



Queensland
Government

Nursing Research and Practice Development Centre

The Prince Charles Hospital
Australian Catholic University



ANNUAL RESEARCH REPORT 2016

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Welcome



Professor Paul Fulbrook

On behalf of The Prince Charles Hospital (TPCH) and Australian Catholic University (ACU) Nursing Research and Practice Development Centre (NRPDC), we welcome you to our 2016 Annual Research Report.

This report provides information about the NRPDC research activities during 2016. The report includes information about our many and varied research projects and research outputs, and acknowledges our affiliated clinicians and research students. The Centre is making excellent progress, which is demonstrated by its significant publication output in peer-reviewed journals, as well as conference outputs.

The NRPDC employs two part-time research fellows and one full-time research assistant. All positions are jointly funded between TPCH and ACU. In 2016, the NRPDC facilitated several visiting researchers from ACU,

who have been involved with TPCH staff on a variety of projects. Their collaboration provides support to TPCH staff with potential and ongoing research projects, and strengthens the research training environment within both organisations. Other users of the NRPDC include ACU higher degree research students, of which the large majority is nursing staff employed within the hospital. Several of these research students will be submitting their thesis early next year. The students are supported via the NRPDC and have on-site access to their supervisors, office facilities and research equipment.

As noted above, publication output from the NRPDC has been excellent, with many colleagues contributing to peer-reviewed publications in high quality Q1-ranked journals. Furthermore, research undertaken under the auspices of the NRPDC has been presented at international, national, and local conferences.

The NRPDC nursing research priorities are established annually and are embedded within the NRPDC Strategic Plan 2015-2017, which is negotiated jointly between TPCH and ACU. The Strategic Plan is consistent with key performance indicators identified in the Metro North Hospital and Health Service Nursing and Midwifery Strategic Plan (2013-2017), in particular within Strategic Priority 4: Research and Evidence-Based Practice.

Our main research areas are identified as pressure injury prevention, falls injury prevention, and emergency care. Several current projects cross two priority areas. Research activity has been focused within our priority areas, and has been very productive.

The NRPDC research priorities are aligned with several of the Australian Council on Healthcare Standards, most notably National Safety and Quality Health Service (NSQHS) Standard 8 (Preventing and Managing Pressure Injuries) and Standard 10 (Preventing Falls and Harm from Falls). As well, much of our research in emergency care is relevant to Standard 2 (Partnering with Consumers).

The continuing hard work of the NRPDC staff, and the collaborations formed with clinician-researchers, have contributed significantly to our ability to conduct clinically relevant research. Although most of our research has been nurse-led, we have developed productive collaborative research partnerships with several other professional disciplines and organisations.

Messages



**Clinical Associate Professor
Cherie Franks**

Director of Nursing

Nursing Services

The Prince Charles Hospital



**Professor Michelle
Campbell**

Executive Dean

Faculty of Health Sciences

**Australian Catholic
University**

It is with great pleasure that once again I present the 2016 Annual Research Report for the Nursing Research and Practice Development Centre (NRPDC) at The Prince Charles Hospital (TPCH).

The collaboration between TPCH and Australian Catholic University was established in 2010 and with the opening of the NRPDC it has continued to grow from strength to strength over its relatively short history.

Research is a key element of professional practice and the NRPDC offers TPCH nurses the opportunity to increase their level of knowledge by participating in its mentoring and scholarship programs, enrolling in master's and doctoral research programs and a range of research activities to advance their clinical practice and improve patient outcomes. The contribution of TPCH nursing staff to deliver evidence based care is impressive.

I remain very proud of the achievements of the Nursing Research and Practice Development Centre team led by Professor Paul Fulbrook and our staff and continue to look forward to many years of achievements ahead.

Since its establishment six years ago, the Nursing Research and Practice Development Centre at The Prince Charles Hospital (TPCH) and Australian Catholic University's (ACU) School of Nursing, Midwifery and Paramedicine within the Faculty of Health Sciences, has grown from strength to strength. I am proud to present our achievements in 2016.

We enhanced our joint collaboration in the areas of emergency care, cardiothoracic care, falls and pressure injury prevention and management, to advance ACU's commitment to supporting vital research. Through our partnership, a number of staff have been awarded honorary appointments as visiting researchers within the Centre, supporting our commitment to improve the quality of health care around key societal needs.

The Faculty of Health Sciences positioning values of excellence, dignity and engagement reinforces our shared vision for research that makes a difference in the provision of health care for the most vulnerable including the Indigenous, elderly and disabled.

This Annual Research Report is testimony of our strong partnership, and I invite you to reflect on our accomplishments and prospects.

About Us

Who we are

The NRPDC was founded in 2010, to foster change through research and encourage the implementation of evidence-based practice regarding patient care. Its overall aim is to contribute to improved clinical outcomes.

The NRPDC houses a nurse-led research team whose aim is to inspire, support, and undertake quality research within the hospital. Our current research priority areas, which are established in the NRPDC Strategic Plan 2015-2017 and are aligned with nursing priorities that are identified within TPCH Nursing Strategic Plan, are:

- falls injury prevention
- pressure injury prevention
- emergency care
- cardiothoracic care

Our aims

- To undertake research and practice development that is aligned with TPCH nursing strategy.
- To undertake research and practice development that impacts on the quality of patient care and improves outcomes.
- To extend nursing research capacity and capability, and enhance the research culture within the hospital and the university.
- To assist clinicians in research activities by providing mentorship and facilitation for research development, data collection, data analysis, and dissemination.
- To provide research ethics and governance guidance.
- To provide information regarding internal and external funding sources, and assist/collaborate with research grant applications.

- To support and co-write research articles for local, national and international conferences and peer reviewed journal publications.
- To assist clinical staff to obtain adequate funds to provide time away from their substantive roles to work on research projects.
- To support nursing staff to undertake higher degree by research (HDR) studies, supervised via the NRPDC.
- To provide HDR students with supervision, a research community, and office space and facilities to work on their research.

Governance

The NRPDC is governed by a Steering Committee, which meets to agree on and monitor the strategic direction and outcomes of the centre. Its members are:

Adjunct Associate Professor Alanna Geary, Executive Director of Nursing and Midwifery, Metro North Hospital and Health Services District; **Professor Michelle Campbell**, Executive Dean, Faculty of Health Sciences, ACU; **Clinical Associate Professor Cherie Franks**, Director of Nursing, TPCH; **Professor Patrick Crookes**, National Head of School of Nursing, Midwifery and Paramedicine, ACU; **Belinda Faulkner**, Nursing Director, Clinical Effectiveness, TPCH; **Clinical Associate Professor Megan Lowe**, Nursing Director, Education & Workforce, TPCH; **Associate Professor Paula Schulz**, State Head (Qld), School of Nursing, Midwifery and Paramedicine, ACU & Visiting Research Fellow, NRPDC, TPCH; **Professor Paul Fullbrook**, Nursing Director, Research and Practice Development, NRPDC, TPCH & Professor of Nursing, School of Nursing, Midwifery and Paramedicine, ACU.



The Prince Charles Hospital

Personnel



Professor Paul Fulbrook RN; PhD, MSc, PGDipEduc, BSc (Hons)

Nursing Director

Paul was appointed as Professor of Nursing at ACU in late 2004. He began collaborating with TPCH in mid-2008. This led to his establishment in a full-time jointly funded role at TPCH in mid-2009, as Nursing Director, Research and Practice Development. He leads the NRPDC research program in emergency care, and has an active role in the research life of TPCH, and is a founder member of its Research Council, and a member of the Hospital Research Ethics Committee. Paul's clinical and research background is in intensive care nursing. He is well known internationally for his critical care nursing work, has published widely in this field and spoken at many national and international conferences.



Clinical Associate Professor Melanie Jessup RN; PhD, BN (Hons)

Research Fellow

Melanie joined the NRPDC in 2013, bringing research experience from working with multi disciplinary, multi-site teams in paediatrics, emergency department and chronic respiratory illness. Her clinical background in paediatrics reflects a family-centred focus, with a particularly qualitative strength. She mentors visiting researchers, supervises higher degree research students and facilitates research in the clinical setting. She leads the NRPDC falls prevention and management research program: examining causes, context, culture and potential solutions, considering the experience of both the faller and the health professional.



Sandra Miles RN, RM; BN, MN (Child & Adol), PhD candidate

Research Fellow

Sandra is a part-time member of the NRPDC who also maintains a teaching and research position in the School of Nursing, Midwifery and Paramedicine at ACU. She leads the NRPDC pressure injury prevention and management research program. A key aim is to increase awareness of the quality activities being undertaken at the hospital in this area, through research studies and publications. Sandra is currently completing her PhD which she will be submitting next year.



Petra Lawrence RN; BN (Hons), PhD candidate

Research Assistant

Petra is an early career researcher and works at the NRPDC on a part time basis. She has been involved in supporting a variety of NRPDC research projects, and is currently completing her PhD, which investigated motivational interviewing for psychologically distressed emergency department patients.



Lisette Knight CN; BN

Research Assistant

Lisette has been seconded to the NRPDC from the Princess Alexandra Hospital. She has assisted with several projects, primarily within the emergency department.



Josephine Lovegrove RN; BN

Research Assistant

Josie is part-time and has worked on a variety of projects, mainly in the falls and pressure injury research programs. She is currently working on her Honours degree, investigating nurses' clinical judgement of pressure injuries.

Steering Committee

The NRPDC is governed by a Steering Committee, which meets to agree on and monitor the strategic direction and outcomes of the centre. It is comprised of the following members			
Adjunct Associate Professor Alanna Geary	Executive Director of Nursing & Midwifery, Metro North Hospital and Health Services	Professor Michelle Campbell	Executive Dean, Faculty of Health Sciences, ACU
Clinical Associate Professor Cherie Franks	Director of Nursing, TPCH	Professor Mary Courtney	Head, National School of Nursing, Midwifery and Paramedicine, ACU
Clinical Associate Professor Megan Lowe	Nursing Director, Education & Workforce, TPCH	Associate Professor Paula Schulz	State Head (Qld), School of Nursing, Midwifery and Paramedicine, ACU
Clinical Associate Professor Belinda Faulkner	Nursing Director, Clinical Effectiveness, TPCH	Professor Paul Fulbrook	Nursing Director, Research and Practice Development, NRPDC & Professor of Nursing, ACU

TPCH and ACU Partnership Representatives



Clinical Associate Professor Cherie Franks RN; BN, Grad Cert Health Stud (Nurs), Dip Manage

Director of Nursing, The Prince Charles Hospital

Cherie is the Director of Nursing at The Prince Charles Hospital, Metro North Hospital and Health Service. She is responsible and accountable for the provision of effective leadership, high level operational management and clinical expertise. Her passion and commitment is for clinical safety, patient outcomes and leading clinical service delivery in the provision of excellence. Cherie has a strong interest in nursing research and works collaboratively with the Nursing Director Research and Practice Development to integrate research evidence into clinical practice, and to further develop partnerships with consumers, researchers and clinical staff to further strengthen nursing research and health care outcomes. Cherie is currently studying for her Masters in Health Administration at ACU.



Professor Patrick Crookes, RN, RM; M&CHC; PhD, BA (Accounting), M Health Planning

National Head of School of Nursing, Midwifery and Paramedicine, Faculty of Health Sciences, ACU

Professor Patrick Crookes is Head of the National School of Nursing, Midwifery and Paramedicine at ACU. This is the largest Nursing School in Australia. He was previously the Dean of the Faculty of Health and Behavioural Sciences at the University of Wollongong and Director of the Wollongong Academy for Tertiary Teaching and Learning Excellence. He was the Chair of the Council of Deans of Nursing and Midwifery ANZ from 2009-2013. In 2015, Professor Crookes was appointed a Principal Fellow of the Higher Education Academy (one of circa 350 globally) for his contributions to nursing education and scholarship. He is an Associate Editor for the international journal *Nurse Education Today*.



**Clinical Associate Professor
Megan Lowe, RN; BHSc, DipAppSc
(Nursing Education), MA Admin
Leadership**

Nursing Director, Education and
Workforce, TPCH

In her current role, Megan is a senior member of the Nursing Services Team, responsible and accountable for the provision of effective leadership, high level operational management and educational expertise for the planning, coordination, formulation and direction of policies relating to the provision of nursing education, staff development and nursing workforce that supports excellence in clinical care and ensures the planning, delivery and evaluation of high quality and cost effective services that are consistent with the strategic and operational directions of The Prince Charles Hospital, Metro North Hospital & Health Service and policy of the Department of Health. Megan has worked for Queensland Health for over 33 years and has held a number of senior nursing positions across clinical, educational and workforce fields. Over the last five years Megan has provided leadership and support to a range of activities associated with visioning and bringing to life an interactive partnership with ACU in the development of a Clinical School.



**Associate Professor Paula Schulz,
RN; BA, BSci (Hons), MPsych,
DPsych (Health)**

State Head (Qld), School of Nursing,
Midwifery & Paramedicine, ACU

Paula has worked in tertiary education
for 26 years, and has held a number of

academic leadership positions with the School and Faculty at ACU. She completed her PhD in 2007, investigating the efficacy of a modified Theory of Planned Behaviour that included anticipated regret as an additional variable in determining the reproductive intentions of women. Her research interests lie in the areas of positive psychology and resilience, health behaviour change and transition support strategies for students in their first year of University. Paula has been instrumental in establishing the ACU Clinical School at TPCH.

Visiting Researchers



**Dr Jenneke Foottit, RN; PhD,
MSocSc, BSocSc**

Visiting Research Fellow

Jenneke lectures in the School of Nursing,
Midwifery and Paramedicine at ACU
(Brisbane). She completed her PhD in 2010.

Her specialty is ageing and her research

focus is on people with dementia, particularly later stages. She is interested in issues around managing pain in cognitively impaired older adults, and the management of behaviours of concern in people with late stage dementia. Her earliest research work of people with dementia included working on a research project examining the use of case conferencing in the introduction of palliative care, systematic reviews on palliative care, use of supplements, and use of thickened fluids. She has been teaching in different levels of education in nursing: Bachelor, Diploma and Certificate III in Aged Care, and has worked in a variety of clinical settings such as; hospital, domiciliary, urban, regional, and different countries. Her personal commitment to research is due to her belief that research needs to inform the education provided to health professionals and that quality research and education are linked to good health outcomes. She believes health professionals

need a strong grounding in both the science and art of their chosen field, fostered by good teaching and supported by good ongoing research and role modelling. Jenneke is working with TPCH colleagues on projects involving the use of ECT with dementia patients who have challenging behaviours and fall prevention in cognitively impaired patients.



**Alison Peeler, RN; MPhil, PGCert
(Paed), PGCert (Paed Int Care),
GradDip (Neonat), PhD candidate**

Visiting Research Fellow

Alison is based at the NRPDC one day
per week, and lectures in the School of
Nursing, Midwifery and Paramedicine at

ACU (Brisbane) the remainder of the week. She has over twenty five years experience as a registered nurse and has worked in many areas including education, research and management. For her Master of Philosophy degree, Alison researched parents' and nurses' experiences of respiratory support of children with respiratory distress syndrome due to acute bronchiolitis. Her PhD is in the area of paediatric emergency care, and is evaluating the new paediatric emergency department at TPCH.



Keith Skelton RN, MNurs (Leadership), MNurs (Mental Health), Grad Dip Health Science (Health Educ), BSc (Environ Stud), Crit Care Cert

Visiting Researcher

Keith is a visiting researcher to the NRPDC, and lectures in the School of Nursing, Midwifery and Paramedicine at ACU (Brisbane) in nursing, mental health and the sociology of health. Keith worked as a clinical nurse in a variety of moderate to high dependency units full time for a period of 8 years and as a nurse educator for two years before taking a position as technical officer at ACU, managing the science and clinical nursing laboratories concurrent with casual teaching and casual clinical nursing. Keith's research interests cover many areas including mental health, wound care, drug calculations for student nurses, and community engagement. He is currently working with TPCH based colleagues who are investigating patient falls and nurses' knowledge of falls prevention.



Sandra Hyde, RN; Mental Health Practitioner, MAdvPrac (Mental Health), MA (Educ & Work), BAppSci (Adv Nurs), PhD student

Visiting Researcher

Sandra is a Visiting Researcher to the NRPDC, and has been involved in several mental health research studies. Her main role is Lecturer in the School of Nursing, Midwifery and Paramedicine at ACU (Brisbane). Sandra has worked in adult mental health in the acute and community settings, mental health consultation liaison, with clients who have a dual diagnosis in an acquired brain injury unit and in the Mental Health Information Unit as a Clinical Indicator Coordinator, and continues to collaborate in clinical mental health partnerships. She also has extensive experience in general medical surgical nursing. Sandra's areas of research interest include examining and enhancing the care of the consumer in the acute care setting, and the early detection and treatment of depression and anxiety in the general population.



Dr Roger Lord, PhD, BAppSc, Assoc.Dip.App.Sc, ARCPA

Visiting Research Fellow

Roger is a registered clinical biochemist with a background in both clinical biochemistry and immunopathology. He is a university academic, lecturer (Medical Sciences), attached to the School of Science, Australian Catholic University and a Visiting Research Fellow with the NRPDC. Roger serves on two advisory committees, (Advisory Committee for the Safety of Medicines (ACSOM) and the Therapeutic Goods Committee (TGC – pharmaceutical standards) that report to the Therapeutic Goods Administration (TGA) and Federal Minister for Health. He was made an Associate of the Royal College of Pathologists of Australasia (ARCPA) in 2014. During his research career, he has made significant contributions to the development of vaccines against Plasmodium falciparum (malaria) and in immunological mechanisms involved in liver transplantation tolerance. Roger is currently involved in the emerging science of proteomics and treatment strategies for chronic wound healing. Roger's main project at TPCH is titled A double blind trial of the application of 0.2% glyceryl trinitrate (Rectogesic) for the healing of chronic venous leg ulcers.



Dr Min-Lin (Winnie) Wu, RN, MN (Critical Care), PhD

Visiting Research Fellow

Winnie is based at the NRPDC one day per week, and lectures in the School of Nursing, Midwifery and Paramedicine at ACU (Brisbane) the remainder of the week. She is a Registered Nurse and has worked in a variety of clinical settings including intensive care, burn, medical, peri-operative, and community. Also, she has been working in tertiary education and research since completed her PhD in 2012. Her research focuses on the areas of promoting chronic disease management, healthy ageing, and health care service in preventing hospital readmission in older adults.

Associate Researchers



Damian Williams RN; BNSc, Grad Cert Clin Nsg, Cert IV WPAT N

Nurse researcher: wound care

Damian Williams has been directly involved in delivering advanced wound management services for nearly 20 years. His current position is Clinical Nurse Consultant for

Wound Management at TPCH. He is actively involved in gaining knowledge and promoting best practice wound management. He holds post graduate qualifications in wound management and is currently undertaking a Masters of Nurse Practitioner Studies. He conducts regular wound management education and has presented at conferences at a state, national and international level. Damian has held committee positions on both the Australian Wound Management Association (now Wounds Australia) National Committee and Queensland Committee, and is a past President of the Queensland Committee and is a current committee member. Damian is collaborating on several research projects with the NRPDC. He received a TPCH Foundation Novice Researcher grant for his first project, which is comparing two different dressings for use with skin tears.



Claire Burl RN

Nurse researcher: geriatric care

Claire is a clinical Nurse working in the GEM (Geriatric Rehabilitation and Management) unit at TPCH. She has worked in the area for five years, and was previously working in aged care for many years. Claire was awarded

a New Investigator research grant from TPCH Foundation, with Clinical Associate Professor Melanie as her mentor. The objective of her research study is to determine what types of clinical activities are occurring when a patient falls, and to identify changes to existing practice that may reduce the number of falls, as well as possible impacts on the staff member was caring for the patient that fell.



Stephanie Gettens, RN; BN

Nurse researcher: falls prevention

Stephanie is Principal Project Officer, Patient Safety and Quality Service, Queensland Health. Until recently, Stephanie was a clinical nurse at TPCH within the Early Medical Assessment Unit and the Quality Effectiveness Support Team, where she

was the project officer for falls prevention. She has worked on several projects with Professor Fulbrook. Stephanie was awarded a New Investigator Research grant from TPCH Foundation, with

Professor Fulbrook as her mentor, to investigate 'fear of falling' and its relationship to clinical outcomes, such as hospital length of stay. Her study on falls is highly relevant to TPCH and will provide valuable data that will help to provide the basis for practice development and will form the foundation for further larger studies. Stephanie has nearly completed a Master of Philosophy degree at ACU investigating falls prevention. Her supervisors are Professor Paul Fulbrook, Professor Nancy Low Choy and Clinical Associate Professor Melanie Jessup.



Catherine Saxon RN

Nurse researcher: respiratory care

Cathy is a Clinical Nurse in Endoscopy and Procedural Services at TPCH and a nursing research student with the ACU. She has completed the study, "What are high risk respiratory patients' experiences in

bronchoscopy with 'cautious' sedation and analgesia: a qualitative study". To help fund this project she received a grant from The Prince Charles Hospital Foundation in 2014. Cathy is also working on a systematic review, of randomised controlled trials, that have collected data pertaining to patient experience in bronchoscopy with various forms of sedation and analgesia. She has nearly completed her masters degree research, and will submit early next year. Her supervisors are Professor Paul Fulbrook, Professor Kwun Fong, and Associate Professor Chantal Ski.



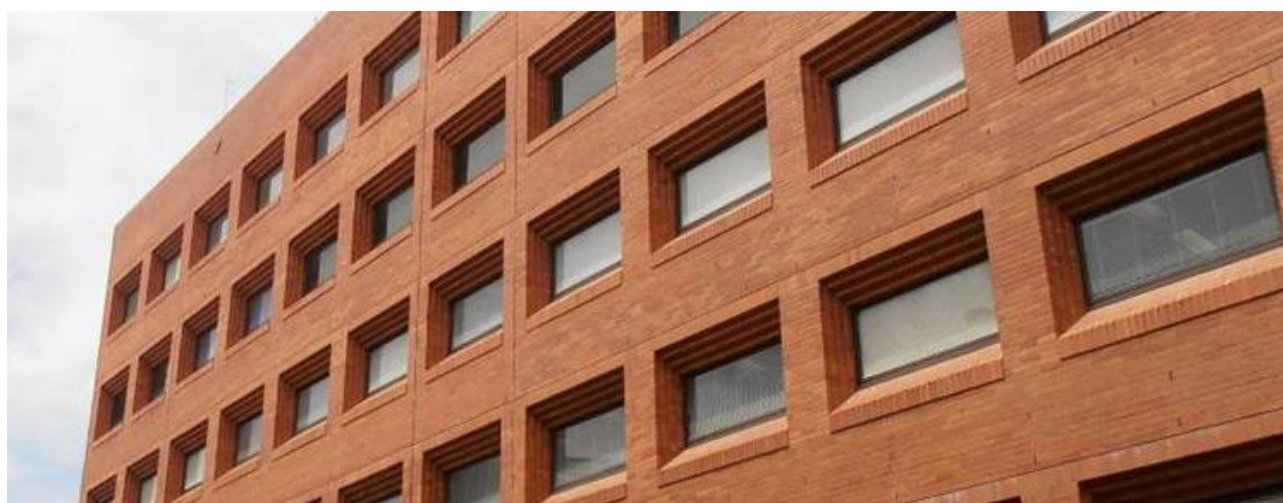
Vainess Mbuzy, RN, BN, MN (Primary Health Care), MN Advanced Practice (Health Professional Education), Grad Dip (Intensive care Nursing), PhD candidate

Nurse researcher: critical care

Vainess is a Clinical Nurse currently working in the Adult Intensive Care Services at TPCH. She has over 30 years of experience as a registered nurse and has worked in a variety of areas, including education and management, overseas and in Australia. She holds a graduate diploma in intensive care nursing, Master of Nursing in Primary Health Care, and Master of Advanced Practice in Health Professional Education. Vainess is a PhD candidate and is investigating Indigenous peoples' experiences of acute cardiac care, under the supervision of Professor Paul Fulbrook and Clinical Associate Professor Melanie Jessup. Her research includes a qualitative study of Indigenous cardiac patients' and their relatives' experiences and a metasynthesis of Indigenous peoples' experiences of hospitalisation. She is a successful recipient of TPCH Foundation New investigator grant, with Professor Fulbrook as her mentor.

Post Graduate Research Students

2016 Post Graduate Research Students			
Research Student	Degree	Supervisors	Thesis title
^a Sandra Miles	Doctor of Philosophy	^a Prof. Paul Fulbrook Debra Mainwaring-Magi Dr George Mnatzaganian	Able-Bodied Children: Development and Education
^a Petra Lawrence	Doctor of Philosophy	^a Prof. Paul Fulbrook Assoc. Prof. Shawn Somerset ^a Assoc. Prof. Paula Schulz	A randomised controlled trial of a psychosocial brief intervention for emergency department attendees with moderate psychological stress
^β Vainess Mbuzi	Doctor of Philosophy	^a Prof. Paul Fulbrook Prof. Nereda White ^a Clin. Assoc. Prof. Melanie Jessup	Indigenous people's experiences of acute cardiac care
^a Alison Peeler	Doctor of Philosophy	^a Prof. Paul Fulbrook Assoc. Prof. Karen-Leigh Edward ^β Dr Frances Kinnear	Evaluation of a paediatric emergency department
Kodchanipa Phonpruk	Doctor of Philosophy	Prof. Karen Flowers ^a Prof. Paul Fulbrook Prof. Geraldine Naughton Dr George Mnatzaganian	Discharge information provided to parents whose child has attended the paediatric emergency department
^β Stephanie Gettens	Master of Philosophy	^a Prof. Paul Fulbrook ^β Prof. Nancy Low Choy ^a Clin. Assoc. Prof. Melanie Jessup	Psychosocial implications of sustaining a fall while in hospital
^β Cathy Saxon	Master of Nursing (Research)	^a Prof. Paul Fulbrook Assoc. Prof. Chantal Ski ^β Prof. Kwun Fong	Patients with chronic respiratory disease: experiences of bronchoscopy
Yansheng Wang	Master of Health Administration	^a Prof. Paul Fulbrook ^a Sandra Miles	Hospital prevalence of skin tears
^a Josephine Lovegrove	Honours	^a Prof. Paul Fulbrook ^a Sandra Miles	Nursing assessment of pressure injury risk



Clinical Sciences Building TPC Health

^aNRPDC ^βTPCH

TPCH ACU

Research Projects

PRESSURE INJURY PREVENTION AND WOUND MANAGEMENT

Systematic review of interventions to reduce pressure injury in immobile critically ill patients (NSQHS Standard 8)

^aPaul Fulbrook, ^aPetra Lawrence, ^aJosephine Lovegrove
Pressure injury (PI) prevention in critically ill patients features prominently in current research literature, as it is a key clinical indicator of the effectiveness of care; critically ill adults are often at higher risk than other patients. The impetus for this review arose from clinical concerns about the relatively high incidence of occipital PI in TPCH extra-corporeal membrane oxygenation (ECMO) patients, due to their being immobile and supine for prolonged periods of time. Thus, the initial inquiry via the research literature was focused on risk factors and methods of PI prevention for this group. However, the first search revealed an absence of research on this topic. The search remit and terms were therefore expanded to cover PI risk and prevention in all immobile critically ill patients. Thus, the aim of this review is to critically evaluate the effectiveness of interventions aimed at preventing PI in immobile critically ill patients.

FUNDING: in-kind.

The presence of pressure injury in patients admitted to the emergency department via ambulance: pilot descriptive study (NSQHS Standards 2 and 8)

^aPaul Fulbrook, ^aSandra Miles, Elizabeth McInnes (ACU), ^βFrances Kinnear, Fiona Coyer (QUT)

The study aim is to determine the prevalence of pressure injury (PI) presence in adult patients arriving at an emergency department (ED) by ambulance. The objectives of this study are to: describe the relationship between the presence and stage of PI identified on presentation to ED and the presence and grade of PI identified when patients are admitted to the wards; examine the association between various factors (patient-related; pre-ambulance arrival condition; length of ambulance journey; patient position in ambulance; stretcher surface) and the presence of PI; and examine the association between PI presence on admission to the ward and various timed events (ambulance call; ambulance pick up; ambulance arrival in ED; length

of stay in ED). Data (n = 240) were collected from two emergency departments: TPCH and the Royal Brisbane and Womens Hospital. Data analysis is in progress.

FUNDING: ACU Faculty of Health Sciences, \$13,000.

Nurses' knowledge of pressure injury prevention and management (NSQHS Standard 8)

^aPetra Lawrence, ^aPaul Fulbrook, ^aSandra Miles

Building upon a previous research study that was conducted across the health service district, this study will investigate TPCH nurses' knowledge levels. A proportional, stratified sample of nurses is being recruited and surveyed using the Pieper Zulkowski Pressure Ulcer knowledge Tool (PZ-PUKT). The study has been completed.

DISSEMINATION: a research article is under preparation for publication. Several conference presentations.

FUNDING: in-kind.

Pressure injury incidence and risk factors in intensive care patients (NSQHS Standard 8)

^βJake Nowicki, ^βDaniel Mullany, ^βAmy Spooner, ^βTracy Nowicki ^βPeta McKay, ^βAmanda Corley, ^aPaul Fulbrook, ^βJohn Fraser

The aim of this study was to assess the clinical characteristics and outcomes of ICU patients reported as having a hospital acquired pressure injury to better understand patient factors associated with their development in comparison to ward patients. Data were collected from TPCH. A secondary data analysis was undertaken on all patients with a recorded pressure injury on the hospital's critical incident reporting systems and admitted patient data collection between July 2006 to March 2015. There were a total of 5280 reports in 3860 patients; 726 reports were intensive care patients and 4554 were non-intensive care patients, with severe hospital acquired pressure injury reported in intensive care patients and 54 non-intensive care patients. Pressure injury incidence increased in intensive care patients and decreased in non-intensive care patients over the study period. There were statistically significant differences in the anatomical location of severe hospital acquired pressure injuries between these groups.

DISSEMINATION: the study has been written up and submitted for publication.

FUNDING: in-kind.

^aNRPDC ^βTPCH

Application of 0.2% glyceryl trinitrate ointment for the healing of chronic venous leg ulcers (NSQHS Standard 8)

^aRoger Lord, ^bDamian Williams, ^aSandra Miles, ^aPaul Fulbrook, ^bEwan Kinnear, ^bJeffrey Rowland
A small study by Roger Lord showed that glyceryl trinitrate, the active ingredient in rectogesic ointment, increased production of nitric oxide in venous leg ulcers. This resulted in vasodilation and immune system activation at the wound site, helping to clear bacterial load and promote wound closure. This new study will recruit a larger sample to reach statistical significance. Consenting patients with venous leg ulceration, confirmed with the use of transdermal oxygen sensors, will be randomly allocated to a control (usual treatment) or experiment (application of 0.2% glycerol trinitrate) group. Planimetry will be used for baseline measurements of ulcer size and to ascertain healing rates at weekly visits over four to six weeks, to monitor whether treatment is having an effect.

FUNDING: ACU, Faculty of Health Sciences, \$10,000.

Categorisation of characteristics and severity of mucosal pressure injuries: a modified Delphi study

^aSandra Miles, ^aPaul Fulbrook

This study will commence by assembling a consensus panel of wound care experts. In the first phase, experts will be asked to review a set of previously collected de-identified photographs and descriptions of mucosal pressure injuries in order to assess their severity and derive agreed key descriptors for each wound. In the second phase, a Delphi technique will be used to seek expert consensus on categorisation of the wounds according to their severity, with the aim to develop hierarchical wound grading criteria for mucosal pressure injuries. The wound grading criteria will subsequently be tested for reliability and validity, in the form of a wound assessment tool, in a future study. Ethical approval has been received and the study is about to commence.

FUNDING: in-kind.

Statewide prevalence of pressure injuries in intensive care patients (NSQHS Standard 8)

Fiona Coyer (QUT), Sandra Gosley, ^aSandra Miles, ^aPaul Fulbrook, Kirstine Sketcher-Baker, Jane-Louise Cook, Jacqueline Whitmore

The aim of this study was to compare the state-wide prevalence, severity and location of pressure injuries of intensive care unit patients compared to patients in non-intensive care wards. The study employed a secondary data analysis design to extract and analyse de-identified

pressure injury data from all Queensland Health hospitals with level I-III intensive care facilities that participated in Queensland Bedside Audits between 2012-2014. The sample included all adult ICU and non-ICU patients that provided consent for the Queensland Bedside Audits, excluding those in mental health units. The study has been completed and an article has been accepted for publication.

DISSEMINATION: a paper has been accepted for publication.

FUNDING: in kind.

Adhesive silicone foam dressing versus meshed silicone interface dressing for the management of skin tears: a comparison of healing rates, and patients' and nurses' satisfaction (NSQHS Standard 8)

^bDamian Williams, ^aPaul Fulbrook, ^aSandra Miles, ^aJosephine Lovegrove

Point prevalence audits within TPCH between 2009 and 2011 have yielded skin tear prevalence results between 5.38% and 12.59% and 95% of skin tears were on patients over the age of 65. The main goal of this study is to compare two standard dressings in terms of their skin tear healing times. Secondary goals are to assess nurses' satisfaction with the dressings (fit for purpose) and patients' satisfaction (comfort et cetera). This will also enable a cost-benefit comparison to be made.

FUNDING: The Prince Charles Hospital Foundation, \$9,938.

Evaluation of a silicone gel adhesive hydrocellular foam dressings for the prevention of sacral pressure injuries in hospitalised elderly patients (NSQHS Standard 8)

^aPaul Fulbrook, ^bDamian Williams, ^aSandra Miles, ^aJosephine Lovegrove

The primary aim of this study is to compare the effect of a shaped silicone gel adhesive hydrocellular foam dressing to standard care on the development of sacral pressure injury in at risk elderly patients in a sub-acute hospital ward. The secondary aims are: to evaluate dressing comfort from the patient's perspective; to evaluate dressing utility from the nurse's perspective; and to quantify the direct costs associated with use of the foam dressing. The design is an open label randomised observational study of patients admitted the Geriatric Evaluation and Management (GEM) unit at TPCH. Data collection is nearly complete.

FUNDING: Smith and Nephew, \$12,141.

Assessment of pressure injury risk and intervention planning for hospitalised patients: a comparison of nurses' clinical judgement with and without use of a standardised pressure injury risk assessment tool (NSQHS Standard 8)

^αPaul Fulbrook, ^αSandra Miles, ^βTracy Nowicki, ^αJosephine Lovegrove

Pressure injuries are preventable adverse outcomes of hospitalisation, which may cause a patient pain or increase their hospital length of stay and, in severe cases, may lead to death. Nurses plan interventions to prevent pressure injuries, using their own judgement or a formal tool to assess risk for each patient. The aim of this study is to compare nurses' use of a structured risk assessment tool versus unstructured clinical judgement to determine which results in the most effective planned interventions to prevent pressure injury. Phases 1 has been completed and phase 2 has commenced..

DISSEMINATION: via local conferences.

FUNDING: The Prince Charles Hospital Foundation, \$9,796.

FALLS PREVENTION AND MANAGEMENT

Clinical care in relation to falls (NSQHS Standard 10)

^βClaire Burl, ^αJenneke Foottit (ACU), ^αMelanie Jessup

The aim of this study is to determine what clinical care and activities are occurring at the time of a patient fall. It utilised a process of mapping patient and staff location and activity at the time of an inpatient fall, utilising this data in focus groups in which staff consider how practice can be modified to minimise falls. Qualitative interviews with the staff member assigned to care for the patient who fell will deliver insight in to the potential impact of a patient fall. The data have been analysed.

DISSEMINATION: a research article is under preparation for publication.

FUNDING: The Prince Charles Hospital Foundation, \$ 7,563.

Patients' experiences of sustaining an in-hospital fall (NSQHS Standards 2 and 10)

^βStephanie Gettens, ^αPaul Fulbrook, ^αMelanie Jessup, ^βNancy Low Choy

A qualitative phenomenological design was used to investigate the experience of falling in hospital. Twelve hospital in-patients that had recently fallen were interviewed while in hospital using unstructured interviews. The methodology was guided by Van Manen's approach to data collection and analysis. Three key themes emerged

from the analysis: Feeling safe, Realising the risk and Recovering independence and identity. These themes describe a continuum whereby falling was not initially a concern to participants, who trusted staff to keep them safe, and tended to not seek assistance. As participants began to appreciate the reality of their falls risk they felt disempowered by their loss of independence but were more receptive to receiving assistance. Finally, as participants recovered, their desire to regain independence increased. They wanted others to perceive them as physically competent, rather than as a frail older person, meaning they were more willing to take risks with mobility.

DISSEMINATION: a research paper has been submitted for publication.

FUNDING: in-kind.

Implementation and evaluation of a nurse-led emergency department pathway for patients that present following a fall: phase 1 (NSQHS Standard 10)

^αPaul Fulbrook, ^αMelanie Jessup, ^αSandra Miles, ^βFrances Kinnear, Bridie McCann (ACU)

The overall aim of this project is to demonstrate the feasibility and effectiveness of streamlining the processes of assessment and early management of ED presentations of fallers utilising an integrated ED Falls Pathway. This project will implement and evaluate a nurse-led program in the ED to identify and screen people who have fallen, so that an individual and in-depth assessment by key health professionals can be provided followed by relevant referrals for community support services on discharge home. It is anticipated that this program will help to reduce the risk of further falls and representations to hospital. Currently seeking funding to support phase 2 of this project. Phase 1 of the project is to test a falls screening tool. Data collection is in progress.

FUNDING: The Prince Charles Hospital Foundation, \$9,762.

Falls knowledge survey (NSQHS Standard 10)

^αKeith Skelton, ^αMelanie Jessup, ^βNancy Low-Choy, ^αJenneke Foottit J, ^βStephanie Gettens

The aim of this project was to conduct a district wide survey on the topic of falls to ascertain health professionals' current knowledge of falls: their impact and prevention. A questionnaire has been developed to identify potential gaps in knowledge and to inform further research and education. Data collection has been completed and analysis is in progress.

FUNDING: The Prince Charles Hospital Foundation, \$4,453.

EMERGENCY CARE

Implementation and evaluation of an emergency department 'Navigator' role to improve timely delivery of patient care (NSQHS Standard 2)

^aPaul Fulbrook, ^bFrances Kinnear, ^aMelanie Jessup

Delayed treatment in the emergency department (ED) is a major healthcare issue. Over a twenty week period a new nursing role was implemented in the ED. This novel role was to troubleshoot factors contributing to patient delays. The results indicate that the Navigators significantly reduced average ED length of stay by around five minutes per patient, and contributed to reduced times at all stages of the ED patient's journey. The role was evaluated using mixed methods and staff were found to be supportive.

DISSEMINATION: two papers have been submitted for publication.

FUNDING: Australian Centre for Health Services Innovation, \$74,000.

Ambulance retrieval: what factors are involved in the decision to transport an emergency patient to hospital? A case study and decision analysis

Paul Fulbrook, Melanie Jessup, Frances Kinnear, Justin Boyle (CSIRO); Emma Bosley (QAS); Gerry FitzGerald (QUT); Marc Colbeck (ACU)

This is investigating how decisions are made about ambulance destinations from the perspectives of ambulance personnel, emergency department (ED) staff, hospital managers and patients. The information will be used to develop an objective decision-making process that accounts for and prioritises factors such as patient acuity, distance/traffic, ambulance and ED/hospital resources and capacity in order to inform ambulance destination. A case study design was used to gather information from stakeholders about ambulance destination decision-making, using a purposive sample of 30 ED presentations as cases. The cases were used to trace each step of the patient's journey from ambulance pick-up to ED arrival. As well as the patient and their relative, emergency healthcare personnel involved in each patient episode were interviewed. Cases were then analysed and summarised, identifying all possible decision points (expected and chance) and possible outcomes. In the second phase of the analysis, emergency care experts from south east Queensland participated in five expert panel meetings to discuss the findings. These are currently being analysed.

FUNDING: Metro North Hospital and Health Services SEED grant, \$111,139.

A brief intervention to motivate health seeking behaviour for emergency department attendees with moderate or high non-specific psychological distress: a pragmatic randomised controlled trial

^aPetra Lawrence, ^aPaul Fulbrook, Shawn Somerset (ACU), Paula Schulz (ACU)

The aim of this study was to evaluate the effectiveness of a brief intervention using motivational interview with emergency department (ED) attendees with moderate or high levels of psychological distress to seek further support for their mental health. Consenting ED attendees were screened using Kessler Psychological Distress scales (K10). Those with low, moderate or high psychological distress were randomised to intervention and control groups. Motivational interview was provided to the intervention group. There were two control groups (moderate or high, and low psychological distress) that received standard care. Motivational interview did not impact health seeking behaviours. However, there was a significant effect on psychological distress with a significant reduction in K10 scores seen in the intervention group.

DISSEMINATION: one article has been published to date, and a second is under review.

FUNDING: in-kind.

Provision of a new paediatric service: an investigation of staff perceptions and experiences of the transition from an adult emergency department

^aAlison Peeler, ^aPaul Fulbrook, ^bFrances Kinnear

This research studied the opening of a separate paediatric emergency department at TPCH from the viewpoint of the staff directly affected. It is using quantitative and qualitative analysis of data from a combination of surveys and interviews. These examined readiness, progress and effects (real and perceived) of the change process at different stages i.e. before, during and after the new department was opened. The surveys were administered widely to staff affected involving different levels and different disciplines. The interviews were conducted with a more limited number of staff representatives of the different groups. The information obtained may help guide the process and should also be of use in planning future similar changes here and elsewhere.

DISSEMINATION: a research article has been published. Several conference papers.

FUNDING: in-kind.

Parents' experiences of care in a paediatric emergency department (NSQHS Standard 2)

^αAlison Peeler, ^αPaul Fulbrook, ^βFrances Kinnear

The purpose of this study was to provide a rich description of the lived experiences of parents/caregivers (n = 20) who had taken their child with either an illness or injury to a new TPCH paediatric emergency department. This qualitative study used semi-structured interviews. Data collection has been completed and thematic analysis is in progress.

FUNDING: in-kind.

A two-year analysis of presentations to a paediatric emergency department

^αAlison Peeler, ^αPaul Fulbrook, ^βFrances Kinnear

Data were retrieved for all paediatric presentation to the TPCH paediatric emergency department during its first two years of operation. During this period there were 35,649 presentations. The mean age of the sample at presentation was 5.83 years (SD 4.61, IQR 1.80-9.59) with a majority of males (56.0%, n = 19,975). Data analysis is in progress.

FUNDING: in-kind.

Evaluation of a structured simulation exercise to prepare emergency staff for the opening of a new department

^βMichelle Davison, ^βFrances Kinnear, ^αPaul Fulbrook

The aim of this study was to assess the utility of a multiple-encounter in-situ (MEIS) simulation as an orientation tool for multidisciplinary staff prior to opening a new paediatric emergency service. A single-group pretest/posttest study was conducted. During the MEIS simulation, multidisciplinary staff with participant or observer roles managed eight children (mannequins) who attended triage with their parent/guardians (clinical facilitators) for a range of emergency presentations (structured scenarios designed to represent the expected range of presentations plus test various clinical pathways/systems). Participants were debriefed to explore clinical, systems and crisis-resource management issues. Participants also completed a pre- and post-intervention questionnaire comprising statements about role confidence and orientation adequacy.

DISSEMINATION: The study has been written up and accepted for publication.

FUNDING: in-kind.

Discharge information provided to parents in the paediatric emergency department: a mixed methods study (NSQHS Standard 2)

Kodchanipa Phonpruk (ACU), Karen Flowers (ACU), Geraldine Naughton (ACU), ^αPaul Fulbrook

This study was conducted in several phases using four methods of data collection: documentary analysis; observation; focus groups; and survey. The aim of phase

1 was to identify the current protocols, procedures, guidelines and resources for providing discharge information in the emergency department (ED). Resources reviewed were retrieved from hospital and government websites and, also from the wall display in the children's ED. Despite the availability of some resources for parents, other documentation lacked information on discharge policies and practices. The aim of the non-participant observation study was to observe current practices in providing discharge information to parents of children presenting to the ED. All parents received verbal discharge information and individualised patient care advice from medical doctors. Also, doctors consistently asked parents if they had any questions about the information they received. None of the observed parents received discharge information from nurses. Beyond asking for any questions, staff involved in discharge lacked other strategies such as asking parents to reiterate the information and determining any potential barriers to implementing the advice provided. However, parents largely appeared satisfied with their child's experience in the ED. Analysis of the focus group data resulted in three themes emerging from the ED nurses' perceptions of the provision of discharge information for parents of children treated in the ED. Barriers and enablers of provision of discharge information were identified within the themes of structure and process. Outcomes were explored for markers of effectiveness and ineffectiveness. The survey data showed that most parents were older than 30 years of age and predominantly the mother rather than the father, accompanied the child to the ED. Upon discharge, almost 40% of parents perceived that their discharge instructions for care of their child's illness at home only involved monitoring. However, 27% of the 58 parents who were asked to report on the instructions for managing their child's illness at home did not provide an answer to this question. In summary, most parents reported receiving discharge information about the care of their child at home. Nonetheless, parents reported anxiety and confidence about caring for their child at home influenced their understanding of discharge information.

DISSEMINATION: an article is being prepared for publication.

FUNDING: in-kind.

Evaluation of a new method to obtain urine samples from non toilet-trained children presenting to the emergency department

^βJeanette Probyn, ^αPaul Fulbrook

The primary aim of this project is to reduce the contamination rate of urine samples obtained for microbiological examination from non toilet-trained children in the children's emergency department (ED). A secondary aim is to reduce the time taken to obtain such samples. The project is being undertaken in two phases. Initially, a baseline study was undertaken to establish

the incidence of urinary sample contamination. In phase two, nursing staff were provided with education about a standardised method of perineal cleaning, as well as a standardised approach to usual care (termed the 'clean catch' method) and a novel approach using a children's potty. These two methods (both using standardised cleaning) are currently being evaluated using a randomised controlled trial. The main outcome measures are: sample contamination and time to obtain sample.

FUNDING: The Prince Charles Hospital Foundation, \$3,190.

The relationship between characteristics of emergency department presentations and increasing demand in emergency care: a retrospective correlational study (NSQHS Standard 2)

^αWinnie Wu, ^αPaul Fulbrook, ^αSandra Miles, ^αJosephine Lovegrove

Demand for emergency care has continued to rise. Despite the high demand for emergency department (ED) services, studies have shown that between 8% and 22% of patients revisit the ED within 30 days of discharge from the ED. Higher ED revisit rates result in increased in-hospital admissions and costs. Therefore, understanding the pattern and characteristics of ED presentations and ED revisits are essential to inform service planning. The purpose of this study is to determine the characteristics of emergency presentations and their association with ED revisits for adult patients within 30 days of ED discharge. A quantitative research approach is being employed. The data will be collected via ED databases over one year period in an acute tertiary hospital. The main outcomes of this study will be an improved understanding of the factors associated with ED revisits and recommendation of possible interventions to prevent ED revisits.

FUNDING: ACU Faculty of Health Sciences, \$10,000.

CARDIAC/THORACIC CARE

Indigenous people and their families' experiences of cardiac care in a hospital setting (NSQHS Standard 2)

^βVainess Mbuji, ^αPaul Fulbrook, ^αMelanie Jessup

This project employed a qualitative design. A purposive sample of Indigenous cardiac patients and their family members were interviewed. The aim was to understand how Indigenous people experienced acute cardiac care, in order to inform the provision of culturally sensitive care. Data collection and analysis are complete.

DISSEMINATION: a research article is under preparation for publication.

FUNDING: The Prince Charles Hospital Foundation, \$9,978.

Indigenous peoples' experiences of acute hospital care: a meta-synthesis (NSQHS Standard 2)

^βVainess Mbuji, ^αPaul Fulbrook, ^αMelanie Jessup

The objective of this study was to explore Indigenous people's experiences and perceptions of hospitalisation and acute care. Systematic procedures were used for the literature search covering the period from 2000 to 2016. A thematic approach to synthesis was taken. Statements were assembled to produce aggregated data of the findings, which were then categorised based on similarity of meaning, and the categories were used to produce comprehensive synthesised findings. A total of 21 primary studies met the inclusion criteria. Three themes emerged from the metasynthesis: *Strangers in a strange land*; *Encountering dysfunctional interactions*; and *Suffering stereotyping and assumptions*. These themes emphasised the importance of meaningful relationships for Indigenous people and highlighted their cultural marginalisation in hospital settings. The findings indicate that healthcare experiences of Indigenous patients and their relatives in acute settings can fall well short of their expectations and needs. It behoves healthcare professionals to firstly be aware of such discrepancies, and secondly to implement strategies that enable inclusive and individualised care.

DISSEMINATION: an article has been accepted for publication. Several conference papers.

FUNDING: in-kind.

Effectiveness of strategies used in the management of cardiac conditions among Indigenous Australians: a systematic review

^βVainess Mbuji, ^αPaul Fulbrook, ^αMelanie Jessup

A systematic review was conducted to examine the evidence relating to the effectiveness of cardiovascular programs for Indigenous Australians. All types of experimental designs were considered for inclusion. Studies were included if they reported interventions or programs explicitly aimed at improving Indigenous cardiovascular health. Only studies that reported outcome measures associated with changes in behavioural risk factors, knowledge of cardiac disease, or health assessment were eligible for inclusion. Methodological quality of included studies was appraised using design-specific Joanna Briggs Institute critical appraisal checklists. Nine studies met the inclusion criteria. Common features of effectiveness of programs were integration of programs within existing services, provision of culturally appropriate delivery models by putting a central role for Indigenous health workers, and provision of support processes to communities such as transportation. It was noted however, that the programs modelled the interventions based on mainstream views and lacked strategies that integrate traditional knowledge and

delivery of health care. Very few cardiovascular health care programs designed specifically for Indigenous Australians, which had undergone rigorous study, were identified. Of the studies reviewed, the nature of interventions was diverse, and they were implemented in a variety of healthcare settings. The limited evidence available demonstrated that interventions targeted at Indigenous cardiac conditions and related risk factors can be effective. The results indicate that there are opportunities to improve cardiac health of Indigenous people at all stages of disease continuum.

DISSEMINATION: the study is currently being written up for publication.

FUNDING: in-kind.

High risk respiratory patient's experiences of bronchoscopy with cautious sedation and analgesia: a qualitative study (NSQHS Standard 2)

^βCathy Saxon, ^αPaul Fulbrook, Chantal Ski (University of Melbourne), ^βKwun Fong

Sedation for bronchoscopy is dependent on the preferences of the physician. Sedation is used to alleviate negative symptoms associated with bronchoscopy such as anxiety, amnesia, pain, cough and dyspnoea and has been associated with the patients' willingness to repeat the procedure. Analgesia is often combined with sedation due to its analgesic and antitussive effects. Cautious sedation/analgesia is provided to patients with respiratory disease who are at higher risk during bronchoscopy. A clinical problem has been identified when the nurses assisting with patient airway management during bronchoscopy observe patients' distress due to discomfort. Although there have been many studies that have investigated bronchoscopy with cautious sedation, none have investigated the patients' experience qualitatively. The aim of the project was to understand the lived experience of high risk patients that undergo bronchoscopy with cautious administration of sedation and analgesia. The findings will be used to inform bronchoscopy practice.

DISSEMINATION: a research article is under preparation for publication. Multiple conference papers.

Family-centred care in cystic fibrosis: a regional pilot study (NSQHS Standard 2)

Linda Shields (Charles Sturt University), ^αMelanie Jessup, Wendy Smyth (James Cook University), Gail Abernethy (Townsville Hospital), Tonia Douglas (Curtin University)

The aim of this mixed methods study was to examine perceptions of family-centred care of regional parents of children with cystic fibrosis, and healthcare professionals caring for them. A comparative, cross-sectional survey of parents of children with cystic fibrosis and health staff in a regional setting was undertaken using the Perceptions of Family Centered Care – Parent and Perceptions of Family

Centered Care – Staff questionnaires. A descriptive study of tool suitability was undertaken, and semi-structured interviews were conducted with parents. Parents of children with cystic fibrosis, and staff, showed no difference in scores of perceptions of family-centred care, although this was influenced by the small sample size. Insight into this unique milieu from the parents' perspective is requisite to inform care is appropriate to such a challenging environment and incorporates the whole family. Parents' recommendations included enhanced communication, professional continuity, an informed local team, and recognition of parental experience and expertise.

DISSEMINATION: publication submitted for review.

FUNDING: Australian College of Nursing Research Grant, \$10,000.

Becoming a parent: the experience of people with cystic fibrosis (NSQHS Standard 2)

^αMelanie Jessup, ^βAnne Li, ^αPaul Fulbrook, ^βScott Bell

This qualitative study explored the experience of seven Australian adults with cystic fibrosis through phenomenological enquiry. Utilising a semi-structured interview method, participants were invited to describe their experience of becoming a parent. Recorded interviews were transcribed verbatim and analysed according to van Manen's approach. Analysis of the data realised two overarching themes that characterised the experience of parenthood as recounted by the participants: *Counting the Cost*, as they recalled the *Communication and Processes of Pregnancy*; and *Living the Dream*, as they cast a retrospective view over this, their major achievement, in light of their *Coping, Conjecture and Confidence*. The study draws attention to the role and influence of partners, parents and health professionals, and recommends ways in which key personal and healthcare partners can enhance their contribution and care.

DISSEMINATION: a paper has been submitted for publication. Several conference papers.

FUNDING: Queensland Health – Health Practitioner Research Scheme, \$5,000.

Patients' experiences during flexible bronchoscopy with placebo and/or various pharmaceutical agents: a systematic review (NSQHS Standard 2)

^βCatherine Saxon, ^αPaul Fulbrook, Chantal Ski (University of Melbourne), ^βKwun Fong

The aim of this systematic review was to determine the effectiveness of various pharmaceutical agents used during bronchoscopy on the patient experience, and highlight gaps in the evidence. Eight data bases were searched. Included randomised controlled trials (RCT) were those that reported self-rated aspects of the patient experience and/or willingness to repeat the bronchoscopy. The search yielded

twenty-five relevant RCTs. These studies reported data on a variety of psychological, physical, and patient satisfaction outcomes. The quality of the reviewed RCTs was often impaired: some studies were not blinded, methodology was unclear, and few studies reported protocol registration. There was inconsistent reporting of outcomes, use of measurement scales, and presentation in reports; making a meta-analysis impractical. When pharmaceutical interventions were compared, some studies demonstrated improved patient outcomes. Propofol with hydrocodone resulted in improved patient comfort and reduced cough. Propofol compared to midazolam improved patient tolerance of the procedure and reduced breathlessness. Midazolam with dextromethorphan compared to midazolam alone reduced distress, discomfort and cough. Non-use of sedation resulted in negative psychological and physical effects. Overall, when compared to placebo, use of sedation improved patient comfort, tolerance and willingness to repeat the procedure but effects varied according to type of sedation.

FUNDING: in-kind.

DISSEMINATION: a paper is being prepared for publication. Several conference papers.

MENTAL HEALTH CARE

Motivational interviewing to enhance treatment attendance in mental health settings: a systematic review and meta-analysis

^aPetra Lawrence, ^aPaul Fulbrook, Shawn Somerset (ACU)

A systematic review and meta-analysis of randomised controlled trials was conducted to determine if motivational interviewing (MI) pre-treatment intervention in mental health settings leads to increased post-MI treatment attendance. Sub group analysis was used to investigate treatment-seeking and non-treatment-seeking groups. There were wide variations in study sample size. Blinding and monitoring the intervention fidelity was absent in the majority. Meta-analysis revealed that MI pre-treatment improved attendance for therapy (OR = 4.04) relative to comparison groups. Sub-group analysis revealed that MI was more effective for those not seeking treatment for a mental illness (OR = 4.83), compared to those seeking treatment (OR = 1.79). It was concluded that non-treatment seeking individuals receive the greatest benefit from MI to motivate them to attend further therapies.

DISSEMINATION: a research article is under preparation for publication.

FUNDING: in-kind

OTHER RESEARCH

Perioperative changes in elderly patients undergoing hip fracture surgery

^βUsha Gurunathan, ^βChris Stonell, ^αPaul Fulbrook, ^βBernadette Brown

The main aim of this study was to assess the perioperative changes in patients undergoing surgery for proximal femoral fractures. The secondary aims were to: calculate the prevalence of hypothermia in patients on arrival to the post anaesthetic care unit; and evaluate the association between occurrence of hypothermia and post-operative length of stay in the recovery room. Eighty seven patients were included in this study. A significant drop in body temperature (0.730C, 95% CI: 0.58- 0.88, $p < 0.001$) occurred from their arrival at the operating theatre until their arrival at the recovery room. One third of the patients were noted to be hypothermic when they arrived at recovery room. A significant drop of 0.240C (95% CI: 0.11-0.36, $p < 0.001$) was observed at the holding bay area. These results indicate that despite the use of active warming methods for most patients, significant hypothermia was still an issue. Further improvement is necessary to prevent hypothermia in this high-risk group of patients.

FUNDING: in-kind.

DISSEMINATION: a research article has been accepted for publication. Several conference papers.

Evaluation of the ACU/The Prince Charles Hospital Clinical School Experience: Phase 1

Paula Schulz (ACU), ^aPaul Fulbrook, Gillian Lewis (ACU), ^βCherie Franks, ^βMegan Lowe

This study is using a mixed methods research design. It employs a quantitative survey utilising the Quality Clinical Placement Environment (QCPE) inventory, and qualitative investigation via focus groups. Key stakeholder groups are students that commenced at The ACU/TPCH Clinical School in 2016, second year ACU Nursing students that commenced a traditional placement at TPCH and at an equivalent comparator hospital, and educators from ACU, the Clinical School and those involved in teaching students on traditional placement. The research team is reviewing the emerging themes in an ongoing fashion to identify those that make meaningful contributions to answering the research questions. The results of ACU/TPCH Clinical School students and comparator group students on the QCPE tool, as well as comparison of the grade point averages of both groups in their clinical subjects in semesters one and two 2016, will offer quantitative insight into their differing experiences.

FUNDING: in-kind.

Publications

Publications 2016

Colbeck M, Lockwood C, Peters M, ^αFulbrook P, McCabe D (2016). The effect of evidence-based, treatment-oriented, clinical practice guidelines on improving patient care outcomes: a systematic review protocol. *JB I Database of Systematic Reviews and Implementation Reports* 14(6), 42-51.

Conway A, ^βSheridan J, ^βMaddicks-Law J, ^αFulbrook P, Ski C, Thompson D, Doering L (2016). Accuracy of anxiety and depression screening tools in heart transplant recipients. *Applied Nursing Research* 32, 177-181.

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Eley R, Judge C, ^αKnight L, Dimeski G, Sinnott M. (2016). Illustrations reduce contamination of midstream urine samples in the emergency department. *Journal of Clinical Pathology* 69(10): 921-915.

Frganovic A, Bloomer M, Northam H, Kalauz S, Zellinger M, Lopez V, ^αFulbrook P (2016). World Federation of Critical Care Nurses: Brisbane Declaration on Culturally Sensitive Critical Care Nursing. *Connect: The World of Critical Care Nursing* 10(3), 80-82.

^αFulbrook P, ^βAnderson A (2016). Pressure injury risk assessment in intensive care: comparison of inter-rater reliability of the COMHON (Conscious level, Mobility, Haemodynamics, Oxygenation, Nutrition) Index with three scales. *Journal of Advanced Nursing* 72(3), 680-692.

Higgins N, Dart N, Meehan T, ^αFulbrook P, Anderson D, Fawcett L (2016). The Safewards program in Queensland public hospital acute mental health settings. *Australian Nursing and Midwifery Journal* 23(11), 41.

^αJessup M, Douglas T, Priddis L, Branch-Smith C, Shields L; AREST-CF. (2016). Parental experience of information and education processes following diagnosis of their infant with cystic fibrosis via newborn screening. *Journal of Pediatric Nursing* 31(3), e233-241.

^αJessup M, Crilly J, Boyle J, Wallis M, Lind J, Green D, Fitzgerald G (2016). Users' experiences of an emergency department patient admission predictive tool: A qualitative evaluation. *Health Informatics Journal* 22(3), 618-632.

^αPeeler A, ^αFulbrook P, Edward K, ^βKinnear F (2016). An evaluation of staff transitioning from a combined adult/child emergency department to a new paediatric emergency department: a qualitative study. *Australasian Emergency Nursing Journal* 19(3), 153-158.

Ward D, ^αFulbrook P (2016). Nursing strategies for effective weaning of the critically ill mechanically ventilated patient. *Critical Care Nursing Clinics of North America* 28(4), 499-512.

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Conway A, ^βSheridan J, ^βMaddicks-Law J, ^αFulbrook P, Ski CF, Thompson DR, Clark RA, Doering LV (in press). Depression and pain in heart transplant recipients: an observational study. *Biological Research for Nursing*.

Coyer F, ^αMiles S, Gosley S, ^αFulbrook P, Sketcher-Baker K, Cook J, Whitmore J (in press). Pressure injury prevalence in intensive care versus non-intensive care patients: a state-wide comparison. *Australian Critical Care*.

^βDavison M, ^βKinnear F, ^αFulbrook P (in press). Evaluation of a structured simulation exercise to prepare emergency staff for the opening of a new department. *BMJ Simulation & Technology Enhanced Learning*.

^αFulbrook P, ^αJessup M, ^βKinnear F (in press). Implementation and evaluation of a 'Navigator' role to improve emergency department throughput. *Australasian Emergency Nursing Journal*.

^βGurunathan U, ^βStonell C, ^αFulbrook P (in press). Perioperative hypothermia during hip fracture surgery: an observational study. *Journal of Evaluation in Clinical Practice*.

^αMiles S, ^αFulbrook P, Mainwaring-Magi D (in press). Evaluation of standardized instruments for use in universal screening of very early school-age children: suitability, technical adequacy and usability. *Journal of Psychoeducational Assessment*.

^βMbuzi V, ^αFulbrook P, ^αJessup M (in press). Indigenous peoples' experiences and perceptions of hospitalisation for acute care: a metasynthesis of qualitative studies. *International Journal of Nursing Studies*.

Published abstracts 2016

^βSaxon C, ^αFulbrook P, ^βFong K, Ski C (2016). Patients' experiences during bronchoscopy with "cautious" sedation and analgesia; a qualitative study. *Respirology* 21(Suppl. 3): 23.

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^βVainess Mbuzi, ^αPaul Fulbrook, ^αMelanie Jessup. Effectiveness of strategies used in the management of cardiac conditions among Indigenous Australians. PROSPERO 2016:CRD42016046688 Available from http://www.crd.york.ac.uk/PROSPERO_REBRANDING/display_record.asp?ID=CRD42016046688.

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Journal articles under review or in preparation

Under review

^αJessup M, ^β Li A, ^αFulbrook P, ^β Bell S. Passage to parenthood: the experience of men and women with cystic fibrosis.

^αMiles S, ^αFulbrook P, Mnatzaganian G. Two-year cluster randomized-controlled trial of a school-group sensorimotor early intervention.

^αLawrence P, ^αFulbrook P. Motivating health seeking behaviour among emergency department attendees with psychological distress.

^β Saxon C, ^αFulbrook P, Ski CF, ^β Fung K. High-risk respiratory patients' experiences of bronchoscopy with conscious sedation and analgesia: a qualitative study.

In preparation

Chamberlain D, Pollock W, ^αFulbrook P. ACCCN Workforce Standards for Intensive Care Nursing: systematic and evidence review, development, and appraisal.

^β Gettens S, ^αFulbrook P, ^αJessup M, ^β Low-Choy N. Falling in hospital - what the patient has to say: a qualitative study.

^αHyde S., ^αMiles S, ^αFulbrook P. The experience of seclusion: a thematic analysis of perspectives from consumers and staff.

^αHyde S., ^αMiles S, ^αFulbrook P. Use of a comfort room for distressed people in acute mental health settings: a thematic analysis of perspectives from consumers and staff.

^αJessup M, ^αFulbrook P, ^β Kinnear F. Evaluation of an emergency department nurse navigator role: a mixed methods study.

^αJessup M, ^αFulbrook P, ^β Kinnear F, ^β Trudgen K, ^β Beasy K. Navigator role in the emergency department: an insider' view.

^αJessup M, Shields L, Douglas T, Smyth W, Abernathy G. Family-centred care for families living with cystic fibrosis in a rural setting: a qualitative study.

^αLawrence P., ^αFulbrook P. Factor structure of the K10 in a sample from the emergency department.

^αLawrence P, ^αFulbrook P. One month follow up of a pragmatic randomised controlled trial to evaluate effects of a brief intervention for emergency department attendees who present with moderate of high levels of non-specific psychological distress: a pilot study.

^αLawrence P, ^αFulbrook P. Three month follow up of a pragmatic randomised controlled trial to evaluate effects of a brief intervention for emergency department attendees who present with moderate of high levels of non-specific psychological distress: a pilot study.

^αLawrence P, ^αFulbrook P, Lovegrove J. Systematic review of interventions to reduce pressure injury in immobile critically ill patients.

^αLawrence P, ^αFulbrook P, Somerset S, Schulz P. Meta analysis and systematic review of motivational interviewing as a pre treatment for people with psychological problems.

Mbuzi V, ^αFulbrook P, ^αJessup M. Strategies to improve Indigenous cardiac health: a systematic review.

^β Nowicki J, ^β Mullany D, ^β Spooner S, ^β Nowicki T, ^β McKay P, ^β Corley A, ^αFulbrook P, ^β Fraser J (2017 in press). Are pressure injuries related to skin failure in critically ill patients?

Phonpruk K, Flowers K, Naughton G, ^αFulbrook P. Analysis of written resources available for parents leaving a paediatric emergency department.

^β Williams D, ^αMiles S, ^αFulbrook P. A seven-year review of skin tear characteristics, prevalence and management in an Australian general hospital.

Conference Presentations

International

^β Saxon C, ^α Fulbrook P, ^β Ski C, ^β Fong K (2016). Patients' experiences during bronchoscopy with "cautious" sedation and analgesia; a qualitative study. 21st Congress of the Asian Pacific Society of Respiriology, The Queen Sirikit National Convention Center, Bangkok, Thailand, 12-15 November 2016.

^β Nowicki J, ^β Mullaney D, ^β Spooner A, ^β Nowicki T, ^β Mackay P, ^β Corley A, ^α Fulbrook P, ^β Fraser J (2016). Are pressure injuries related to failure of care or failure of tissue in critically ill patients? ANZICS/ACCCN Intensive Care Annual Scientific Meeting and the 22nd Annual Paediatric and Neonatal Intensive Care Conference. Perth Convention and Exhibition Centre, Perth, Australia. 20-22 October 2016.

^β Corley A, ^β Nowicki J, ^β Mullaney D, ^β Spooner A, ^β Nowicki T, ^β Mackay P, ^α Fulbrook P, ^β Fraser J (2016). Bedside assessment of microvascular skin perfusion to identify patients at risk of developing pressure injuries in the intensive care unit: feasibility and interim results. ANZICS/ACCCN Intensive Care Annual Scientific Meeting and the 22nd Annual Paediatric and Neonatal Intensive Care Conference. Perth Convention and Exhibition Centre, Perth, Australia. 20-22 October 2016.

^α Jessup M, ^α Fulbrook P, ^β Kinnear K (2016). Staff evaluation of the role of an emergency department nurse navigator. 4th International Conference for Emergency Nurses (ICEN). Alice Springs, 19-21 October 2016.

National

^β Gettens S, ^α Jessup M, ^α Fulbrook P, Low-Choy N (2016). Falling in hospital – what the patients say. 7th Biennial Australian and New Zealand Falls Prevention Conference, Melbourne, 27-29 November 2016.

^α Jessup M, ^β Burl C, ^β Footitt J, ^α Fulbrook P (2016). The context of clinical practice at the time of an inpatient fall. 7th Biennial Australian and New Zealand Falls Prevention Conference. Melbourne, 27-29 November 2016.

Jessup M, Shields L, Douglas T, Abernathy G Smyth W, Priddis L. (2016). Going the distance: family centred care for cystic fibrosis in remote or rural areas. ANZ Cystic Fibrosis Nurses Conference, Launceston, 11-12 August 2016.

Local

^β Saxon C, ^α Fulbrook P, ^β Fong K, ^β Ski CF (2016). Patients' experiences during bronchoscopy with "cautious" sedation and analgesia: a qualitative study. Annual Health Discoveries Forum, The Prince Charles Hospital, 17-21 October 2016.

^α Fulbrook P, ^α Jessup M, ^β Kinnear K, ^β Bosley E, ^β FitzGerald G, ^β Boyle J, ^β Colbeck M, ^β Knight L (2016). QAS Decision to transport case study. Annual Health Discoveries Forum. The Prince Charles Hospital, 17-21 October 2016.

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^β Corley A, ^β Spooner A, ^β Dalglish L, ^β Anstey C, ^β Cobb T, ^β O'Keefe M, ^β Lye I, ^β Mullany D, ^α Fulbrook P, ^β Nowicki T, ^β Fraser J (2016). Bedside assessment of microvascular skin perfusion to identify patients at risk of developing pressure injuries: feasibility and interim results. The Prince Charles Hospital Annual Health Discoveries Forum. The Prince Charles Hospital, 17-21 October 2016.



Emergency Department TPCH

^αNRPCD ^βTPCH

Hospital Research Ethics Committee Approvals

HREC/16/QPCH/10

An evaluation of a paediatric emergency department

HREC/16/QPCH/100

Evaluating the ACU/The Prince Charles Hospital Clinical School Experience: Phase 1.

HREC/16/QPCH/111

Fast screening of patients that present to the emergency department following a fall: a feasibility and prevalence study (Phase 1).

HREC/16/QPCH/171

Seven year prevalence of skin tears in an acute general hospital: A descriptive study.

HREC/16/Alfred/171

Non-inferiority randomised controlled trial comparing wound healing with compression therapy to electric stimulation therapy (Wound ELECT trial).

HREC/16/QPCH/191

Categorisation of characteristics and severity of mucosal pressure injuries: a modified Delphi study.

HREC/16/QPCH/255

Pilot descriptive study: The presence of pressure injury in patients admitted to the emergency department via ambulance.

HREC/16/QPCH/305

Assessment of pressure injury risk and intervention planning for hospitalised patients: a comparison of nurses' clinical judgement with and without use of a standardised pressure injury risk assessment tool.

**Nursing Research & Practice
Development Centre
The Prince Charles Hospital**

Contact: Josephine Lovegrove
josephine.lovegrove@health.qld.gov.au
Tel: 07 3139 6282
Level 5, Clinical Sciences Building
The Prince Charles Hospital, Rode Road,
Chermside, Queensland 4032, Australia

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