastfeeding difficulties and these topics were a focus in developing the resource.

As an outcome of this work a resource package has been developed as a 30 minute film with 10 modules that can be hosted on a variety of platforms. The film is in Vietnamese with English subtitles and there is an accompanying booklet written in Vietnamese with English on the opposing pages.

The program of research clustered under this pillar is focused on developing and evaluating innovations to improve the capacity, responsiveness and productivity of the health workforce including the effective use of technologies such as tele-health to provide improved quality of care.
To complement the Model, a comprehensive, modular education program was developed to address key aspects of caring for older people. This unique program aligns with the Australian standards for aged care and addresses professional issues such as leadership and teamwork as well as clinical issues such as continence and cognition. Funded by the Commonwealth Government, Professor Alison Hutchinson recently led implementation of the Model in seven residential aged care facilities in Victoria. The aim of the project was to promote aged care workforce development in order to ensure that healthcare services were more responsive to the needs and preferences of older people, and ultimately to improve outcomes for older people, their families and staff.

Following implementation, residents reported greater understanding of work-related pressures on staff and felt their preferences were considered. Although family members wanted to retain control of care, they reported increased trust in staff, and a better understanding of staff’s roles, work practices and responsibilities. While staff acknowledged the work environment was challenging, they perceived the Model re-invigorated and strengthened existing partnerships in care.

A reduction in sick leave levels and agency/casual staff usage was observed following implementation. In one facility, following implementation including appointment of ward-based evidence-based practice leaders to facilitate uptake of the Model, a 67% reduction in formal complaints and fewer OH&S incidents were observed. Participants expressed ownership of systems developed through the project. For example, evidence-based practice leaders contributed to developing a project planning and implementation tool, and initiated a number of innovative, evidence-based projects. These included: nursing/lifestyle staff collaborating to develop goal-oriented plans of care for residents (e.g. improving mobility through movement to music); activities encouraging residents to use computer facilities; and investigating ways to minimise distractions during medication rounds.

**WORKFORCE IMPROVEMENT MODELS**

**Mental Health Triage**

Building on previous research funded by Alfred Health that established the core competencies of telephone-based mental health triage, QPS member A/Professor Natisha Sands developed a novel technology for competency training and assessment for mental health tele-triage by nurses. In a subsequent study funded by the Telematics Trust, the Mental Health Tele Triage Competency Assessment Tool (MHTT-CAT) was successfully trialled at two partner health networks, Alfred Health and Barwon Health.

The MHTT-CAT tracks clinician decision-making and produces a brief summary report and qualitative feedback in the form of comment or suggestion, which can then be discussed with the clinician undertaking the assessment in the context of professional development. The qualitative feedback provided by the program is the form of suggested screening questions derived from the World Health Organisation’s Composite International Diagnostic Interview, which is a comprehensive, fully standardised psychiatric interview framework that can be used to assess mental disorders according to the definitions and criteria of the World Health Organisation’s International Classification of Diseases 10th Edition (ICD-10).

The MHTT-CAT has recently been successfully commercialised through Deakin Commercial in an agreement between Deakin University and University of Melbourne, in which Deakin is the lead organisation. The product has been in demand since the publication of the research findings, and a product licence has been sold to Cambridge UK, and QLD Department of Health, who recently implemented MHTT-CAT state-wide. Other Victoria and international mental health services are currently in the process of arranging a MHTT-CAT license.

There has been considerable interest in the tool in the UK and New Zealand. The UK Mental Health Triage Scale is now being used in Brigend Wales, Bradford, Cambridge and Auckland.

**Design Matters for patient care in emergency departments (ED)**

ED staff are always on their feet and time poor, whilst managing competing staff and patient demands. Led by A/Professor Bernice Redley this study of four Melbourne emergency departments investigated how the ED design influenced staff communication to ensure safe and effective team-based care.

The findings indicate that informal communication with peers and within discipline groups (e.g. nurses speaking to nurses) was most common, was unplanned and opportunistic and staff used all areas of the ED to communicate. It also found spatial design elements are contributing to several tensions within ED that can hinder the effectiveness of team communication.

**Informal Communication Areas**

- **Staff at times require acoustic, but not visual, separation from patients and others to communicate with other staff.** ED staff are using spaces intended for other uses, or creating temporary barriers, in order to maintain both confidentiality and connection to their patients and teams.
EDUCATION MODELS TO BUILD WORKFORCE CAPACITY

Team-based learning to improve patient outcomes in postgraduate critical care education

Well-developed communication and reflection skills along with effective team behaviours are central to the delivery of safe and high quality care, improving health outcomes and patient experiences and, reducing the risk of sub-optimal care. In health education, acquisition of these skills through learning must be explicit.

Led by Professor Judy Currey, Team-Based Learning (TBL) was introduced into postgraduate critical care nursing curricula to accelerate students’ attainment of higher order critical thinking and problem solving skills, and to enhance graduate employability and patient safety through the development of teamwork, reflection and communication skills.

TBL is a specific educational strategy that sequences individual preparatory learning prior to class, and active team learning and immediate feedback in the class. Within this motivational framework, students hold each other accountable for contributing to each other’s learning, and develop teamwork, critical thinking and problem solving skills. Individual and team effort is rewarded.

Professor Currey and colleagues have evaluated TBL among students and results showed significant increases in students’ quality of learning, clinical reasoning ability, professional development and experience of learning in a team context. Students demonstrated and reported higher learner engagement with TBL over lecturing, greater learning effectiveness, critical thinking and motivation to learn.

Future research is exploring industry educators’ perceptions of the impact of TBL, and student perception of the influence of TBL on learning styles, and acquisition of highly desired graduate learning outcomes such as problem solving, self-management, communication and teamwork skills.

VeRITy – a virtual reality learning tool to support student midwives

Touch training and the complementary virtual reality (VR) simulation are an innovative solution for midwifery student education.

In a collaborative project between QPS researchers and colleagues in the Deakin CADET VR Lab, a ‘Virtual Reality Intrapartum Touch Trainer’ (VeRITy) prototype has been developed to give midwifery students a previously unavailable opportunity to practice one of the key skills required for assessing the progress of labour. This innovative task trainer is the first of its type in the world.

The VeRITy project involves two powerful technological innovations - haptic technology and virtual reality which allows the user to change the context of clinical decision making. The combination of the two is designed to support and enhance student learning by providing a realistic experience in feeling labour contractions in pregnant women.

The QPS team, including A/Professor Helen Forbes (lead) Professor Tracey Bucknall, A/Professor Diane Phillips and A/Professor Cate Nagle evaluated the midwifery student experience of using the task trainer and the virtual reality scenario. The team investigated whether ‘Verity’ has the potential to improve clinical decision making and confidence in students who are building their skills in assessing progress of labour.

After completing the simulation students were competent and confident in measuring contractions under varying clinical conditions. This ensures that the midwifery workforce has a level of competence before entering the clinical environment where decisions are time critical and life-dependent.

Development of Midwife standards for practice in Australia

A major project will see the development of Midwife standards for practice in Australia. In 2016, a Deakin University team co-led by A/Professor Cate Nagle was awarded a contract to develop the Nursing and Midwifery Board of Australia’s (NMBA) Midwife standards for practice.

The project team includes senior midwives and policy development experts from five universities and a professional/industrial organisation. The team is also working with an Expert Advisory Group of midwifery key stakeholder groups, including consumer representatives, established by the NMBA for the project.

It is 10 years since the publication of the current National competency standards for the midwife (2006). During this time, there have been significant changes to the role and scope of a midwife’s practice, the regulatory framework and the model of midwifery education such that this project is timely and necessary.

The Midwife standards for practice define the practice and behaviour of midwives and outline their obligations to be safe and competent to practise across a diverse range of practice settings. In addition to clinical roles, midwives practise in direct nonclinical relationships in areas such as education, research, management, administration, advisory, regulatory and/or policy development roles. The Standards will provide guidance for consumers and other stakeholders in midwifery practice including those in regulation, education & employment.
GLOBAL ENGAGEMENT

QPS researchers are leading several major international safety and quality projects and have built collaborations with leading researchers in Bhutan, Canada, China, Denmark, England, India, Philippines, Scotland, Thailand, the US and Wales. International engagement and capacity building is achieved via research partnerships, collaborations and international higher degree research students.

WORLD LEADING RESEARCH - GLOBAL INITIATIVES IN PATIENT SAFETY

University of Ottawa
In 2015 Professor Ian Graham from the University of Ottawa participated in the Centre’s Thinker in Residence program. A leading internationally renowned scholar in the area of knowledge translation, Professor Graham has been a longstanding collaborator with QPS researchers with his work focused on reducing the gap between evidence and practice.

In 2016, Professor Dawn Stacey, also from the University of Ottawa and the Ottawa Hospital Research Institute, participated in the same Thinker in Residence program. Professor Stacey is a world renowned expert in shared decision making and during her visit she participated in a symposium on shared decision making and patient participation in care. During the program, Dr Stacey also provided expert guidance to many higher degree research students as well as faculty on a range of research projects.

Bangor University
Professor Tracey Bucknall has a long term collaboration in developing the science of knowledge translation with Professor Jo Rycroft-Malone, Pro-Vice Chancellor, Research & Impact and Professor of Implementation & Health Services Research, at Bangor University United Kingdom. For a decade they served as editors of a leading international journal Worldviews on Evidence Based Nursing as well as co-authoring a book focusing on Models and Frameworks for Implementing Evidence-Based Practice. Recently the research collaboration has resulted in several successful grant applications and publications focusing on improving nurses’ decision-making and the implementation of research into practice. Along with QPS researchers, Professor Rycroft-Malone and Professor Christopher Burton, Head of the School of Healthcare Sciences Bangor University have participated in QPS Masterclasses on knowledge translation.

University of Copenhagen
Professor Vibeke Zoffmann at the University of Copenhagen is an important associate of QPS and is working with QPS researchers to trial an online self-management tool for young people with diabetes. Professor Zoffmann is an Honorary Associate Professor at Deakin University.

A paper-based version of the tool, Guided Self-Determination, is well-established and widely used in Denmark and other European countries; however, the fully online version is the world first and is designed for reaching young people in rural and remote areas. The University of Copenhagen is a key partner in the research project.

Professor Vibeke Lorentzen, Centre for Clinical Research, VIA has a solid collaboration with Alfred Deakin Professor Mari Botti in pain management and Professor Bodil Rasmussen focussing on psychosocial aspects of living with diabetes. Professor Lorentzen is an Honorary Associate Professor at Deakin University.

Royal Institute of Health Sciences (RIHS) in Bhutan - Patient Safety beyond Borders
In order to assist with the specific challenges faced in developing countries and particularly Bhutan, QPS members have linked with key academics and members of health services to develop mechanisms for examining patient safety issues in hospitals and devising appropriate solutions to the problems identified. QPS is committed to working with the Royal Institute of Health Sciences (RIHS) in Bhutan to co-create a program of Research and Training in Patient Safety and Quality Care, entitled ‘Patient Safety beyond Borders’. As part of this work, QPS researchers have an ongoing commitment though fieldwork and PhD student supervision. QPS has similar programs in Thailand, China and the Philippines. Deakin students and staff on the Deakin SONM 2016 Bhutan study tour, and staff from Khesar Gyalpo University of Medical Sciences of Bhutan.
OTHER COLLABORATIONS

International Society for Pharmacoeconomics and Outcomes Research (ISPOR)
Professor Elizabeth Manias is a member of the Leadership Group in Medication Adherence and Persistence of ISPOR. This international group comprises academics, policy makers, clinicians and researchers from diverse areas including USA, Canada, the UK, Africa, the European Union, and Australia, to investigate health care initiatives in medication adherence and make recommendations for research and practice. Past work has included examining interventions aimed at improving medication adherence in osteoporosis and hypertension. The group is currently working on identifying the methods used to measure medication adherence for patients with multiple complex health conditions.

University of Michigan (UM)
Professor Anne Sales from UM is working with QPS researchers in the area of knowledge translation and medication error reporting. The team have a number of important projects and are key players in the Knowledge Utilisation Colloquium which brings together large groups of like-minded international scholars.

University of Bergen
Professor Marit Graue, University of Bergen, Norway has a decade long affiliation with School of Nursing and Midwifery. Professor Graue was a visiting scholar to the School for three months in 2007. Professor Graue is the Director of Young Adults with Diabetes clinic and her research program focuses on diabetes self-management. There are solid collaboration with Professor Bodil Rasmussen and Professor Trisha Dunning. The collaboration has resulted in numerous publications focusing on diabetes in aged care, diabetes education and diabetes self-management.

Public Health Foundation of India
QPS researchers have established a collaboration with A/Professor Sailesh Mohan and Dr Prashant Jarhyan, from the Public Health Foundation of India to develop and implement a community-based intervention program to improve identification, management and outcomes for patients with chronic lung disease in India. This is a unique initiative to train both community nurses and community health care workers to implement a respiratory chronic disease management intervention in a community setting. This program will provide individuals with limited access to health care access to evidence-based interventions for chronic lung disease within their own community setting.
AWARDS AND PRIZES

AWARDS

Alfred Deakin Prof Maxine Duke *
- Alfred Deakin Professor awarded 2016
- Australian Nursing and Midwifery Accreditation Committee (ANMAC) Nurse Practitioner Course Accreditation Committee
- ANMAC Expert Advisory Committee Nurse Practitioner Standards

Alfred Deakin Prof Mari Botti AM
- Member in the General Division of the Order of Australia for service to nursing and medical education, as academic and author, and for her contribution and leadership in pain management research
- 2016 Researcher of the Year - Epworth Research Institute Achievement Award

Prof Trisha Dunning AM
- State finalist for Victorian Senior Australian of the year for 2017
- Vice-President of the International Diabetes Federation 2013-2015
- Finalist in the 2015 Victorian Public Health Care Awards for the McKellar guidelines for managing older people with diabetes

A/Prof Patricia Nicholson
- 2016 Australian College of Operating Room Nurses Excellence in Perioperative Nursing award

PRIZES

A/Prof Ana Hutchinson and Yasmin Sungkar et al.
Best Poster Prize winner Stepping on Sepsis- Northern Health Emergency Department, 13th Annual Conference for Emergency Nursing, 2015.

A/Prof Bernice Redley, Prof Mari Botti, Kate Coleman
Moya Conrick Best Paper Award, for their paper Measuring the impact of technology on nursing work: A systematic review of the literature, Nursing Informatics Australia Conference, 2015.

FELLOWSHIPS AND SCHOLARSHIPS

Dr Helen Rawson
- Australian Commonwealth Universities Titular Fellowship
- Swansea University Fulton Fellowship for 2016 at the Centre for Innovative Ageing, College of Human and Health Sciences, University of Swansea, Wales

ALFRED DEAKIN POST DOCTORAL RESEARCH FELLOWSHIPS

Dr Melissa Bloomer – Best practice in end of life care in acute hospitals: mapping and evaluation in public and private settings.

Dr Lisa Kuhn – Improving the safety and quality of emergency department management for women with heart attacks: addressing the gender gap.

Dr Anna Ugalde – The cancer app. delivery improvement (CANDID) study; a randomised controlled trial.

*Alfred Deakin Professor Maxine Duke receiving Alfred Deakin award with Vice-Chancellor Professor Jane den Hollander.

EXTERNAL COMMITTEES

Prof Tracey Bucknall
- NHMRC Grant Review Panel member and a member of Advisory Committees for the Australian Commission on Safety and Quality in Health Care
- Board Director for Royal Freemasons

Prof Alison Hutchinson
- NHMRC Translation Research into Practice panel member
- Board member Uniting AgeWell
- Chair, Quality And Safety Committee - Uniting AgeWell

Prof Andrea Driscoll
- Board member of Australian Centre for Heart Health
- Executive of National Clinical Issues Committee
- Member -American Heart Association- - Commission of complex cardiovascular patient and family care science
- Chair, Cardiovascular Advisory Panel, Australian College of Critical Care Nurses

Prof Elizabeth Manias
- Geriatric Pharmacist from the Commission for Certification in Geriatric Pharmacy, USA
- Accredited Pharmacist for Medication Management Reviews, Society of Hospital Pharmacists Australia
- Medication Adherence Good Research Practices Working Group of the International Society for Pharmaco-economics and Outcomes Research

Prof Julie Considine
- Fellow Centre for Emergency and Disaster Management
- Founding Fellow, College of Emergency Nursing Australasia and Australia and New Zealand Committee on Resuscitation (ANZCOR) representative.

Dr Melissa Bloomer
- Member World Federation of Critical Care Nurses

Dr Phil Russo
- HAI Advisory Committee for the Australian Safety and Quality in Health Care Commission
- National Health and Medical Research Council Infection Control Guidelines Advisory Committee
### RESEARCH GRANTS

**PROJECT TITLE AND TEAM**

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**Project categories:**
- C1 – National externally funded competitive grant, as listed on the Australian competitive grants register
- C2 – Other publicly funded/state or part govt/govt agency research

#### ‘Prioritising Responses of Nurses To deteriorating patient Observations (PRONTO)’
Prof Tracey Bucknall, Prof Alison Hutchinson, Prof Gillian Harvey, Prof Julie Considine, Prof Imogen Mitchell, Prof Jo Rycroft-Malone, Prof Ian Graham, Dr Mohammadreza Mohebbi, A/Prof Jennifer Watts

**CAT1-A1**

- NHMRC- Partnership Project, Alfred Health, Eastern Health, Monash Health, SA Health, ACSQHC Australian Commission on Safety and Quality in Health Care, Bangor University, University of Adelaide, University of Ottawa

#### ‘The INTACT trial - Introducing a care bundle to prevent pressure injury’
Prof Wendy Chaboyer, Prof Tracey Bucknall, Prof Joan Webster, A/Prof Elizabeth Mclnnes, Dr Merrilyn Banks, Prof Marianne Wallis, Dr Brigid Gillespie, Dr Jenny Whitty, A/Prof Lukman Thalib, Prof Nicky Cullum

**CAT1-A1**

- NHMRC Project grant

#### ‘M-Health: Efficacy and Cost-effectiveness of a smartphone App to reduce unmet needs and distress in people with cancer (ACE): a randomized controlled trial’
Prof Trish Livingston, Prof Suzanne Chambers, A/Prof Victoria White, Prof David Ashley, Jacqui Chirgwin, A/Prof Meinir Krishnasamy, Dr Cathy Mihalopoulos, Prof Mari Bott, Dr Liana Oreillana

**CAT 1-A1**


#### ‘Communicating with older people across transitions points of care’
Prof Tracey Prof Elizabeth Manias, Bucknall, A/Prof Robyn Woodward-Kron, A/Prof Allison Williams, Prof Carmel Hughes, A/Prof Christine Jorm

**CAT1-A1**

- ARC- Discovery Projects

#### ‘Patients’ preference for participation in patient safety activities’
Prof Wendy Chaboyer, Dr Jennifer Whitty, Prof Tracey Bucknall

**CAT1-A1**

- ARC- Discovery Projects

#### ‘Improving psychological and physiological outcomes for prostate cancer survivors’
Prof Trish Livingston, Prof Jo Salmon, Dr Kerry Cournay, Dr Cadelyn Gaskin

**CAT1-A2**

- Prostate Cancer Foundation of Australia

#### ‘Reducing harm, in the acute hospital setting, to people displaying symptoms associated with a neurocognitive disorder’
Prof Alison Hutchinson, A/Prof Bernice Redley, Prof Tracey Bucknall, Dr Helen Rawson, Dr Ben Richardson, Adj/Prof Cheyne Chalmers, Prof Donald Campbell, Dr Emily Tomlinson, Prof Beverly O’Connell

**CAT2-B3**

- Dementia Collaborative Research Centre Grant

#### ‘Reducing Care Burden and Depression among Caregivers’
Prof Trish Livingston, Prof Richard Osborne, Prof Mari Bott, Jacqui Chirgwin, Prof David Ashley, Dr John Reynolds

**CAT1-A1**

- NHMRC Project grant

#### ‘Improving clinician and older people with diabetes’ communication and decisions about integrating palliative and end of life care into usual diabetes care’
Prof Trisha Dunning, A/Prof Peter Martin, A/Prof Neil Orford, Dr Liana Oreillana

**CAT1-A2**

- DART Grant- Research- Diabetes Australia-Victoria (Research Trust)

#### ‘Development and validation of the FAST tool’
Prof Andrea Driscoll

**CAT1-A2**

- NHF Vanguard Grant- National Heart Foundation

#### ‘Development of midwife standards for practice’
A/Prof Catherine Nagle, Prof Susan McDonald, Dr Jane Morrow, Dr Gina Kruger, Ms Rhian Kramer, Prof Melanie Birks, Ms Julianne Byrne, Dr Maureen Miles, Dr Marie Heartfield

**CAT2-B2**

- Australian Health Practitioner Regulation Agency

#### ‘Exploring the diversity in models of care of Victorian Nurse Practitioners’
Dr Grainne Lowe, Prof Andrea Driscoll

**CAT2- B2**

- Department of Health and Human Services - Victoria

#### ‘Cancer App Delivery Improvement (CANDID) Study’
Prof Trish Livingston, Ms Anne Woollett, A/Prof John Reynolds, Dr Barbara Lavelle, Prof David Ashley.

**CAT2-B2**

- DH Vic Grants Department of Health Victoria
## RESEARCH GRANTS

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<th>PROJECT CATEGORY</th>
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<td>&quot;Towards improved communication for medication safety: addressing the complexities of managing medications in hospitalised children&quot;. Prof Elizabeth Manias, A/Prof Allison Williams, Dr Sharon Kinney, A/Prof Noel Cranswick, Prof Fiona Newall, Prof Danny Liew, Prof Ian Wong</td>
<td>CAT1-A1</td>
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<td>The development of guidelines for adolescents and young adults with chronic kidney disease transitioning to adult care&quot;. Prof Elizabeth Manias, A/Prof Allison Williams, Jac Kee Low, Dr Kimberley Crawford</td>
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<td>Evaluation of the Victorian trial of safe wards. A/Prof Natisha Sands, Dr Bridget Hamilton, Ms Justine Fletcher, Ms Cathy Roper, A/Prof Stephen Elsom</td>
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<td>Super Pharmacies Initiative - Tender Evaluation Nursing services' A/Prof Bernice Redley</td>
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<td>&quot;Department of Health and Human Services - Victoria</td>
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<td>Rapid review of the literature and draft revision of the National consensus statement: Essential elements for recognising and responding to clinical deterioration&quot;. Prof Tracey Bucknall, Dr Mariann Fossum, Dr Nicole Austin, Dr Sharon McKinley</td>
<td>CAT2-B2</td>
<td>ACSQHC Australian Commission on Safety and Quality in Health Care</td>
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<td>Person-centred, consumer-directed community aged care: translating the evidence into practice' A/Prof Goetz Ottmann</td>
<td>CAT2-B3</td>
<td>DHA Grant- Research - Department of Health and Ageing</td>
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<td>Improving primary prevention of heart disease in rural and regional populations’ Prof Andrea Driscoll, Dr John Rolley, Dr Alison Beauchamp</td>
<td>CAT2-B2</td>
<td>DH VIC Grants Department of Health Victoria</td>
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<tr>
<td>Developing an evidence-based ‘best practice’ approach to support life goal exploration with people with an intellectual disability and other cognitive impairments who are formal communicators‘ A/Prof Goetz Ottmann, A/Prof Keith Mccvilly, A/Prof Erin Wilson</td>
<td>CAT2-B3</td>
<td>DFCSIA Tender- Department of Families, Community Services and Indigenous Affairs</td>
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<td>Identifying predictors of functioning in people with advanced cancer and their caregivers in rural and regional communities: A prospective, longitudinal study.&quot; Prof Trish Livingston, Dr Anna Ugaldé, Prof David Ashley, A/Prof Meinir Krishnasamy, Dr Anna Boltong, Dr Penelope Schofield, Prof Suzanne Chambers, Prof Sanchia Aranda</td>
<td>CAT2- B2</td>
<td>VCA Victorian Cancer Agency Early Career Seed Grants</td>
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<td>Risk screening and assessment tools for older people in hospital&quot; A/Prof Bernice Redley</td>
<td>CAT2-B2</td>
<td>Department of Health and Human Services, Victoria</td>
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<td>Improving outcomes for heart failure patients: Implementation of a heart failure nurse practitioner role; phase 2 - Building capacity to reduce heart failure readmissions’. Prof Andrea Driscoll</td>
<td>CAT2-B2</td>
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<td>Improving medication compliance in heart failure patients using a health literacy framework’ Prof Andrea Driscoll, Prof Richard Osborne, Dr Alison Beauchamp</td>
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<td>Physical, social, psychological and cultural factors influencing breastfeeding intention, initiation and duration among women living with Type 1 and Type 2 Diabetes (T1DM &amp; T2DM) in Victoria' Prof Bodil Rasmussen, A/ Prof Catherine Nagle, Mrs Catharine McNamara, Prof Helen Skouteris,Mrs Cheryl Steele, Dr Alison Nankervis.</td>
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<td>Nurses Board of VIC Grant- Ella Lowe Research Grants</td>
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<td>Review of engaging patients in communication at transitions of care’ Prof Tracey Bucknall, Prof Wendy Chaboyer, Prof Alison Hutchinson, Prof Anne McMurray, Prof Mari Botti, Prof Andrea Marshall, Dr Lauren McTier, A/Prof Brigid Gillespie, Dr Helen Rawson</td>
<td>CAT2-B3</td>
<td>ACSQHC Australian Commission on Safety and Quality in Health Care</td>
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<td>PROJECT TITLE AND TEAM</td>
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<td><em>A collaboration to establish the validity of the Continence Nurses Society of Australia (CoNSA) Continence Nurse Specialist Standards for Practice</em>; Dr Joan Ostaszekiewicz, Ms Janie Thompson, Ms Elizabeth Watt</td>
<td>CAT3-C3</td>
<td>Continence Nurse Society of Australia</td>
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<td><em>Evaluation of Technology within Simulated and Real-life Nursing Settings</em> Prof Mari Botti, Dr Lemai Nguyen, Prof Bridie Kent, Dr Bernice Redley</td>
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<td>Smartward Pty Ltd</td>
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<td><em>Design Matters for Hospital Team based Patient Care in Emergency Departments (Hospital Workplace Design for Teamwork)</em> A/Prof Bernice Redley</td>
<td>CAT3-C1</td>
<td>Hassel Ltd, Department of Industry, Innovation, Science, Research and Tertiary Education</td>
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<td><em>Self-management resources in supportive care</em> Dr Anna Ugalde, Prof Trish Livingston, Dr Anna Boltong, A/Prof Vicki White, A/Prof Meinir Krishnasamy, Dr Penelope Schofield</td>
<td>CAT3-C3</td>
<td>Cancer Institute of NSW</td>
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<tr>
<td><em>Personalised diabetes specific discharge care planning for older people with diabetes</em> Prof Trisha Dunning, Duggan N, S Savage</td>
<td>CAT3-C3</td>
<td>Nurses Board of Victoria Legacy Ltd</td>
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<td><em>Picture my future photo library</em> A/Prof Goetz Ottmann, A/Prof Erin Wilson, A/Prof Keith Mcvilly, Ms Julie Anderson, Ms Jenny Crosbie</td>
<td>CAT3-C3</td>
<td>State Trustees Australia Foundation Grant</td>
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<td><em>Understanding context in knowledge translation</em> Assoc Prof Janet Squires, Prof Alison Hutchinson</td>
<td>CAT3-C4</td>
<td>CIHR Knowledge synthesis grant</td>
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<td><em>Identification of factors associated with the development of pressure ulcers in surgical patients. A retrospective review</em> Assoc. Prof Pat Nicholson</td>
<td>CAT3-C3</td>
<td>Australian College of Operating Room Nurses</td>
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<td><em>Applying the Quality Use of Medicines (QUM) framework to aid staff clinical decision-making when administering and monitoring glucose lowering medicines (GLM) and when educating older people with diabetes to self-manage their GLMs</em> Prof Trisha Dunning, A/Prof Peter Martin, A/Prof Neil Orford, Dr Liliana Orellana</td>
<td>CAT2-C2</td>
<td>Aged Care Service Improvement and Healthy Ageing Grants : Quality Use of Medicines, funded by Commonwealth Department of Health and Ageing</td>
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<td><em>Rapid research review: Improving documentation at transitions of care for complex patients</em> Prof Elizabeth Manias, Prof Tracey Bucknall, Prof Alison Hutchinson, Prof Mari Botti, Dr Jacqui Allen</td>
<td>CAT3-C3</td>
<td>The Sax Institute</td>
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<td><em>International Research Collaboration Scheme 2016</em> Prof Trish Livingston, A/Prof Gyan Prakash Haynes, Ms Anna Ugalde, Prof Trish Livingston</td>
<td>CAT8-2</td>
<td>DU International Research Collaboration Scheme</td>
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<td><em>Evaluation of BreaCan - Gynaecological and Breast Cancer Support</em> Ms Kerry Haynes, Dr Anna Ugalde, Prof Trish Livingston</td>
<td>CAT3-C3</td>
<td>Breacan</td>
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<td><em>Organisational Self-Assessment for Readiness to Implement CDC</em> A/Prof Goetz Ottmann</td>
<td>CAT3-C3</td>
<td>Council of the Ageing</td>
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<td><em>Cancer Care coordinators mapping project</em> Prof Trish Livingston, Ms Kerry Haynes, Dr Anna Ugalde</td>
<td>CAT3-C3</td>
<td>Cancer Council Victoria- Contract Research</td>
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<tr>
<td><em>A multi-method Delphi process to evaluate the risk fidelity and usability of an intelligent clinic support tool for acute hospital care</em> Prof Mari Botti</td>
<td>CAT3-C3</td>
<td>Epworth Healthcare</td>
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<tr>
<td><em>Partnering with patients in medication administration</em> Prof Alison Hutchinson, Prof Tracey Bucknall, Prof Elizabeth Manias, Prof Mari Botti, Dr Helen Rawson</td>
<td>CAT3-C3</td>
<td>Nurses Board of Victoria major grant</td>
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<td><em>Cross national comparisions of best practice care for ethnic elderly populations in mainstream health system and culturally specific care areas</em> Dr Helen Rawson</td>
<td>CAT 3- C4</td>
<td>Association of Commonwealth Universities</td>
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## RESEARCH GRANTS contd.

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<th>PROJECT TITLE AND TEAM</th>
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<td><strong>PROJECT CATEGORY</strong></td>
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<td>Project categories: C1 – National externally funded competitive grant, as listed on</td>
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<td>C2 – Other publicly funded/state or part govt/govt agency research</td>
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<td>‘Cross national comparisons of best practice care for ethnic elderly populations in</td>
<td>CAT 3- C4</td>
<td>The Association of Commonwealth Universities - Titular Fellowship</td>
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<td>mainstream health system and culturally specific care areas.’ Dr Helen Rawson</td>
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<td>‘Burden and disparities in heart failure: THE GAP project.’ Prof Andrea Driscoll</td>
<td>CAT1-A2</td>
<td>NHF Future Leader Fellowship - National Heart Foundation of Australia</td>
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<th>ALFRED DEAKIN POST DOCTORAL RESEARCH FELLOWSHIPS</th>
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<tr>
<td>Dr Melissa Bloomer, (Prof Mari Botti) ‘Best practice in end of life care in acute</td>
<td>CATB-2</td>
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<td>hospitals mapping and evaluation in public and private settings’</td>
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<td>Dr Lisa Kuhn (Prof Julie Considine) ‘Improving the safety and quality of emergency</td>
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<td>dept management for women with heart attacks: addressing the gender gap’</td>
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<td>Dr Anna Ugalde (Prof Trish Livingston) ‘The cancer app delivery improvement (CANDID)</td>
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<td>study: a randomised controlled trial’</td>
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</table>
The Centre for Quality and Patient Safety Research provides a world class research environment for students wishing to undertake higher degrees by research through a Doctor of Philosophy or Master by Research in nursing, midwifery and allied health professions.

**STUDENT PROJECTS**

**HIGH DEGREE BY RESEARCH**

In the 2015 ERA rankings (Excellence in Research in Australia) Deakin Nursing achieved a rating of ‘above world standard’. Domestic and international students have the opportunity to research topics associated with the three pillars of the Centre. These pillars are the patient experience, patient safety, and the health workforce. Academic staff within the Centre are highly experienced in supervising students who wish to undertake PhD or Master’s by Research studies. They have extensive understandings about a diverse range of topic areas underpinning the three pillars and they also are experienced in qualitative, quantitative and mixed research methods. QPS plays a leading role in research capacity building among the nursing and health workforce in Victoria nationally and overseas, with many students coming from interstate and South East Asian nations to undertake post graduate research. During the 2015 and 2016 period, there were five PhD completions – three completions were in the area of patient safety, and two completions were in the area of the health workforce.

**HEALTH WORKFORCE – TRANSITION TO SPECIALTY PRACTICE PROGRAMS**

**PhD Student:** Julia Morphet  
**Title of PhD:** Transition to Specialty Practice Programs in Australian Emergency Nursing

Emergency nursing Transition to Specialty Practice Programs (TSPPs) provide structured orientation, education and clinical support to novice emergency nurses. This study examined the prevalence, design, characteristics and functions of emergency nursing TSPPs in Australia, and applied these findings to inform development of a framework for future emergency nursing TSPPs. The findings showed that the design, structure and characteristics within TSPPs facilitated the recruitment, retention, and professional development of participants. The study showed that while the aims of TSPPs were similar, there was variability in the structure and features of TSPPs in Australian EDs, and subsequently in participant outcomes. The TSPP (Emergency Nursing) Framework was developed based on the findings of this study and was underpinned by three key practice standards: the College of Emergency Nursing Australasia, Practice Standards for the Emergency Nursing Specialist (2013); the Registered Nurse Standards for Practice (Nursing and Midwifery Board of Australia, 2016) and the National Safety and Quality Health Service Standards (2011).
PATIENT SAFETY

MENTAL HEALTH DETERIORATION
PhD Student: Emily Tomlinson (nee Cull)
Title of PhD: Incident delirium in the acute general medical setting

Delirium is a serious disorder of cognition that can have detrimental complications for patients. Up to 30% of hospitalised medical patients experience incident delirium. The study aimed to examine risk factors for, characteristics associated with, and management of acute general medical patients who developed delirium during hospitalisation. Data were collected from the medical records of patients in three acute medical units in a Melbourne health service. Predisposing risk factors for incident delirium were: dementia, cognitive impairment, functional impairment, previous delirium and having a fracture on admission. Precipitating factors following hospital admission were: use of an indwelling catheter, adding more than three medications during admission and having an abnormal sodium level during admission. Findings from this work provides evidence for identifying patients at risk of developing delirium during hospitalisation, and implementing strategies to prevent its onset and improve care for these patients.

HEALTH WORKFORCE

CLINICAL DECISION MAKING
PhD Student: Richen Pelzang
Title of PhD: Patient safety issues and concerns in Bhutan’s healthcare system: a qualitative study

Bhutan is a resource poor nation and improving patient safety in hospital contexts is a challenge. This study aimed to identify the key patient safety concerns in Bhutan’s hospital system by exploring what key stakeholders perceived and experienced as the main patient safety concerns. In-depth interviews were conducted with 94 participants, and information was also collected by nominal group meetings and policy document review. Participants included doctors, nurses, educators, managers, administrators and policy makers. Results showed that standards and guidelines available in Bhutan’s hospitals focused primarily on quality assurance, not patient safety. Medication errors, healthcare associated infections, diagnostic errors, surgical errors and post-operative complications, laboratory/blood testing errors falls, patient identification and communication errors, were perceived as common concerns. A number of practices were identified as critical factors to improving patient safety in the Bhutanese healthcare system, which included: instituting clinical governance; the development and improvement of physical infrastructure; providing adequate human resources; providing staff with patient safety training and education; promoting communication and information systems; and integrating indigenous cultural values into practices.

PATIENT SAFETY

SYMPTOM MANAGEMENT
PhD Student: Jintana Damkliang
Title of PhD: Use of an evidence-based care bundle by Thai emergency nurses.

This study revealed that a care bundle approach can promote consistent, evidence-based emergency nursing care of patients with severe traumatic brain injury (TBI), decreasing variations in nursing care and reducing the risk of secondary brain injury from suboptimal care. Importantly, strategies to support implementation of the care bundle must take into account local structure, staffing, processes and resources for maximum uptake in a busy clinical environment. The study provides a useful framework for developing and implementing evidence-based care bundles in order to close the gaps between knowledge and clinical practice. Furthermore, findings from this research can be applied to a range of low resource contexts and clinical conditions. If care bundles are developed specifically to the clinical context and patient population, they can better equip nurses to deliver evidence-based care and optimise clinical care.

PATIENT SAFETY

PREVENTION OF COMPLICATIONS
PhD Student: Shu Wen Chen
Title of PhD: Decision-Making on birth choices following a caesarean delivery in Taiwan.

The growing caesarean delivery (CD) rates continue to challenge maternal care in numerous high income countries. Taiwan has high CD rates and low vaginal birth after caesarean (VBAC) rates, but little is known about factors influencing VBAC rates. A qualitative approach was used involving in-depth interviews, observation and field notes. In all, 21 women and 11 obstetricians were recruited in a private medical centre. Women’s decisions were influenced by both internal factors (women’s previous birth experience, fear of a vaginal birth, evaluation of modes of birth, and current pregnancy) and external factors (information resources-obstetricians’ recommendations, the experiences of significant others and with the internet, health insurance-National Health Insurance and private insurance). The decision-making process spanning from passive to shared decision-making, included women information searching, respecting obstetricians’ professional judgement, and evaluation of alternatives. Routine provision of explanations by obstetricians regarding risks associated with alternative birth options, in addition to financial coverage for RCS from National Health Insurance, would assist women’s decision-making.


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Moore, K., & Bouchoucha, S. (2016). Exercise beats anxiety: so why not do it? A lack of time you say! Berlin, Germany: Logos Verlag,


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