



Royal Brisbane and Women's Hospital

RBWH Research Report 2024

Nursing and Midwifery Services

Metro North
Health



Queensland
Government



Metro North Health acknowledges the Traditional Custodians of the Land upon which we live, work and walk, and pay our respects to Elders both past and present.

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Nursing and Midwifery Research Centre

Research Highlights

The Nursing and Midwifery Research Centre continues to go from strength to strength, with outcomes demonstrating the centre is *Leading Research and Advancing Health*. The reach of the centre extends across all hospital services, from emergency and critical care to surgery and medicine, maternity and neonatology. Vascular access research continues to be strong focus of the Nursing and Midwifery Research Centre. We have also achieved research successes in areas including occupational violence, virtual reality to reduce anxiety, and blood conservation. Co-design methods and effective consumer involvement are now embedded in our core business, with our recent work showcasing the importance of value-based healthcare. The Nursing and Midwifery Research Centre has been successful at attracting and sustaining Nursing and Midwifery research academics who specialise in a broad range of research methodologies (notably randomised controlled trials, implementation and evaluation, guideline development and health economics) to address the most important clinical questions being raised by clinical staff at the cold face of patient care.

Members of the Nursing and Midwifery Research Centre were awarded several local, national, and international awards. This included the prestigious Professor Joan Webster Nursing and Midwifery Award and the Research Implementation Award presented to Professor Jed Duff at the 2024 Metro North Research Excellence Awards. Professor Nicole Marsh's NHMRC Investigator Grant commenced in 2024, focusing on optimizing peripheral intravenous catheter access. Dr. Nicole Gavin has now joined the team to support this initiative.

The Nursing and Midwifery Research Centre secured 14 grants totalling over \$800,000 in 2024. This funding was awarded from research foundations, health service grant rounds, universities, professional societies, and industry partners, demonstrating the wide breath and appeal of research being conducted in our Centre. Dissemination of results remains an essential activity, with 45 studies published in predominantly top-ranking journals, and 39 keynote or plenary lectures conducted across the globe.

Growth and sustainability of research capacity and capability at the Royal Brisbane and Women's Hospital and the wider Metro North (MN) community is a primary focus of the Nursing and Midwifery Research Centre now, and into the future. The longstanding MN Nursing and Midwifery Grand Rounds continues to provide an opportunity for nurses and midwives across the range of disciplines to present their research outcomes (including confirmation seminars). Furthermore, the inaugural MN Nursing and Midwifery Showcase (held in November 2024) was an immediate success, with over 110 registrants. This as an excellent opportunity for nurses and midwives to share their research and quality improvement outcomes with peers; and receive recognition for their hard work. To encourage year-long teaching and learning, a series of research education modules has now also been developed for Talent Management System and is online for all Metro North Staff. Finally, in line with our commitment to nursing and midwifery advancement in research, a new position has been created for University Students in Nursing to be employed as Research Assistants, giving our emerging workforce hands on experience in ongoing research here at the Royal Brisbane and Women's Hospital.



Successful Research Higher Degree candidates in 2024

Name	Title	Month Completed	Affiliated University	Summary
Dr Salihah Asiri (PhD)	The effectiveness of virtual reality technology for perioperative anxiety among adults undergoing elective surgery	March 2024	Queensland University of Technology	Perioperative anxiety is common and can significantly affect surgical outcomes, manifesting in both physical symptoms like increased heart rate and psychological symptoms like fear and panic. Causes include fear of the unknown, pain, the procedure, outcomes, and the environment. This anxiety can lead to postoperative complications, including pain and longer hospital stays. While pharmacological interventions, like fentanyl and midazolam, are used, they can have side effects. Consequently, non-pharmacological methods, such as music and psychological support, are gaining popularity. Recently, virtual reality (VR) has emerged as a promising tool for managing perioperative anxiety, though most research has focused on children, with limited studies on adults.
Jessica Rachel Minogue (MPhil)	Long-term outcomes after paediatric sepsis – A two-year follow-up cohort study	March 2024	Queensland University of Technology	Mortality from paediatric sepsis is improving, however morbidity in the surviving population remains common. Long-term outcomes of pediatric sepsis survivorship past hospital discharge are vastly unknown. The aim of the LOTUS (Long-term outcomes after paediatric sepsis) study was to understand what long-term outcomes are experienced by children two years after sepsis survival across four domains (physical, cognitive, emotional, and social) of health as conceptualised by the Post Intensive Care Syndrome – pediatrics (PICS-p) framework.

Research Awards and Achievements

Recipient (RBWH staff in bold)	Award	Event
Nicole Marsh	Best New Zealand Research: Title – Binational survey of vascular access device insertion and management workforce	Intravenous Nursing New Zealand 2024 Conference
Amanda Corley	Best Nursing Oral Presentation	Australian and New Zealand Intensive Care Society Annual Scientific Meeting
Grace Xu	Received a Queensland Health Clinical Research Fellowship 2024	Queensland Health
Catherine O'Brien	Received a Metro North Pre-PHD Scholarship 2024	Metro North Health Services
Amanda Corley	2 year Griffith University Postdoctoral Fellowship	Griffith University
Catherine O'Brien	Received a Sir Ian McFarlane Nursing and Midwifery Clinical Excellence Award	RBWH Foundation
Jed Duff	Received Professor Joan Webster Nursing and Midwifery Award	2024 Metro North Research Excellence Awards
Jed Duff, Grace Xu	Research Implementation Award for the HELIX Implementation Capacity Building Program	2024 Metro North Research Excellence Awards
Nicole Marsh	Elaine Graham Robertson Award Best oral presentation – peer reviewed	2024 ACIPC (Australasian College for Infection Prevention and Control) International Conference
Bridie McGann	QUT PhD Scholarship	Queensland University of Technology

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
Samantha Keogh	Nursing and Midwifery Research Centre	Speaking Engagement Services at the South East Asia Roadshow	Becton, Dickinson and Company	\$25,990	1 year, 2024
Jed Duff , Michael Chataway, Grace Xu , Lita Olsson , Jo Griffiths	Nursing and Midwifery Research Centre, Qld Occupational Violence	The Queensland Ambassador Program: Preventing Occupational Violence in Healthcare Settings	Queensland University of Technology Research Budget	\$1000	1 year, 2024
Grace Xu , Jed Duff , Samantha Keogh , Kevin Chu , Nathan Brown	Nursing and Midwifery Research Centre	Co-designed strategies to enhance patient participation in their peripheral intravenous catheter care in Emergency Department: an implementation trial (CARE-ED)	Queensland Health Clinical Research Fellowship	\$100,000	2 years, 2024-2026
Tricia Kleidon, Amanda Ullman, Nicole Marsh	Nursing and Midwifery Research Centre, University of Queensland	Supplemental tackifier to intravenous catheter dressings to keep intact year-round in kids (the STICKY Kids trial)	Eloquest Healthcare	\$205,114.67	3 years, 2024-2026
Alison Craswell, Jeffrey Anderson, Naomi Howell, Nicole Marsh , Catherine O'Brien	Nursing and Midwifery Research Centre	Clinical effectiveness of selection and insertion by a vascular access specialist in a regional setting: a randomised controlled trial and feasibility study	Caboolture and Kilcoy Hospitals and Woodford Corrections (CKW) and University of Sunshine Coast (USC) Collaborative Grant Round 2024	\$40,136	1 year, 2024
Catherine O'Brien	Nursing and Midwifery Research Centre	Midline catheter optimal tip placement	Metro North Health Services Pre-Research Higher Degree Scholarship	\$15,000	1 year, 2024
Karen Davies , Nicola Harper , Samantha Keogh , Peter Donovan , Jed Duff , Natasha Roberts , Melanie Duncan , Dale Trevor	Nursing and Midwifery Research Centre, RBWH Pharmacy, STARS Education and Research Alliance, STARS Electronic Medicine Management Workflow and Nursing Medication Administration, Consumer Advocate	Digital evaluation and implementation of the medication administration evaluation and feedback tool (MAEFT) at STARTS	Royal Brisbane and Women's Hospital Grant Round 2	\$48,198.00	1 year, 2024
Amanda Corley , Fiona Coyer, Samantha Keogh , Melissa Bloomer	Nursing and Midwifery Research Centre	Haemodialysis catheters in the intensive care unit: reducing patient harm through optimising bedside maintenance practices	Griffith University Postdoctoral Fellowship	\$257,216	2 years, 2024-2026
Grace Xu , Jed Duff , Samantha Keogh	Nursing and Midwifery Research Centre	Patient PARTicipationN in periphERal intravenous catheter (PIVC) care in the emergency department (PARTNER)	SWIFT Grant	\$15,000	2 years, 2024-2026

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
Grace Xu, Jed Duff, Samantha Keogh, Kevin Chu, Nathan Brown, Vicki Binnie	Nursing and Midwifery Research Centre, Emergency Department, RBWH & PAH	Co-design of an implementation toolkit to enhance patient participation in their peripheral intravenous catheter care in the Emergency Department	Queensland University of Technology, CHT Consumer Engagement Grant	\$9,644	1 year, 2024
Grace Xu, Nicole Marsh, Jed Duff, Peter Del Mar, Robert Ware, Nathan Brown, Catherine O'Brien, Paul Mariano	Nursing and Midwifery Research Centre, Emergency Department, RBWH	Does a vascular access specialist model in the Emergency Department (VAS-ED) improve peripheral intravenous catheter outcomes? A randomised controlled trial	Emergency Medicine Foundation	\$105,000	2 years, 2024-2026

RBWH Department / Research Group Led Research Activity

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Samantha Keogh		Speaking Engagement Services at the South East Asia Roadshow (Jan & June 2024)	0	
Jed Duff,	Michael Chataway, Grace Xu, Lita Olsson, Jo Griffiths	The Queensland Ambassador Program: Preventing Occupational Violence in Healthcare Settings		
Catherine O'Brien		Midline catheter optimal tip placement		
Amanda Corley	Fiona Coyer, Samantha Keogh , Melissa Bloomer	Haemodialysis catheters in the intensive care unit: reducing patient harm through optimising bedside maintenance practices		
Grace Xu	Jed Duff, Samantha Keogh, Kevin Chu, Nathan Brown	Co-designed strategies to enhance patient participation in their peripheral intravenous catheter care in Emergency Department: an implementation trial (CARE-ED)	1	
Grace Xu	Jed Duff, Samantha Keogh	Patient PARTICipationN in periphERal intravenous catheter (PIVC) care in the emergency department (PARTNER)		
Grace Xu	Jed Duff, Samantha Keogh, Kevin Chu, Nathan Brown, Vicki Binnie	Co-design of an implementation toolkit to enhance patient participation in their peripheral intravenous catheter care in the Emergency Department		
Grace Xu	Nicole Marsh, Jed Duff, Peter Del Mar, Robert Ware, Nathan Brown, Catherine O'Brien, Paul Mariano	Does a vascular access specialist model in the Emergency Department (VAS-ED) improve peripheral intravenous catheter outcomes? A randomised controlled trial		
Amanda Corley	Nicole Marsh, Emily Larsen, Annabel Levido	Invasive medical device utility and harm: a point prevalence study	0	Starting in March 2025
Samantha Keogh	Mahesh Pamanan, Kevin Laupland, Felicity Edwards, Annabel Levido , Dale Trevor	Partnering with consumers and clinicians to establish research priorities for intensive care		
Jed Duff	Debbie Long, Cory Williams	DHCRC: Improving patient experiences and outcomes from elective surgery in Australia: an investigation into perioperative patient health literacy, learning preference and knowledge needs		

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Jed Duff	Keogh S, Pearse B, Ramanan M	Barriers and facilitators to blood conservation practice in intensive care	1	pending
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, Fiona Coyer, Samantha Keogh , Jaesh Dhanani, Rebecca Rashleigh-Rolls, Marshall A, Nicole Marsh	Haemodialysis catheters in the intensive care: a national survey of critical care nurses' bedside maintenance practices	4	
Amanda Corley	Bloomer M, Samantha Keogh, Kevin Laupland, Jaesh Dhanani, Rebecca Rashleigh-Rolls, Nicole Marsh	Haemodialysis catheters in the ICU: a prospective point prevalence study of catheter care and complications		
Nicole Marsh	Amanda Corley, Emily Larsen, Amanda Ullman, Catherine O'Brien, Gillian Ray-Barruel	Binational survey of vascular access device insertion and management teams		
Samantha Keogh	Annabel Levido, Kevin Laupland, Felicity Edwards	Appropriate use criteria for peripheral arterial catheters in acute and critical care (The PACE Study)	1	N/A
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, Nicole Marsh , Nikki Fozzard, Matthew Zunk, Barbara Hewer, Amanda Corley , 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, Amanda Corley	Securing jugular central venous lines with dressings fixed to a liquid adhesive (Mastisol) in an Intensive Care Unit population (STICKY Trial)		12
Emily Larsen	Joshua Byrnes, Claire Rickard, Vineet Chopra, Amanda Ullman, Nicole Marsh , Doreen Tapsall, Raymond Chan, Amanda Corley , 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, Nicole Marsh , Amanda Corley , 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)		

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Grace Xu	Amanda Ullman, 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	Hannah Peach, Claire Rickard, Barbara Hewer, Indy Pearse, Mary Fenn, R Cocksedge, Nicole Marsh	Does longer peripheral intravenous catheter LENGTH optimise Antibiotic DelivERY: a randomised controlled trial to reduce interruptions to intravenous antibiotic delivery (The LEADER Study).	3	197
Nicole Marsh	Amanda Corley, Joshua Byrnes, Emily Larsen, Barbara Hewer, Robert Ware, Catherine O'Brien, Hannah Peach	Cost-benefit analysis and clinical effectiveness of peripheral intravenous device selection and insertion by a vascular access specialist (The SELECT Study)		
Nicole Marsh	Emily Larsen, Claire Rickard, Kerri McLeod, Robert Ware, Amanda Ullman, Catherine O'Brien, Andrew Bulmer, Julie Flynn	Developing ideal catheter to vein ratio parameters for peripheral venous and midline devices: recommendations to prevent catheter failure (the DIAMETER Study)		

Collaborative Research Activity Involving RBWH Department / Research Group

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Alison Craswell,	Jeffrey Anderson, Naomi Howell, Nicole Marsh, Catherine O'Brien	Clinical effectiveness of selection and insertion by a vascular access specialist in a regional setting: a randomised controlled trial and feasibility study		
Karen Davies,	Nicola Harper, Samantha Keogh, Peter Donovan, Jed Duff, Natasha Roberts, Melanie Duncan, Dale Trevor	Digital evaluation and implementation of the medication administration evaluation and feedback tool (MAEFT) at STARTS		
Tricia Kleidon,	Amanda Ullman, Nicole Marsh	Supplemental tackifier to intravenous catheter dressings to keep intact year-round in kids (the STICKY Kids 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, 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, Jed Duff, D Long, Amanda Ullman, Michelle Barakat-Johnson, Deanne August, L Jones, Hannah Carter	Eliminating harm from devices across the life span in critical illness: The DEFENCE Study		

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Claire Rickard	Amanda Ullman, Amanda Corley , Nicole Marsh , Tricia Kleidon, Syeda Farah Zahir, Josh Byrnes, Kate McCarthy, Danner Ball, Catherine O'Brien , 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 , Cole R, Robert Ware, Joshua Byrnes	Preventing infusate injuries throughout a child's hospitalisation (PATCH): A Type 1 Hybrid Randomised Controlled Trial		
Lauren Kearney	Victoria Eley, Christopher Lehner, Susan de Jersey, Deanne August , John Thompson, Bec Jenkinson, Rachael Nugent, Jean Spinks, Nicole Marsh , Nigel Lee, Amanda Ullman	Fluids in labour: Ensuring maternal euvolaemia (FLUME Study)		
Oya Gumuskaya	Jed Duff , 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		
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, Nicole Marsh , Tricia Kleidon, Jessica Schults, Rebecca Paterson, Eugene Slaughter, Joshua Byrnes, Katie McFadden, Robert Ware, Emily Monteagle, Lisa Hall, Allison Craswell, Louise Cullen, Amanda Corley , 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, Ian Scott, Grace Xu , Carly Gomura, Fiona Trad, Emma Kennedy, Kellie McCarthy	Using co-design to enhance multidisciplinary teamwork and workload efficiency in the internal medicine unit		

Lead Investigator Name (RBWH staff and consumers in bold)	Other Study Investigators (RBWH staff and consumers in bold)	Research Project Title	Consumer involvement	Number of RBWH Patients Recruited
Amanda Ullman,	Nicole Marsh , 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		
Evan Alexandrou	Nicole Marsh , Amanda Ullman, Steve Frost, Peter Carr, Nicholas Mifflin, Craig McManus, Emily Larsen , Amanda Corley , Catherine O'Brien , David Wyld , Cameron Curley , Joshua Byrnes, India Pearse	Promoting haemostasis for central venous access devices: a randomised controlled trial (PRESS Trial)		

Research Publications

Authors

Investigator	ORCID ID	Investigator	ORCID ID
Nicole Marsh	https://orcid.org/0000-0002-5779-1304	Catherine O'Brien	https://orcid.org/0009-0000-2131-3004
Samantha Keogh	https://orcid.org/0000-0002-2797-4388	Deanne August	https://orcid.org/0000-0002-7204-7065
Jed Duff	https://orcid.org/0000-0003-1427-0303	Nicole Gavin	https://orcid.org/0000-0002-0828-9852
Amanda Corley	https://orcid.org/0000-0002-4250-4077	Grace Xu	https://orcid.org/0000-0002-3421-4176
Annabel Levido	https://orcid.org/0000-0002-8996-6666	Emily Larsen	https://orcid.org/0000-0001-6272-8484

Publications in 2024

Journal Articles (RBWH staff or consumers in bold)

Corley A, Marsh N, Keogh A. Methodological Progress Note: Pilot Randomised Controlled Trials. 2024. Journal of Hospital Medicine. <https://doi.org/10.1002/jhm.13376>

Xu G, Hyun A, Kang E, **Marsh N, Corley A.** Exploring Clinicians' insertion experience with a new peripheral intravenous catheter in the emergency department. 2024. Australasian Emergency Care. <https://doi.org/10.1016/j.auec.2024.03.001>

Gavin N, Northfield S, Mihala G, Somerville M, Kleidon K, **Marsh N**, et al. Central venous access device-associated skin complications in adults with cancer: A prospective observational study. 2024. Seminars in Oncology Nursing. <https://doi.org/10.1016/j.soncn.2024.151618>

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Kearney L, Brady S, Nugent R, **Marsh N**, Davies-Tuck M, Eley V. The effects of intravenous hydration regimes in nulliparous women undergoing induction of labour: A systematic review and meta-analysis. Acta Obstetrica et Gynecologica Scandinavica. 2024. <https://doi.org/10.1111/aogs.14793>

Marsh N, Larsen E, Ullman A J. Authors' response to "comment on 'peripheral intravenous catheter infection and failure: A systematic review and meta-analysis.;" International Journal of Nursing Studies. 2024. 153: 104727. <https://doi.org/10.1016/j.ijnurstu.2024.104727>

Ullman AJ, **Larsen E**, Gibson V, Binnewies S, Ohira R, **Marsh N**, et al. An mHealth application for chronic vascular access: A mixed methods evaluation. Journal of Clinical Nursing. 2024. <https://doi.org/10.1111/jocn.17034>

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Larsen E, Marsh N, Rickard CM, Mihala G, Walker RM, Byrnes J. Health-related quality of life and experience measures, to assess patients' experiences of peripheral intravenous catheters: a secondary data analysis. *Health and Quality of Life Outcomes*. 2024. <https://doi.org/10.1186/s12955-023-02217-8>

Marsh N, Larsen EN, Ullman AJ, Mihala G, Cooke M, Chopra V, et al. Peripheral intravenous catheter infection and failure: a systematic review and meta-analysis. *International Journal of Nursing Studies*. 2024. <https://doi.org/10.1016/j.ijnurstu.2023.104673>

Gough K, Dargaville TR, Ullman A, **Marsh N**, Pelzer E. Haemostatic discs demonstrate physical efficacy against microbes commonly associated with central line associated bloodstream infections. *Journal of Hospital Infection*. 2024. <https://doi.org/10.1016/j.jhin.2023.12.006>

Martin S, Richards C, **Keogh S**, Ward A. Embedding planetary health in nursing education: exploring the barriers and enablers to implementing changes in undergraduate Bachelor of Nursing curriculum. *Teaching and Learning in Nursing*. 2024. <https://doi.org/10.1016/j.teln.2023.11.008>

Levido A, Keogh S, Jarrett P, Coyer F. Proactive debriefing to promote wellbeing in intensive care nurses: A protocol. *Australian Critical Care*. 2024. <http://doi.org/10.1016/j.aucc.2024.01.004>

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Williams CJ, Woods L, Tannagan C, **Duff J**. Patient-facing e-health interventions to promote self-management in adult surgical patients: A scoping review. *Perioperative Care and Operating Room Management*. 2024. <https://doi.org/10.1016/j.pcorn.2024.100384>

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Xu H, Corley A, Ware R, Nghiem S, Stirling S, ...**Marsh N**. Using a Long peripheral intraVenous catheter with a retractable guidewire to optimise first insertion success for patients with Difficult IntraVenous Access in the emergency department (LOVE-DIVA): study protocol for a randomised controlled trial. *British Journal of Nursing*. 2024. 33(7). <https://doi.org/10.12968/bjon.2024.33.7.S28>

Duff J, Jeffries L, Griffiths J, Woollett K, Carter A, **Xu H**. Qualitative evaluation of a novel security role to reduce occupational violence in inpatient hospital settings. *American Association of Occupational Health Nurses*. <https://doi.org/10.1177/21650799241249187>

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Williams C, Woods L, Stott A, **Duff J**. Codesigning an E-Health intervention for surgery preparation and recovery. 2024. *Computers, Informatics, Nursing*. <https://doi.org/10.1097/CIN.0000000000001137>

Holbert M, **Duff J**, Wood F, Holland A, Teague W, Frear C, et al. Barriers and co-designed strategies for the implementation of negative pressure wound therapy in acute pediatric burn care in Australia: A mixed method study. 2024. *Journal of Pediatric Nursing*. <https://doi.org/10.1016/j.pedn.2024.05.018>

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Xu H, ...Griffin B. Using Virtual Reality to manage patient anxiety during painful procedures in Emergency Department: a feasibility randomised controlled trial protocol (VR-ED). Vascular Access. 2024;18(2). <https://online.fliphtml5.com/ycxm/w/avdo/#p=1>.

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Jeffries L, **Xu H**,...**Duff J**. Implementing an Ambassador Program to Reduce Occupational Violence in Hospital Inpatient Settings: A Pilot Study. Australian Health Review. 2024 Nov 18. <https://doi.org/10.1071/AH24248>.

Book Chapters (RBWH staff or consumers in bold)

Kerrie Curtis, **Nicole C Gavin** & Catriona Duggan (2024) Part II Chapter 4 Right Patient Selection. Moureau N (Editor) Vessel Health and Preservation: The Right Approach for Vascular Access. Second Edition.

Keynote or Plenary Lectures given in 2024

Date	Title
25 January 2024	Keogh S . Keynote speaker: Optimising vascular access and insertion outcomes. Infusion Nurses Network Thailand, Thailand
24 January – 1 February 2024	Keogh S . Optimising vascular access and insertion outcomes with discussions. South-East Asia Roadshow, Vietnam, Malaysia, Philippines & Singapore
22-23 March 2024	Marsh N . Invited Speaker. Securing Central lines in Intensive Care: A multicentre randomised controlled trial (RCT). Intravenous Nursing New Zealand
22-23 March 2024	Xu G, et al . Invited Speaker. What factors impact emergency department nurses' adherence to the best evidence-based peripheral intravenous catheter guidelines? Intravenous Nursing New Zealand
10-12 April 2024	Duff J . Invited Speaker. ANZICS/ACCCN Annual Conference. Brisbane, Australia
10-12 April 2024	Keogh S . Invited Speaker. Hybrid trial research methods. ANZICS/ACCCN Intensive Care Annual Scientific Meeting, Brisbane, Australia
17 – 19 April 2024	Keogh S . Invited Speaker. Implementation contexts and strategies for peripherally inserted central catheter material and design selection: A qualitative exploration using CFIR/ERIC approach. 8 th World Congress on Vascular Access. Prague.
17 – 19 April 2024	Xu G . Invited Speaker. Unlocking PIVC Secrets: Revealing key insights from 1500 emergency department audits. 8 th World Congress on Vascular Access. Prague.
17 – 19 April 2024	Xu G . Invited Speaker. Peripheral intravenous catheter practice in emergency department: best evidence vs. reality. 8 th World Congress on Vascular Access. Prague.
16 May 2024	Duff J . Invited Speaker. 4Fs program as an implementation failure and what to do next time. HELIX Workshop: Health Roundtable – 2024 Innovation Showcase. Brisbane
18-21 May 2024	Keogh S . Invited Speaker. Declothing VAD and maintaining its patency through flushing and locking. Infusion Nurses Society. Kansas, USA
23-27 June 2024	Keogh S . Invited Speaker. Facilitate the Transfusion Practitioners Workshop: A Transfusion Practitioner Challenge – audit or research or both? International Society of Blood Transfusion Conference. Barcelona, Spain
June 2024	Xu H , et al. Invited Speaker. How good is ED clinicians' cannulation practice? 23 rd International Conference on Emergency Medicine (ICEM), Taiwan
June 2024	Amit B., Xu H . Invited Speaker. Improving adherence to best practices and clinical outcomes in difficult intravenous access patients in emergency department. 23 rd International Conference on Emergency Medicine (ICEM), Taiwan
2-6 July 2024	Keogh S . Keynote Speaker. Optimizing vascular access insertion and maintenance. Vascular Access Leadership Summit, Kuala Lumpur.
July 2024	Xu H , et al. An innovative device for Difficult Venous Access in emergency departments - A randomised controlled trial. Princess Alexander Hospital Research Symposium.
July 2024	Xu H , et al. Peripheral intravenous catheter practice in emergency department: A national survey. Princess Alexander Hospital Research Symposium.

July 2024	Xu H , et al. Revealing key insights from 1500 emergency department Peripheral Intravenous Catheter audits. Princess Alexander Hospital Research Symposium.
29-30 August 2024	Duff J and team. An aboriginal clinician perspective of authentic aboriginal community-led co-created research: the "Let's Have a Yarn About Our Bladder" project. SMART Strokes Conference, Tweed Heads, Australia
29-30 August 2024	Duff J and team. Aboriginal community-led co-creation to deliver culturally safe and appropriate guideline-recommended care. SMART Strokes Conference, Tweed Heads, Australia
28 September – 1 October 2024	Keogh S . Charting the Course: Navigating vascular access research through the lens of implementation science. Association for Vascular Access Conference, Denver, Colorado, USA
28 - 30 September 2024	Marsh N . Invited Speaker. An Evolving Workforce: Exploring Patient Outcomes and Economic Implications of Vascular Access Teams. Association for Vascular Access Annual Scientific Meeting. Denver, Colorado, USA
28 - 30 September 2024	2024 Xu H , et al. Improving IV insertion success: innovative guidewire intravenous catheters in emergency department. Association for Vascular Access Annual Scientific Meeting, Denver, Colorado, United States.
28 - 30 September 2024	2024 Xu H , et al. PIV care: Why emergency department clinicians do not follow the best practice? Association for Vascular Access Annual Scientific Meeting, Denver, Colorado, United States.
16-18 October 2024	Xu H , et al. Bridging the Gap: Enhancing Peripheral Intravenous Catheter Care in Emergency Departments. 21 st International Conference for Emergency Nurses, Sydney.
16-18 October 2024	Xu H , et al. Revealing key insights from 1500 emergency department Peripheral Intravenous Catheter audits. 21 st International Conference for Emergency Nurses, Sydney.
16-18 October 2024	Xu H , et al. ED clinicians' insertion experience with a new vascular access device – a qualitative study. 21 st International Conference for Emergency Nurses, Sydney.
17-20 November 2024	Corley A . Invited Speaker. Does catheter length matter? A comparison of short versus long peripheral intravenous catheters for intravenous antimicrobial delivery in hospitalised adults. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
17-20 November 2024	Larsen E . Session Chair. Invasive Devices. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
17-20 November 2024	Larsen E . Session Chair 18 November. Pop up stage presentations – Featuring a mix of brief sponsor and exhibitor presentations and poster showcases. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
17-20 November 2024	Corley A . Binational survey of vascular access device insertion and management workforce. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
17-20 November 2024	Corley A . Infection prevention practices for non-tunnelled haemodialysis catheters in the intensive care unit: preliminary results from an Australia-wide cross-sectional survey. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
17-20 November 2024	Marsh N . Infection and all-cause failure of peripheral intravenous catheters: A systematic review and meta-analysis. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
17-20 November 2024	Marsh N . Session Chair, 19 November. Pop up stage presentations – Featuring a mix of brief sponsor and exhibitor presentations and poster showcases. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
17-20 November 2024	Corley A . Session Chair, 19 November. Pop up stage presentations – Featuring a mix of brief sponsor and exhibitor presentations and poster showcases. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
17-20 November 2024	Marsh N . Oral Presentation. Medical liquid adhesive to secure jugular central venous catheter dressings in intensive care: a multicentre randomised controlled trial. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
17-20 November 2024	Larsen E . Session Chair. Free paper – lightning talks. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
17-20 November 2024	Larsen E . Session Chair 20 November. Pop up stage presentations – Featuring a mix of brief sponsor and exhibitor presentations and poster showcases. 2024 Australasian College for Infection Prevention and Control International Conference. Melbourne, Australia
28-30 November 2024	Duff J . Invited Speaker. Empowering clinicians in the implementation of evidence-based perioperative hypothermia prevention strategies in Australia. Australian College of Perioperative Nurses (ACORN) Uniting and Igniting International Conference. Sydney, Australia