



## **Contents**

Nursing and Midwifery Research Centre1
--

Published by the State of Queensland (Metro North Hospital and Health Service), April 2024

This document is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit creativecommons.org/licenses/by/3.0/au

© State of Queensland (Metro North Hospital and Health Service) 2022

You are free to copy, communicate and adapt the work, as long as you attribute the State of Queensland (Metro North Hospital and Health Service).

For more information, contact:

RBWH Research Services, Metro North Hospital and Health Service, Building 34, Level 1, South Wing, Herston QLD 4006, email RBWH-Research-AdminCoord@health.qld.gov.au.

An electronic version of this document is available at https://metronorth.health.qld.gov.au/research/research-reports

#### Disclaimer:

The content presented in this publication is distributed by the Queensland Government as an information source only. The State of Queensland makes no statements, representations or warranties about the accuracy, completeness or reliability of any information contained in this publication. The State of Queensland disclaims all responsibility and all liability (including without limitation for liability in negligence) for all expenses, losses, damages and costs you might incur as a result of the information being inaccurate or incomplete in any way, and for any reason reliance was placed on such information.

## **Nursing and Midwifery Research Centre**

## **Research highlights**

The NMRC continues to build research capacity in the nursing and midwifery workforce, despite significant challenges brought by the post-COVID era and in a setting of staff shortages. Our aim continues to be to lead and support excellence in nursing and midwifery research.

We are excited by the arrival of new Professorial staff which will significantly impact the ability of nurses and midwives to positively influence patient outcomes. Professor Samantha Keogh has been appointed in a joint capacity between QUT and RBWH as Professor of Acute and Critical Care. Samantha comes with a wealth of clinical and research/implementation science knowledge in both adult and paediatric acute and critical care, and has already made valuable partnerships with RBWH.

We'd like to extend our good wishes and thanks to Professor Fiona Coyer who took up an exciting new opportunity with the University of Queensland as Professor, School of Nursing, Midwifery and Social Work, and Discipline lead for Nursing. Fiona remains an important member of the NMRC team as an Honorary Professor of Nursing Research and will continue to collaborate with the NMRC and RBWH Intensive Care Services. Fiona commenced at RBWH in 2015 as Professor of Nursing and has made significant contributions to building research capacity and improving the care provided to critically ill patients.

Integral to nursing and midwifery capacity building is the ability to attract competitive funding. This year, the centre's researchers have been awarded 18 competitive grants totalling \$4.4 million. We'd particularly like to celebrate the teams awarded a MRFF Clinician Researcher Grant: Building capacity to prevent healthcare harm for hospitalised infants: A type 1 hybrid randomized controlled trial \$1,495,953.80; and an NHMRC Partnership grant: Eliminating harm from devices across the life span in critical illness: The DEFENCE Study \$1,499,947.60. The NMRC Director, Professor Nicole Marsh, was also awarded a 5-year NHMRC Investigator Grant Emerging Leadership 1 grant: Optimising peripheral intravenous catheter access to treat infection for \$662,040 commencing in 2024.

Of special and important note, Yashni Kander (PhD candidate) is leading a research program around improving access to tertiary and quaternary health services for Aboriginal and Torres Strait Islander patients by addressing their social and emotional wellbeing. This project is supported by a Nursing and Midwifery Fellowship grant and Professor Jed Duff.

The centre's members have been recognised for their achievements in research, teaching, consumer engagement and implementation, receiving 18 local, national and international awards during 2023. Professor Amanda Ullman, an NMRC Honorary Research Fellow, along with RBWH team members Emily Larsen and Nicole Marsh, received the 2023 most outstanding patients' innovation award by the Australian Patients Association for: Consumer-led innovation to implement improvement in vascular access device management: The Vascular Access Passport. The voice of the consumer is important to our research team, and we continue to ensure that it is actively represented in our research.

2023 was a busy and productive year for the NMRC in terms of research dissemination and knowledge-sharing, with 38 peer reviewed publications (15 in Q1 journals) and 2 book chapters published; and 41 conference presentations (18 international, 20 national and 3 webinars). We look forward to an even more successful 2024!

## **Research Awards and Achievements**

Recipient	Award	Event
(RBWH staff in bold)		
Amanda Corley	Commendation: Teaching achievement for the Vascular Access Devices & IV Therapy course	Griffith University
Grace Xu	Association of Queensland Nursing and Midwifery Leaders (AQNML) Outstanding Achievement in Nursing/ Midwifery Leader Award	2022 Association of Queensland Nursing and Midwifery Leaders (AQNML)
Grace Xu	Best Scientific Paper Award	19 <sup>th</sup> International Emergency Nursing Conference
Grace Xu	Shortlisted for PROV-ED 2022 Pitchfest final round	PROV-ED, Queensland Health
Grace Xu	Top downloaded article in Emergency Medicine Australasia: Effects of mobile mindfulness on emergency department work stress: A randomised controlled trial	Emergency Medicine Australasia Journal
Aniela Setiawan, Nicole Marsh, Amanda Corley	Won the best Nurses/Radiographer E-poster, (Poster was completed through the Nursing and Midwifery Research Centre (NMRC) Evidence Based Practice Training Program (EBP))	Interventional Radiology Society of Australasia (IRSA) Conference
Bree-yana McConnochie, Nicole Marsh, Amanda Corley	Received the Professor Jeffrey Lipman award for best translational research into practice	Herston Health Precinct Symposium 2023
Amanda Ullman, Craig McBride, <b>Emily Larsen</b> , Tricia Kleidon, <b>Nicole Marsh and</b> <b>team</b>	Received the 2023 award for most outstanding patients' innovation by the Australian Patients Association for project: Consumer-led innovation to implement improvement in vascular access device management: The Vascular Access Passport	Australian Patients Association national awards night
Marsh N, Larsen E, O'Brien C, Ware R, Coyer F, Corley A	Received the Dr Stephen Morrison award for best clinical research	Herston Health Precinct Symposium 2023
Peters N, <b>Marsh N</b> and team	Received Australasian Society for Ultrasound Medicine AJUM article of the year award: Remotely supervised ultrasound-guided peripheral intravenous cannulation training: A prospective cohort study examining success rates and patient experience.	Australasian Society for Ultrasound Medicine Conference
Corley A	Received the 2023 Griffith University Postdoctoral Fellowship	Griffith University
Marsh N	Highly commended Research Support Award	2023 Metro North Research Excellence Awards
Marsh N	Received Professor Joan Webster Award	2023 Metro North Research Excellence Awards
Duff J and team	Received Implementation Award	2023 Metro North Research Excellence Awards
Larsen E, Ullman A, Marsh N, Roberts N, Boyte F, Winterbourn K, Binnewies S	Finalist, Complex Health Challenges	2023 Metro North Research Excellence Awards
Grace Xu	Received the Excellence in Clinician Researcher award	2023 AVATAR
Amanda Corley	Received the AVATAR Excellence in Teaching Award 2023	2023 AVATAR
O'Brien C, Marsh N, Corley A, Peters N, Williamson F, Hewer B, Graham J, Burgess L, Baxter K, Rogers K, Gill R, Daly N, Woollett K, Schults J, Rickard C	Consumer Focus award for "Difficult Access Requires Thought, Training and Technology (DART3): Codeveloping an ultrasound pathway for patients with difficult intravenous access.	RBWH QuARRIES Awards

## **Research Grants**

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Ullman A, Marsh N, Curley M, Coyer F, Davies M, Keogh S, Kearney L, McBride C, Kleidon T, August D, Takashima M, Xu G, Cole R, Ware R, Byrnes J	Nursing & Midwifery Research Centre, Neonatal Unit, Women's & Newborn Services	Building capacity to prevent healthcare harm for hospitalised infants: A type 1 hybrid randomized controlled trial	2022 MRFF Clinician Researchers	\$1,495,953.80	4 years, 2023-2026
<b>Duff J,</b> Keogh S, Pearse B, Ramanan M	Nursing & Midwifery Research Centre	Barriers and facilitators to blood conservation practice in intensive care	2023 CHT/COSI Enabling Grant	\$23,462	1 year, 2023
<b>Xu G</b> , Griffin B, Pennuto C, Addae H.	Nursing & Midwifery Research Centre	CO-design and impLement of Virtual Reality goggles to reduce procedure-related anxiety in emergency department (COOL -VR)	2022 PAH Small Project Grant	\$25,000	1 year, 2023
Heidke, PV, <b>Duff J</b> , Munday J, Keogh S	Nursing & Midwifery Research Centre	Implementing perioperative hypothermia guidelines for orthopaedic patients	Australian College of Perioperative Nurses (ACORN) Research Grant	\$10,000	1 year, 2023
Coyer F, Fullbrook P, Keogh S, Duff J, et al	Nursing & Midwifery Research Centre, ICU, GSNU	Eliminating harm from devices across the life span in critical illness: The DEFENCE Study	NHMRC Partnership Grant	\$1,499.947.60	3 years, 2023-2026
<b>Duff J</b> , Meloncelli N, Purtell L, Pattullo C, Rosengren D, Nasato G, et al.	Nursing & Midwifery Research Centre, Workforce Development Office Metro North, RBWH Pharmacy, A/Chief Operating Officer, Q Health, A/Executive Director RBWH	Evaluating the Helix4 Implementation Practice Capacity Building Program	2023 SERTA Grant	\$73,087.00	1 year, 2023
Rickard C, Ullman A, Corley A, Marsh N, Cleidon T, Zahir SF, Byrnes J, McCarthy K, Ball D, O'Brien C, Schults J	Nursing & Midwifery Research Centre	Protect PIVCs: An adaptive randomized controlled trial of a novel antimicrobial dressing for peripheral intravenous catheters (PIVCs). PROP trial	ЗМ	\$102,869.00	2 years, 2023-2024
Corley A, Bloomer M, Marsh N	Nursing & Midwifery Research Centre	Haemodialysis catheters in the intensive care: a systematic review and exploration of critical care nurses' bedside maintenance practices to address high catheter failure rates	2023 Griffith University New Researcher Grant Scheme	\$18,377	1 year, 2023

2023 RBWH Research Report Printed versions are uncontrolled Page 3 of 12

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Marsh N, Corley A, Byrnes J, Larsen E, Ware R, Peters N, O'Brien C, Graham J, Groom P, Hewer B, Peach H, Smith S, Fenn M	Nursing & Midwifery Research Centre	Clinical effectiveness and cost of peripheral intravenous device selection and insertion by a vascular access specialist (The SELECT Study)	2023 RBWH SERTA Grant	\$74,685	1 year, 2023
Ullman A, Marsh N, Curley M, Coyer F, Davies M, Keogh S, Kearney L, McBride C, Kleidon T, August D, Takashima M, Xu G, Cole R, Ware R, Byrnes J	Nursing & Midwifery Research Centre, Grantley Stable Neonatal Unit	Preventing infusate injuries throughout a childs hospitalisation (PATCH): A Type 1 Hybrid Randomised Controlled Trial	MRFF Medical Research Future Fund	\$205,405.00	3 years, 2023-2025
Kearney L, Lehner C, Eley V, Swift A, Jenkinson B, Marsh N, et al	Nursing & Midwifery Research Centre Women's and Newborn Services	Fluids in labour: Ensuring maternal euvolaemia (FLUME Study)	2023 SERTA Grant	\$60,268.00	1 year, 2023
Gumuskaya O, <b>Duff J</b> , Sarkies M, Mitchell B, Aitken S, Carroll R, Wong G, Phillips N, Hill C	Nursing & Midwifery Research Centre	Tran_S Rapid: A bundled approach to minimise preoperative fasting, and improve postoperative mobilisation in adults undergoing orthopaedic, vascular and urological elective and emergency surgeries: Implementation Research	Australian College of Perianaesthesia Nurses (ACPAN) Research Grant Program	\$9,943.86	1 year, 2023
Lehtonen N, Dolecka U, Gane E., Scott I, <b>Xu, G</b> , Gomura C, Trad F, Kennedy E, McCarthy K	Nursing & Midwifery Research Centre	Using co-design to enhance multidisciplinary teamwork and workload efficiency in the internal medicine unit	Metro South SERTA Grant	\$25,000	1 year, 2023
Thompson R, Redfern A, Birch S, Bennett I, Roberts K, Simpson K, Young L, Keogh S	Nursing & Midwifery Research Centre	Targeting therapy resistance through epithelial mesenchymal plasticity in patient-derived organoids from preneoadjuvant chemotherapy biopsies	Tour de Cure Princess Alexandra Research Foundation Competitive Grant	\$70,000	1 year, 2023
<b>Keogh S</b> , Rashleigh- Rolls R, <b>Laupland K,</b> Edwards F	Nursing & Midwifery Research Centre	Appropriate use criteria for peripheral arterial catheters in acute and critical care (The PACE Study)	RBWH Foundation	\$43,923.00	1 year, 2023
A Corley, S Keogh, J Dhanani, F Coyer, E Larsen, C O'Brien, N Marsh	Nursing & Midwifery Research Centre	Haemodialysis catheters in the intensive care unit: a prospective cohort study to reduce patient harm through optimising bedside maintenance practices	Australian College of Critical Care Nurses Diane Chamberlain Seeding Grant Award	\$10,000	1 year, 2023
A Corley, M Bloomer, F Coyer, S Keogh	Nursing & Midwifery Research Centre	Vascular haemodialysis catheters in the intensive care: a survey of bedside maintenance practices to address high infection rates and catheter failure.	Australian College of Infection Prevention and Control SEED Research Grant.	\$6,844	1 year, 2023

Investigator Names (RBWH staff in bold)	RBWH Departments / Research Groups	Research Project Title	Granting Body	Total Awarded (whole all years)	Length of Awards in years and years active
Marsh N	Nursing & Midwifery Research Centre	Optimising peripheral intravenous catheter access to treat infection	NHMRC Investigator Grant Emerging Leadership 1	\$662,040	5 years, 2023-2028

## **Current RBWH Department / Research Group Led Research Activity**

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Jed Duff	Keogh S, Pearse B, Ramanan M	Barriers and facilitators to blood conservation practice in intensive care	
Grace Xu	Griffin B, Pennuto C, Addae H	CO-design and impLement of Virtual Reality goggles to reduce procedure-related anxiety in emergency department (COOL -VR)	
Jed Duff	Nina Meloncelli, Louise Purtell, Champika Pattullo, David Rosengren, Ashley Cameron, Rhiannon Barnes, Sarah Black, Luke Wainwright, Louise Dallura, Sharon Hobdy	Evaluating the Helix4 Implementation Practice Capacity Building Program	
Amanda Corley	Bloomer M, Coyer F, <b>Keogh S,</b> Dhanani J, Rashleigh-Rolls R, Marshall A, <b>Marsh N</b>	Haemodialysis catheters in the intensive care: a national survey of critical care nurses' bedside maintenance practices.	
Amanda Corley	Bloomer M, Keogh S, Laupland K, Dhanani D, Rashleigh-Rolls R, Marsh N	Haemodialysis catheters in the ICU: a prospective point prevalence study of catheter care and complications	
Nicole Marsh	Corley A, Larsen E, Ullman A, O'Brien C, Ray-Barruel G	Binational survey of vascular access device insertion and management teams	
Nicole Marsh	Amanda Corley, Joshua Byrnes, Emily Larsen, Robert Ware, Nathan Peters, Catherine O'Brien, Julieanne Graham, Peter Groom, Barbara Hewer, Hannah Peach, Sarah Smith, Mary Fenn	Clinical effectiveness and cost of peripheral intravenous device selection and insertion by a vascular access specialist (The SELECT Study)	70
Samantha Keogh	Rebecca Rashleigh-Rolls, Kevin Laupland, Felicity Edwards	Appropriate use criteria for peripheral arterial catheters in acute and critical care (The PACE Study)	
Jed Duff	Michael Chataway, Andy Carter	Testing a novel approach for monitoring the incidence, fear and perceived risk of occupational violence among healthcare workers	
Emily Larsen	Andrew Bulmer, <b>Nicole Marsh</b> , Nikki Fozzard, Matthew Zunk, Barbara Hewer, <b>Amanda Corley</b> , Amanda Fox, Michelle King, Robert Ware	Examining clinical outcomes of patients receiving treatment via long ultrasound-guided peripheral intravenous catheters: an observational cohort study: EXTEND Study	
Nicole Marsh	Claire Rickard, <b>Amanda Corley</b>	Securing jugular central venous lines with dressings fixed to a liquid adhesive (Mastisol) in an Intensive Care Unit population (STICKY Trial)	196 across 4 hospital

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title	Number of RBWH Patients Recruited in 2022
Emily Larsen	Joshua Byrnes, Claire Rickard, Vineet Chopra, Amanda Ullman, <b>Nicole Marsh</b> , Doreen Tapsall, Raymond Chan, <b>Amanda Corley,</b> Nicole Gavin, Brighid Scanlon, Sue Schoonbeek, Mary fenn	Measuring quality of life and experience for central venous access devices in cancer care: Developing and preliminary testing of patient reported outcome and experience measures. (CVAD PROM/PREM)	
Grace Xu	Scott Stirling, Carrie Wong, <b>Nicole Marsh</b> , Amanda <b>Corley</b> , Robert Ware, Son Nghiem	Does long peripheral intravenous catheter with retractable coil tip guidewire optimise first insertion success rate for patients with difficult intravenous access in emergency departments: a randomised controlled trial (LOVE-DIVA)	
Grace Xu	<b>Amanda Ullman</b> , Claire Rickard, Browyn Griffin, Edward Pink	Adherence to the peripheral intravenous catheter (PIVC) GUIDEline for promoting evidence-based PIVC insertion and management in the Emergency Department (GUIDE-ED)	
Amanda Corley	H Peach, C Rickard, B Hewer, I Pearse, M Fenn, R Cocksedge, N Marsh	Does longer peripheral intravenous catheter LEngth optimise Antibiotic DelivERy: a randomised controlled trial to reduce interruptions to intravenous antibiotic delivery (The LEADER Study).	
Nicole Marsh		Optimising peripheral intravenous catheter access to treat infection	

# Collaborative Research Activity <u>Involving</u> RBWH Department / Research Group

		•
Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title
Amanda Ullman	Nicole Marsh, Martha Curley, Fiona Coyer, Mark Davies, Samantha Keogh, Lauren Kearney, Craig McBride, Tricia Kleidon, Deanne August, Mari Takashima, Grace Xu, Roni Cole, Robert Ware, Joshua Byrnes	Building capacity to prevent healthcare harm for hospitalised infants: A type 1 hybrid randomized controlled trial
Penny Vera Heidke	Jed Duff, Judy Munday, Samantha Keogh	Implementing perioperative hypothermia guidelines for orthopaedic patients
Fiona Coyer	Paul Fullbrook, Samantha Keogh, <b>Jed Duff</b> , D Long, Amanda Ullman, Michelle Barakat-Johnson, Deanne August, L Jones, H Carter	Eliminating harm from devices across the life span in critical illness: The DEFENCE Study
Claire Rickard	Amanda Ullman, <b>Amanda Corley, Nicole Marsh,</b> Tricia Kleidon, Syeda Farah Zahir, Josh Byrnes, Kate McCarthy, Danner Ball, <b>Catherine O'Brien</b> , Jessica Schults	Protect PIVCs: An adaptive randomized controlled trial of a novel antimicrobial dressing for peripheral intravenous catheters (PIVCs). PROP trial
Amanda Ullman	Nicole Marsh, Martha Curley Fiona Coyer, Mark Davies, Samantha Keogh, Lauren Kearney, Craig McBride, Tricia Kleidon, Deanne August, Mari Takashima, Grace Xu G, Cole R, Ware R, Byrnes J	Preventing infusate injuries throughout a childs hospitalisation (PATCH): A Type 1 Hybrid Randomised Controlled Trial
Lauren Kearney	Victoria Eley, Christoper Lehner, Susan de Jersey, Deanne August, John Thompson, Bec Jenkinson, Rachael Nugent, Jean Spinks, <b>Nicole Marsh</b> , Nigel Lee, Amanda Ullman	Fluids in labour: Ensuring maternal euvolaemia (FLUME Study)
Oya Gumuskaya	<b>Jed Duff</b> , Mitchell Sarkies, Brett Mitchell, Sarah Aitken, Rosemary Carroll, Gerald Wong, Nicole Phillips, Cate Hill	Tran_S Rapid: A bundled approach to minimise preoperative fasting, and improve postoperative mobilisation in adults undergoing orthopaedic, vascular and urological elective and emergency surgeries: Implementation Research

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title
Rik Thompson	Andrew Redfern, Simone Birch, Ian Bennett, Kate Roberts, Kaylene Simpson, Leonie Young, Samantha Keogh	Targeting therapy resistance through epithelial mesenchymal plasticity in patient-derived organoids from pre-neoadjuvant chemotherapy biopsies
Judith Munday	Jed Duff, Fiona Wood, David Sturgess, Samantha Keogh, Nicholas Ralph, Nicole White, Hannah Carter, Ian Graham, Margherita Murgo, Nicholas Fernandes, Kerstin Wyssusek, Bipphy Kath, Ruth Melville, Allison Kearney, Mary-Anne Ramis, Kate Kynoch, Christine Woods	The PeriWarm Trial: Transforming perioperative temperature management for better patient outcomes
Claire Rickard	Amanda Ullman, <b>Amanda Corley, Nicole Marsh</b>	A pilot randomised controlled trial of a novel antimicrobial dressing in peripheral intravenous catheters
Claire Rickard	Amanda Ullman, <b>Nicole Marsh</b> , Tricia Kleidon, Jessica Schults, Rebecca Paterson, Eugene Slaughter, Joshua Byrnes, Katie McFadden, Robert Ware, Emily Monteagle, Lisa Hall, Allison Craswell, Louise Cullen, <b>Amanda Corley</b> , Catriona Booker, Stephanie Hadikusumo, Krispin Hajkowicz, Fiona McFarlane, Steven McTaggart, Ben Ballard, Greg Merlo, Frances Williamson, Andy Carter	Difficult access requires thought, training and technology (DART3): Co-developing an ultrasound pathway for patients with difficult intravenous access. An implementation study to enhance peripheral intravenous catheter insertion success and reduce insertion-related complications
Cory Williams	Judy Munday Jed Duff	The co-design and evaluation and an e-health app to improve the perioperative patient journey and facilitate integrated care: a pilot randomised control trial
Nicole Lehtonen	Urszula Dolecka, Elise Gane, lan Scott, <b>Grace Xu,</b> Carly Gomura, Fiona Trad, Emma Kennedy, Kellie McCarthy	Using co-design to enhance multidisciplinary teamwork and workload efficiency in the internal medicine unit
Amanda Ullman,	<b>Nicole Marsh</b> , Andrew Bulmer, Naomi Runnegar, Tricia Kleidon, Paul Lee-Archer, Benjamin Pearch, Deanne August, Cathy Biles, Joshua Byrnes, Vineet Chopra, Alan Coulthard, Rob Ware, Claire Rickard, Marianne Wallis, Peter Mollee	Peripherally inserted central catheter innovation to reduce infections and clots: the PICNIC trial

# Research Activity With a Specific Focus on First Nations People

Lead Investigator Name (RBWH staff in bold)	Other Study Investigators (RBWH staff in bold)	Research Project Title
Yashni Kander	Jed Duff, Geoffrey Binge, Patricia Kennedy, Cory Williams, King Law	Improving access to tertiary and quaternary health services for Aboriginal and Torres Strait Islander patients by addressing their social and emotional wellbeing

## **Research Publications**

### **Authors**

Investigator	ORCID ID	Investigator	ORCID ID
Nicole Marsh	https://orcid.org/0000-0002-5779-1304	Amanda Corley	https://orcid.org/0000-0002-4250-4077
Fiona Coyer	https://orcid.org/0000-0002-8467-0081	Emily Larsen	https://orcid.org/0000-0001-6272-8484
Jed Duff	https://orcid.org/0000-0003-1427-0303	Grace Xu	https://orcid.org/0000-0002-3421-4176

### **Publications in 2023**

### Journal Articles (RBWH staff in bold)

Delaforce A, Farmer S, **Duff J**, Munday J, Miller K, Glover L, Corney C, Ansell G, Gutta N, Tuffaha H, Hardy J, Hurst C. Results from a type two hybrid-effectiveness study to implement a preoperative anemia and iron deficiency screening, evaluation, and management pathway. Transfusion. 2022. https://doi.org/10.1111/trf.17287

Asiri S, Guilhermino M, **Duff J**. The effectiveness of using virtual reality technology for perioperative anxiety among adults undergoing elective surgery: a randomised controlled trial protocol. Trials. 2022; 23:972. https://doi.org/10.1186/s13063-022-06908-3

Paterson RS, Larsen EM, Cooke M, Rickard CM, Walker R, **Marsh N**. Integrated versus non-integrated intravenous catheter: A cross-sectional survey of nurse experiences from the OPTIMUM study. British Journal of Nursing. 2023; 32(2):S6-S16. https://doi.org/10.12968/bjon.2023.32.2.S6

**Xu H**, Keogh S, Ullman A, **Marsh N**, Tobiano G, Rickard C, et al. Implementation frameworks, strategies and outcomes used in peripheral intravenous catheter studies: A systematic review. Journal of Clinical Nursing. 2023. https://doi.org/10.1111/jocn.16671

Yuen A, Weinkove R, Ullman A, **Marsh N**, Rickard C, Chunilal S, McQuilten Z. Central venous access device practice across haematology and oncology centres in Australia and New Zealand: a cross-sectional survey. 2023. Internal Medicine Journal. https://doi.org/10.1111/imj.16031

Corley A, O'Brien C, Larsen E, Peach H, Rickard C,..., Marsh N. Does longer peripheral intravenous catheter length optimise antimicrobial delivery? Protocol for the LEADER study. 2023. British Journal of Nursing. 32(7):S24-S30

Marsden DL, Boyle K, Birnie J, Buzio A, Dizon J, .... **Duff J**, on behalf of the I-SCAMP Project Team. Improving practice for urinary continence care on adult acute medical and rehabilitation wards: A multi-site, co-created implementation study. Healthcare. 2023. 11(9): 1-17. https://doi.org/10.3390/healthcare11091241

Toluoliu KE, **Duff J**, Csokasi K. Nonpharmacological interventions for the reduction of post-operative pain after ambulatory surgery: A systematic review of randomised controlled trials. Journal of Perioperative Nursing. 2023. 36(1):19-28. https://doi.org/10.26550/2209-1092.1210

Roberts N, Young A, **Duff J**. Using implementation science in nursing research. Seminars in Oncology Nursing. 39(2): 1-6. https://doi.org/10.1016/j.soncn.2023.151399

Mackie BR, Alvarenga D, Williams C, Mihala G, Dawson J....., **Marsh N**. Securing Cannulas in Combat: an *in vitro* study of three intravenous securement techniques. Journal of Hight Threat and Austere Medicine. 2023. 5(1):3-9. https://doi.org/10.33235/JHTAM.5.1.3-9

Chua I, **Duff J**, Munday J. Elective day surgery cancellations: A retrospective observational study. Collegian. 2023. https://doi.org/10.1016/j.colegn.2023.03.013

**Duff J**. Editorial. Addressing burnout and compassion fatigue in perioperative nursing: An urgent call to action. Journal of Perioperative Nursing. 2023; 36(2): e1-e2. https://doi.org/10.26550/2209-1092.1256

Boyle K, Marsden DL, Waller A, **Duff J**. Barriers and enablers to providing evidence-based in-hospital urinary continence care: A cross-sectional survey informed by the Theoretical Domains Framework. Journal of Clinical Nursing. 2023: 1-10. https://doi.org/10.1111/jocn.16776

Salamonson Y, Manese D, Smith BW, **Duff J**, Theobald KA, Montayre J, et al. Are men treated differently in clinical placements during nursing studies? A cross-sectional study. Journal of Clinical Nursing. 2023; 1-12. https://doi.org/10.1111/jocn.16760

Schults J, **Marsh N**, Ullman A, Kleidon T, Ware R, **Corley A**, et al. Improving difficult peripheral intravenous access requires thought, training and technology (DART3): a stepped-wedge, cluster randomised controlled trial protocol. BMC Health Services Research, 2023; 23:587. https://doi.org/10.1186/s12913-023-09499-0

Peters N, Williamson F, Bauer MJ, Llewellyn S, Snelling PJ, **Marsh N**, et al. Comparison of low-level to high-level disinfection in eliminating microorganisms from ultrasound transducers used on skin: A noninferiority randomized controlled trial. Journal of Ultrasound in Medicine. 2023; 9999:1-10. https://doi.org/10.1002/jum.16286

Massey D, Cooke M, Ray-Barruel G, **Marsh N**, Ullman AJ, Craswell A, Wallis M. Nurses' Education, Knowledge and Perceptions of PIVC management: A web-based, cross-sectional survey. Collegian. https://doi.org/10.1016/j.colegn.2023.03.001

Marsh N, Larsen E, O'Brien C, Groom P, Kleidon T, Alexandrou E, Young E, McCarthy K, Rickard CM. COmparing the use of Midline Catheters versus Peripherally Inserted Central CAtheters for patient requiring peripherally Compatible Therapies: A pilot randomised controlled trial (The Compact Trial). Infection Control and Hospital Epidemiology. https://doi.org/10.1016/j.idh.2023.03.007

Liu S, Stevens JA, Collins AE, **Duff J**, Sutherland JR, Oddie MD, et al. Prevalence and predictors of opioid use before orthopaedic surgery in an Australian setting: A multicentre, cross-sectional, observational study. Anaesthesia and Intensive Care. 2023. https://doi.org/10.1177/0310057X221147066

Stone R, Walker RM, **Marsh N**, Ullman A. Educational programs for implementing ultrasound guided peripheral intravenous catheter insertion in emergency departments: A systematic integrative literature review. Australian Emergency Care. https://doi.org/10.1016/j.auec.2023.06.001

### Journal Articles (RBWH staff in bold)

Matthews R, Gavin N, **Marsh N**, Marquart-Wilson L, Keogh S. Peripheral intravenous catheter material and design to reduce device failure: A systematic review and meta-analysis. Infection Control and Hospital Epidemiology. 2023. https://doi.org/10.1016/j.idh.2023.05.005

Gavin N, Wignall E, **Marsh N**, Marquart L, Dobeli K, O'Brien C, Verderosa A, Totsika M, Keogh S. Perforated intravenous catheter design is acceptable for the administration of contrast-enhanced computer tomography administration in cancer patients: Results of a pilot randomised controlled trial. Journal of Vascular Access. 2023. https://doi.org/10.1177/11297299231171422

**Marsh N**, Larsen E, O'Brien C, Peach H, Keogh S, Davies K, et al. Controlling peripheral intravenous catheter failure by needleless connector design: a pilot randomised controlled trial. 2023. Journal of Clinical Nursing. https://doi.org/10.1111.jocn.16852

**Duff J**. Busting persistent myths about perioperative hypothermia. Journal of Perioperative Nursing. 2023. 36(3): 1-2. https://doi.org/10.26550/2209-1092.1282

Liu S, Stevens JA, Collins AE, **Duff J**, Sutherland JR, Oddie MD, et al. Prevalence and predictors of long-term opioid use following orthopaedic surgery in an Australian setting: A multicentre, prospective cohort study. Anaesth Intensive Care. 2023. 51(5): 321-330. https://doi.org/10.1177/0310057X231172790

Kleidon TM, Gibson V, Cattanach P, Schults J, Royle RH.... **Marsh N**, et al. Midline compared with peripheral intravenous catheters for therapy of 4 days or longer in pediatric patients: A randomized clinical trial. JAMA Pediatrics. 2023. https://doi.org/10.1001/jamapediatrics.2023.3526

Peters N, Thomas J, Woods C, Rickard C, **Marsh N**. Remotely supervised ultrasound-guided peripheral intravenous cannulation training: A prospective cohort study examining success rates and patient experience. Australasian Journal of Ultrasound in Medicine. 2023; 1-10. https://doi.org/10.1002/ajum.12318

Roberts N, Button E, **Duff J**, Paterson C, Smith M, Gavin N. Clinical research nursing pathways: The development and evaluation of a nursing research internship program using the RE-AIM framework. International Journal of Nursing Studies Advances. 2024. https://doi.org/10.1016/j.ijnsa.2024.100176

**Xu H**, ...Ullman A. Exploring Australian clinicians' knowledge, attitudes, and adherence to the national peripheral intravenous catheter clinical care standard: a cross-sectional national survey. 2023. Emergency Medicine Australasia, doi: 10.1111/1742-6723.14214

**Xu H**, Hyun A, Mihala G, Rickard CM, Cooke ML, Lin F, et al. The effectiveness of dressings and securement devices to prevent central venous catheter-associated complications: A systematic review and meta-analysis. 2023. International Journal of Nursing Studies. https://doi.org/10.1016/j.ijnurstu.2023.104620

**Xu H**, Ullman U, Rickard C, Johnston A. Factors impacting emergency department clinicians' peripheral intravenous catheter practice: a qualitative analysis. 2023. International Journal of Emergency Nursing. https://doi.org/10.1016/j.ienj.2023.101366

Takashima M, Hyun A, **Xu H**... Device associated infection with invasive devices in pediatric healthcare: A meta-analysis. Hospital Pediatrics. 2023. https://doi.org/10.1542/hpeds.2023-007194

Rickard CM, Anstey MH, **Keogh S.** Preventing infection or preventing sustainability? Intensive and Critical Care Nursing (Invited editorial). 2023. 78: 103488. https://doi.org/10.1016/j.iccn.2023.103488

Minogue J, Schlapbach L, **Keogh S**, Gibbons K, Long D. Long-term outcomes after paediatric Sepsis (LOTUS) – A protocol for a cohort study. Nursing in Critical Care. 2023. https://doi.org/10.1111/nicc.12938

Minogue J, **Keogh S**, Schlapbach L, Long D (2023) Long-term outcomes following paediatric sepsis – A narrative review. *Australian Critical Care.* 35: S12. https://doi.org/10.1016/j.aucc.2022.08.048

Jarrett P, **Keogh S**, Roberts JS, Wallis SC, Coyer FM. Antimicrobial Residual Drug Error in the Intensive Care Unit; A single blinded prospective observational study. Intensive and Critical Care Nursing. 2023. 77: 103403. https://doi.org/10.1016/j.iccn.2023.103403

Eckert M, Kennedy K, Neylon K, Rickard C, Keogh S, Gray R, Middleton S, Homer C, Whitehead L, Sharplin G. A scoping review of nurse-led randomised controlled trials. Journal of Clinical Nursing. 2023. https://doi.org/10.1111/jocn.16632

**Keogh S**, Dhanani J, Levido A, Gracie C, Ilusihin V, Palmer J, Doubrovsky, Parker SL, Pintara A, Hyugens F, Coyer F. Evaluation of a closed loop-blood sampling system in intensive care: a pilot randomised controlled trial. The ENCLOSE trial. Intensive and Critical Care Nursing. 2023. 75: 103364. https://doi.org/10.1016/j.iccn.2022.103364

**Corley A**, Ullman A, **Marsh N**, Genzel J, **Larsen E N**, Young E, Booker C, Harris P N A, & Rickard C M. A pilot randomised controlled trial of securement bundles to reduce peripheral intravenous catheter failure. Heart & Lung. 2022;57:45-53 https://doi.org/10.1016/j.hrtlng.2022.07.015.

### **Book Chapters (RBWH staff in bold)**

**Duff J**. 2023. Nursing Management: Preoperative Care. In D Brown, H Edwards, T Buckley & R Aitken (Eds), Lewis's Medical-Surgical Nursing 6e: Elsevier Australia

**Corley A** & McGaughey J. (2023) Respiratory alterations and management. In Aitken L, Marshall A & Buckley T (eds.), ACCCN's Critical Care Nursing (5th Ed). Elsevier: Sydney.

## **Keynote or Plenary Lectures given in 2023**

Date	Title
28 February – 2 March 2023	<b>Duff J.</b> Invited. Translating perioperative hypothermia prevention evidence into practice. 3M Health Care Academy Workshop: Delivering Clinical Excellence in the Management of Perioperative Hypothermia. Sydney, Australia
28 February – 2 March 2023	<b>Duff J.</b> Invited. Translating perioperative hypothermia prevention evidence into practice. 3M Health Care Academy Workshop: Delivering Clinical Excellence in the Management of Perioperative Hypothermia. Newcastle, Australia
7 April 2023	<b>Corley A.</b> Invited. Securement bundles to reduce failure in peripheral intravenous catheters. Are multiproduct solutions effective? Wiser Wound Care Symposium, Gold Coast
1-4 April 2023	Marsh N. Invited. Are Peripheral Intravenous Catheters Still a Good Choice? Infusion Nurses Society Conference. Boston, USA
1-4 April 2023	<b>Larsen E.</b> Invited. Procedural Pain during Vascular Access Device Insertion in Adults. Infusion Nurses Society Conference. Boston, USA
14 <sup>th</sup> May 2023	<b>Xu, G.</b> Invited. Opening Speech, representing the Centaur Fellows. Centaur Commemorative Service, 80 <sup>th</sup> Anniversary of the Sinking of the 2/3 Australian Hospital Ship Centaur. Australian Catholic University, Brisbane, Australia
16 <sup>th</sup> May 2023	<b>Duff J.</b> Invited. Translating perioperative hypothermia prevention evidence into practice. 3M Health Care Academy Workshop: Delivering Clinical Excellence in the Management of Perioperative Hypothermia. Christchurch, New Zealand
17 <sup>th</sup> May 2023	<b>Duff J.</b> Invited. Translating perioperative hypothermia prevention evidence into practice. 3M Health Care Academy Workshop: Delivering Clinical Excellence in the Management of Perioperative Hypothermia. Wellington, New Zealand
17 <sup>th</sup> May 2023	Xu G. Invited Keynote. My research journey. QEII Hospital Research Symposium, Brisbane
18 <sup>th</sup> May 2023	<b>Xu G.</b> Invited. My journey from a Nurse Practitioner to a Clinician Researcher. Metro North Nurse Practitioner Education Day. Brisbane
June 2023	<b>Xu H.</b> Invited. Difficult vascular access. 22 <sup>nd</sup> International Conference on Emergency Medicine (ICEM), Amsterdam, The Netherlands
June 2023	Xu H. Invited. ED wellness toolkits. 22 <sup>nd</sup> ICEM, Amsterdam, The Netherlands
10 August 2023	<b>Xu G.</b> Invited. (Online) Current gap in PIVC clinical care standards. 2023 Wiser Wounds CRE Education Webinar
15 August 2023	Marsh N. (Webinar). Sorbaview Shield and The Vascular Access Toolkit. MIDLINE Webinar
24 August 2023	Marsh N. (Webinar). When should we consider a Midline Catheter? Infusion Nurses Society
29 August 2023	<b>Duff J.</b> Invited. Translating perioperative hypothermia prevention evidence into practice. 3M Health Care Academy Workshop. Delivering Clinical Excellence in the Management of Perioperative Hypothermia. Melbourne, Australia
30 August 2023	<b>Duff J</b> . Invited. Translating perioperative hypothermia prevention evidence into practice. 3M Health Care Academy Workshop. Delivering Clinical Excellence in the Management of Perioperative Hypothermia. Perth, Australia
5 September 2023	<b>Mathew H, Marsh N</b> . Poster. Sustained low efficiency dialysis (SLED) versus continuous renal replacement therapy (CRRT) in critically ill patients with acute kidney injury: A Meta-analysis. Herston Health Precinct Symposium. Brisbane, Australia
5 September 2023	<b>Corley A.</b> Oral Presentation. Does longer peripheral intravenous catheter length optimise antimicrobial delivery? A randomised controlled trial. Herston Health Precinct Symposium. Brisbane, Australia
7 September 2023	O'Brien C. Developing ideal catheter to vein ratio parameters to prevent peripheral intravenous catheter failure. Herston Health Precinct Symposium. Brisbane, Australia
7 September 2023	Marsh N. Chair. Development and implementation of the cancer nurse's society Australia guidelines. Herston Health Precinct Symposium. Brisbane, Australia

12 September 2023	Duff J. Invited. Translating perioperative hypothermia prevention evidence into practice. 3M Health Care Academy Workshop. Delivering Clinical Excellence in the Management of Perioperative Hypothermia. Brisbane, Australia
30 September 2023	Xu G. Invited. Guest panel speaker, Career opportunities in emergency care: Why, What and How?  19th ICEN, Gold Coast, Australia
28 September 2023	Xu G. Invited. Conduct two Fast Track pre-conference workshops 19th ICEN, Gold Coast, Australia
14-17 October 2023	Marsh N. Invited. Making dressing stick: Securing jugular central venous access devices with dressings fixed to a liquid adhesive. Association for Vascular Access (AVA) 2023 Annual Scientific Meeting. Portland, Oregan, USA
14-17 October 2023	Marsh N. Invited. Integrated versus non-integrated peripheral intravenous catheters: OPTIMUM Trial – a randomized controlled trial. Association for Vascular Access (AVA) 2023 Annual Scientific Meeting. Portland, Oregan, USA
21-22 October 2023	Marsh N. Keynote Speaker and Panel Member. A clinical pathway for managing difficult venous access. Infusion Nurses Society Malaysia Conference. Malaysia
21-22 October 2023	<b>Marsh N</b> . Keynote Speaker and Panel Member. PIVC Patency: Best flushing practices. Infusion Nurses Society Malaysia Conference. Malaysia
21-22 October 2023	Marsh N. Forum Member. Discarding traditions, embracing evidence: Moving forward towards better outcomes. Infusion Nurses Society Malaysia Conference. Malaysia
21-22 October 2023	<b>Corley A.</b> Does longer peripheral intravenous catheter length optimise antimicrobial delivery? A randomised controlled trial. Infusion Nurses Society Malaysia Conference. Malaysia.
11-14 October 2023	<b>Duff J.</b> Invited. Anaesthesia Nursing in Australia. 1 <sup>st</sup> Chinese Nursing Association Annual Congress of Surgery Anaesthesia Nursing. China, Beijing
17-19 October 2023	<b>Duff J.</b> Invited. Teach implementation science course at TIDIRH Australia. National Centre of Implementation Science. Newcastle, Australia
20 October 2023	<b>Duff J.</b> Invited. Implementation Science. Implementation and Sustainability Science Symposium. Newcastle, Australia
14-17 October 2023	Xu H. Invited. PIVC practice in emergency department: best evidence vs. reality. Association for Vascular Access (AVA), Portland, Oregon, United States
October 2023	<b>Xu H</b> . Invited. An innovative device for difficult venous access in ED – Is this a good solution? 20 <sup>th</sup> International Conference for Emergency Nurses (ICEN), Perth
October 2023	<b>Xu H</b> . Invited. A national survey of emergency department clinicians' knowledge, attitude and adherence to the peripheral intravenous catheter Standard. 20 <sup>th</sup> ICEN, Perth
7-10 November 2023	<b>Duff J.</b> Panel Member. Opening panel of events. 1 <sup>st</sup> International Congress of Perioperative Nursing and 16 <sup>th</sup> Brazilian Congress of Nursing in OR, PACU and Central Supply Sterile Department. Brazil
7-10 November 2023	<b>Duff J.</b> Speaker. How to foster your perioperative team's surgical conscience? 1 <sup>st</sup> International Congress of Perioperative Nursing and 16 <sup>th</sup> Brazilian Congress of Nursing in OR, PACU and Central Supply Sterile Department. Brazil
7-10 November 2023	<b>Duff J.</b> Australia scrub nurse profile. 1 <sup>st</sup> International Congress of Perioperative Nursing and 16 <sup>th</sup> Brazilian Congress of Nursing in OR, PACU and Central Supply Sterile Department. Brazil
7-10 November 2023	<b>Duff J.</b> How to make hypothermia prevention work. 1 <sup>st</sup> International Congress of Perioperative Nursing and 16 <sup>th</sup> Brazilian Congress of Nursing in OR, PACU and Central Supply Sterile Department. Brazil
12-15 November 2023	<b>S Keogh.</b> AVATAR/AVAS Workshop: Real-world strategies for meeting the Australian Commission on Safety and Quality PIVC Clinical Care Standard. ACIPC Conference, 12-15 November 2023, Adelaide, Australia