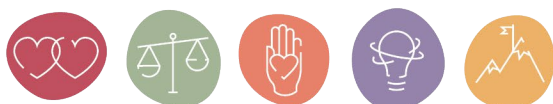




**Darling Downs Health**

# **Research Development and Engagement Unit**

## **2023 Annual report**



**Queensland  
Government**

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# Meet the team



**Dr Anna Tynan**  
*Director of Research | 1.0 FTE*



**Donna Rouse**  
*Research – Senior (Support Officer) | 1.0 FTE*



**Kelly Alexander**  
*Research Ethics and Governance Officer | 0.8 FTE*



**Mandy Hubbard**  
*Research Ethics and Governance Officer | 1.0 FTE*



**Dr Abil Saj**  
*Clinical Trials Manager | 1.0 FTE*



**Laura Cox**  
*Research Coordinator | 0.6 FTE*

# A message from the Executive Director Transformation, Analytics & Governance and the Director Research

The year 2023 was a year of change. The Research Development and Engagement unit was officially formed. Staffing went from 3.3FTE to 5.6FTE, which included the appointment of an additional Research Ethics and Governance Officer (January), Clinical Trials Manager (September) and Research Coordinator for Toowoomba Hospital (September). The unit also joined the newly established Transformation Analytics and Governance Division, and we saw the specialised streams of the unit take form: the Research Ethics and Governance Office; the Research Support Office; and the newly established Clinical Trials Unit.

This year, Darling Downs Health staff were awarded over \$100,000.00 in external research funding to develop and implement research projects relevant to issues faced by the Health Service. An additional 7 clinical trials commenced in the calendar year and 48 exemptions were granted to quality activities. DDH saw a 10% increase in Research Ethics and Governance applications from the previous year 112 (2023) and 98 (2022), and an increase in active clinical trials. Research Support staff consultations numbers were consistent with previous years and research education sessions tripled. The year however has been met with a number of challenges including the departure of a number of active and experienced researchers in the Health Service and the continuing pressures of clinical workloads. This departure of skill has impacted on the research publication output for the year which is down on previous years.

However, the importance of enabling a research culture that will sustain Darling Downs Health into the future has been a key target of the Research Development and Engagement Unit which facilitated a number of research education sessions to target research activity. This included the highly successful Intensive Research Training Program (IRTP) through the Darling Downs Health Innovation and Research Collaborative (DDHIRC) which supports novice clinician researchers to navigate a research project. It includes pairing program participants up with university academics to mentor and facilitate collaboration and achievability of the projects. It has been wonderful to see the blossoming of the next generation of researchers here at Darling Downs Health with many already going for research grants or commencing research higher degrees. Taking the step to commence the research journey is a remarkable achievement to be celebrated and acknowledged. It is with these small steps that future research leaders are born.

The recruitment of Clinical Trials Manager (CTM) Dr Abil Saj, marked a commitment to the expansion in our clinical trial activities at Darling Downs Health. The CTM is responsible for orchestrating the development, monitoring, and execution of strategies aimed at scaling up clinical trials effectively. With a wealth of knowledge and experience in clinical and preclinical research Dr. Saj brings invaluable expertise to the role. The appointment of a Research Coordinator Toowoomba Hospital will also facilitate support for clinicians active or curious about research to achieve success. Along with this, the addition of another Research Ethics and Governance Officer will also help facilitate the commencement of research activity.

This annual report also sets the scene for the next quinquennial of the 2023-2028 Darling Downs Health Research Strategy that has been informed by the experiences, successes, opportunities, and challenges faced by the Health Service. There are key messages emerging from our annual research activity and its reporting. In particular the need to continue to support and grow a research engaged workforce. Thank you to all Darling Downs Health staff and researchers who enable; participate in; produce; and implement research throughout the Health Service. We look forward to planning for a future of bigger and brighter research opportunities.

## Research Highlights 2023

NRERS approved	49
Research projects approved	33
Publications	42
Total funding awarded	\$116,629.19
Total in-kind committed	\$303,483.00
Total active research projects	195

# Research spotlight | Dr Alex King

Tell us about your research focus and what's happening in the Toowoomba Hospital Emergency Department currently?

Our research focus in the Emergency Department is on work which will lead to improvements in patient outcomes in our regional ED setting. Our main project at the moment is recruiting for the ARISE-FLUIDS trial, which is an Australasian interventional trial comparing liberal IV fluids with restrictive IV fluids plus early vasopressors in severe sepsis. Sepsis is a leading cause of death for critically unwell patients coming through the ED and this study aims to add to major research-led improvements in outcomes over the last decade. Another example is the upcoming FEBCON-ED trial which is another multicentre trial which will aim to show whether administering paracetamol to children who suffer a febrile convulsion reduces the chance of further febrile convulsions during the same illness.

What attracted you to doing research?

I was originally inspired to do research by my wife, who is involved in research with the University of Southern Queensland. My first project was in collaboration with her team at USQ looking at differences between Indigenous and Non-Indigenous people presenting to EDs across South-West Queensland, which was presented at the National Rural Health conference in 2019.

Since then, we have been involved in a number of local and multicentre studies looking, for example, at the management of children with head injuries and bronchiolitis in regional settings and ways to avoid unnecessary visits to the ED for sufferers of chronic obstructive airways disease.

What are your goals or areas for future research?

In the future I will aim to continue to engage in research to improve the health of our local community. I also like to choose projects which give ED staff the opportunity to be involved in aspects of research, which I think improves morale and career longevity for these frontline workers.



# 1. Clinical trials

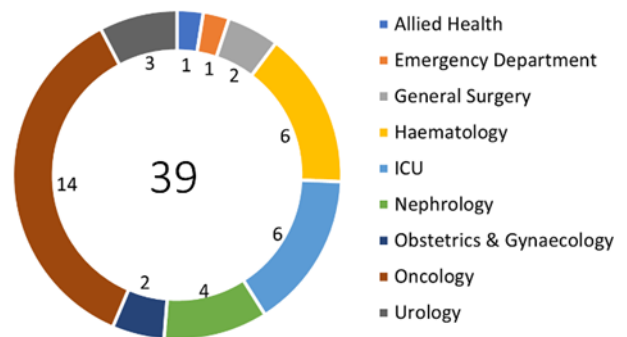
## 1.1 Clinical trials manager report | Dr Abil Saj

Clinical trials are pivotal in today's healthcare landscape, providing essential insights crucial for evidence-based medical practice. They grant patients access to innovative investigational therapies and offer alternative treatment pathways, especially for those encountering unmet medical needs within the existing standard of care.

At Darling Downs Health (DDH), clinicians spearheading clinical trials receive robust support from our team within the Clinical Trials Hub (CTH), which includes a Clinical Trials Manager, Clinical Trial Coordinators, Clinical Trials Pharmacist, Research Nurses, and other expert supporting personnel. Further details can be found in our newly launched website. <https://www.darlingdowns.health.qld.gov.auresearch/clinicaltrials>

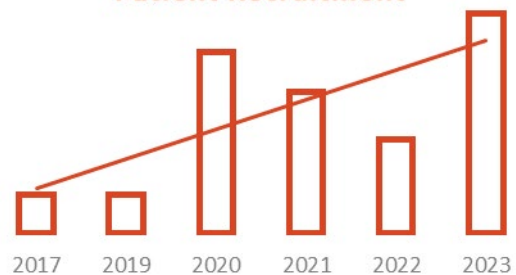
I assumed the role of Clinical Trials Manager (CTM) on September 27, 2023, and set about the establishment of the Clinical Trials Hub (CTH) at DDHHS, with the goal of consolidating all Clinical Trials Units across different departments within DDHHS.

At DDH, we offer comprehensive support to clinicians involved in clinical trials across various departments. As of 2023, we collaborate with clinicians from Oncology, Haematology, Allied Health, Emergency, General Surgery, Intensive Care Unit, Nephrology, Obstetrics & Gynaecology, and Urology. Currently, there are 39 active clinical trials across different departments, which evaluate the safety and effectiveness of experimental medications and other healthcare innovations. These trials encompass a range of studies, including those sponsored by pharmaceutical companies, collaborative group trials and investigator-initiated trials.



Clinical trials in the oncology and Hematology space are managed by the Regional Cancer Centre Trials Unit (RCCTU). The ongoing expansion of the RCCTU at Toowoomba Hospital, marked by its active engagement with collaborative and pharmaceutical trials. RCCTU is one of the thriving clinical trials units under CTH with a steady increase in patient recruitment in 2023.

Patient Recruitment



RCCTU hosted a booth at the Brisbane Cancer Conference in November 2023 to showcase the performance and effectiveness of the unit in running clinical trials successfully. One of the primary objectives of the booth was to draw pharmaceutical companies to the region for their newer and innovative trials. As a result, representatives from Janssen pharmaceuticals, Roche and Novartis are currently engaged in discussion with our team to set up their sites at Toowoomba Hospital.



Figure 1.1: Booth - Brisbane Cancer Conference

## 1.2 Clinical trial activity

Table 1.2 | Active clinical trials by department  
(Oncology = 4, Renal = 1, Allied Health = 1, CCW = 1)

Active Clinical Trials by Department	2023			
	Q1	Q2	Q3	Q4
Allied Health	0	1	1	1
Emergency Department	1	1	1	1
General Surgery	2	2	2	2
Haematology	5	6	6	6
ICU	6	6	6	6
Nephrology	3	4	4	4
Obstetrics and gynaecology	2	2	2	2
Oncology	11	12	12	14
Urology	3	3	3	3
<b>Total</b>	<b>33</b>	<b>37</b>	<b>37</b>	<b>39</b>

Table 1.3 | Clinical trials breakdown

Clinical trials breakdown	2023			
	Q1	Q2	Q3	Q4
Commercial sponsor	2	3	3	4
Collaborative group	27	29	29	29
Clinician led	3	4	4	4
Tele-trial	0	1	1	1
Darling Downs Health Primary Site	0	0	0	0
Darling Downs Health Satellite Site	0	1	1	1
<b>Phase of trial</b>				
Phase II	5	7	7	7
Phase III	14	14	14	15
Phase IV	2	2	2	2
Device	2	3	3	3
Other	10	11	11	11

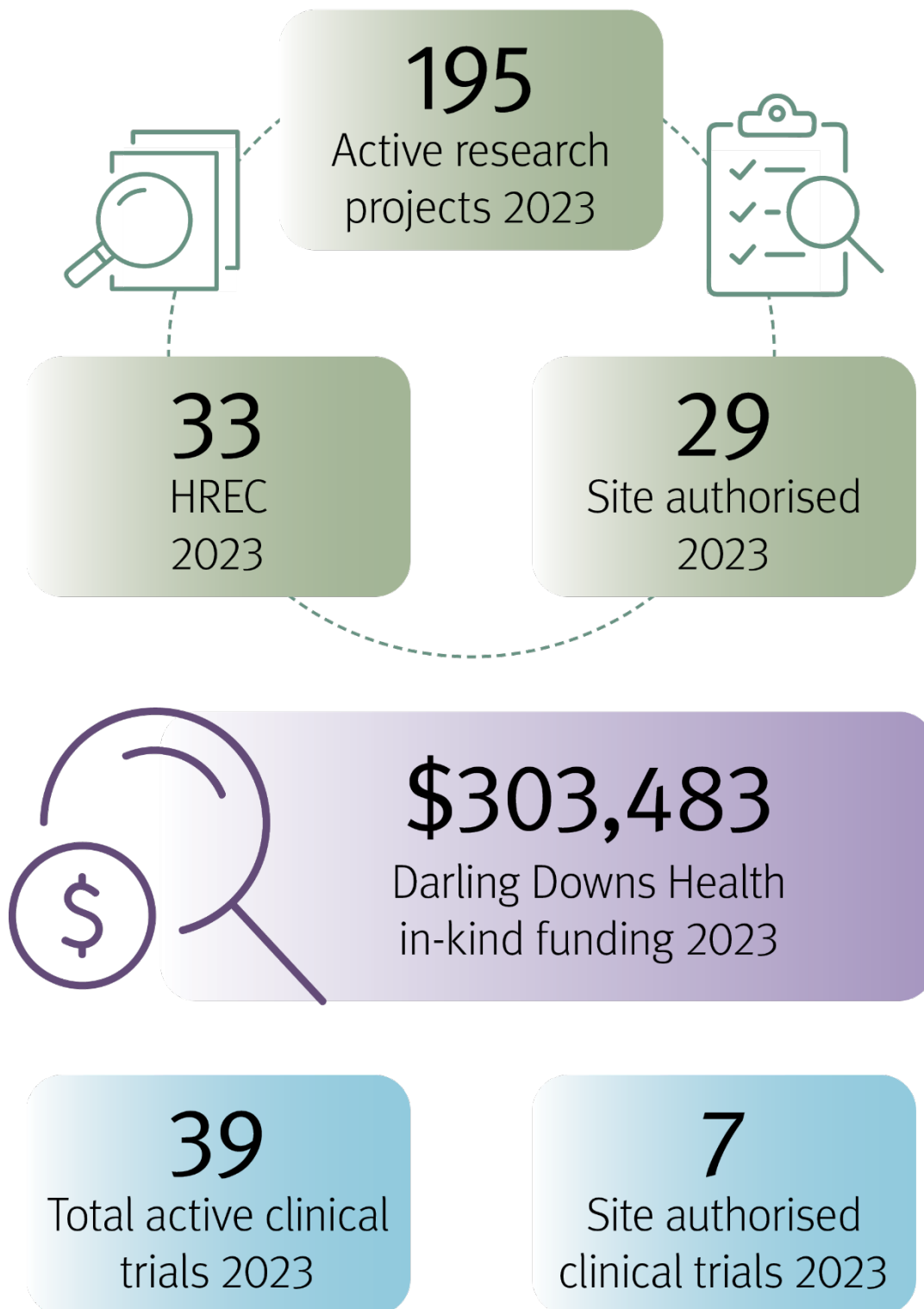
Table 1.4 | Clinical trial metrics

Clinical Trial Metrics	2023			
	Q1	Q2	Q3	Q4
Adverse events	4	0	4	0
Protocol breaches	0	0	0	2
Clinical incidents	0	0	0	0



## 2. Research Ethics and Governance

### 2.1 Snapshot



\*Funding accounted for through SSA Authorisations for this quarter, however actual funding may be received by the HHS through the duration of the project as per the funding schedule.

\*\*In-kind is related to the support provided within a local department or unit for this project to occur within standard work practices

## 2.2 Human Research Ethics Committee (HREC)

### A message from the HREC Chair

A Human Research Ethics Committee (HREC) reviews research proposals that involve human participants to ensure that they meet ethical standards and guidelines including the National Statement on the Ethical Conduct in Human Research 2023. The year 2023 has been a busy year for the Darling Downs Health Human Research Ethics Committee. This has included a steady flow of low-risk Research Applications and greater than low-risk Research Applications.

The HREC would not be able to function without the dedication of its members. There are specific requirements of operation and membership of the committee that are set out by the National Statement. This includes a requirement to have representative membership covering First Nations; Researcher; Knowledge and expertise (care and counselling); Lay person; Pastoral; Solicitor and Chair. We have been fortunate to always have a well-represented and broad base of expertise in the committee to provide consideration on all research projects that are submitted.

Under the National Statement on Ethical Conduct in Human Research 2023, Australian HRECs are also charged with evaluating an application's scientific merit. This year we saw the official formation of a low-risk scientific committee for review of low-risk applications. This also facilitates the specialist review of each application. Along with the day-to-day membership requirements, the committee is also involved in a number of training and networking opportunities to further develop skills and experience in ethical review of research projects, particularly some of the more contemporary developments in research such as use of artificial intelligence. The Annual Health Translation Queensland National HREC Conference is one of these events and is always well attended.

Central to the Committee's functioning is our Research Ethics and Governance Officer (REGO) role. Deb Wainwright has filled this sole role for many years. At the commencement of 2023, we were able to welcome an additional REGO, Mandy Hubbard, as an additional resource to support the growing demand and expansion of research in the Health Service. We also had the opportunity to welcome another REGO, Kelly Alexander, in April while Deb went on maternity leave. The high-level committee functioning is a testament to their dedication, and the dedication of the volunteer members.

## 2.3 Submissions

Figure 2.1: provides a comparison of all authorised applications (Ethics, Governance and Not Requiring Ethical Review) processed by the Research Ethics and Governance Office in 2023. Comparisons are made for each quarter, as well as for the type of authorisation.

Research Ethics and Governance authorised applications have remained steady over the past few years. Figure 2.2: shows a comparison across the years of 2015 – 2023 for Research Ethics and Governance authorisation. Of note is the increase in complexity of site-specific assessments generated through clinical trials and increase in amendments, which is not reflected in the tables.

Figure 2.1: Research Ethics and Governance (REGO) Authorisation per quarter and total for 2023

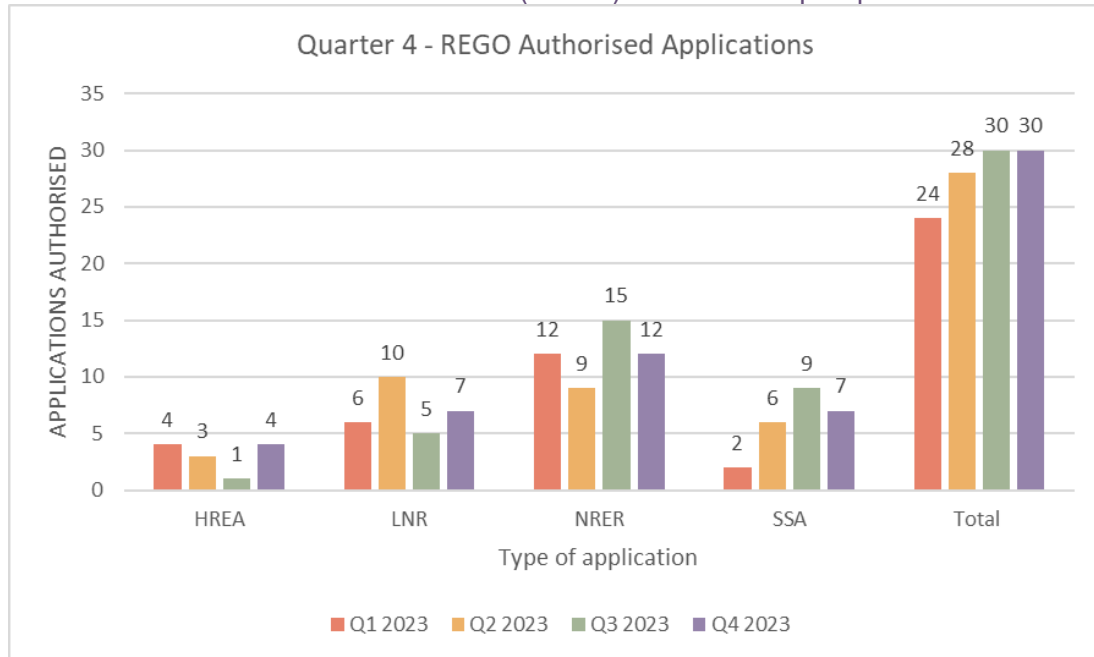
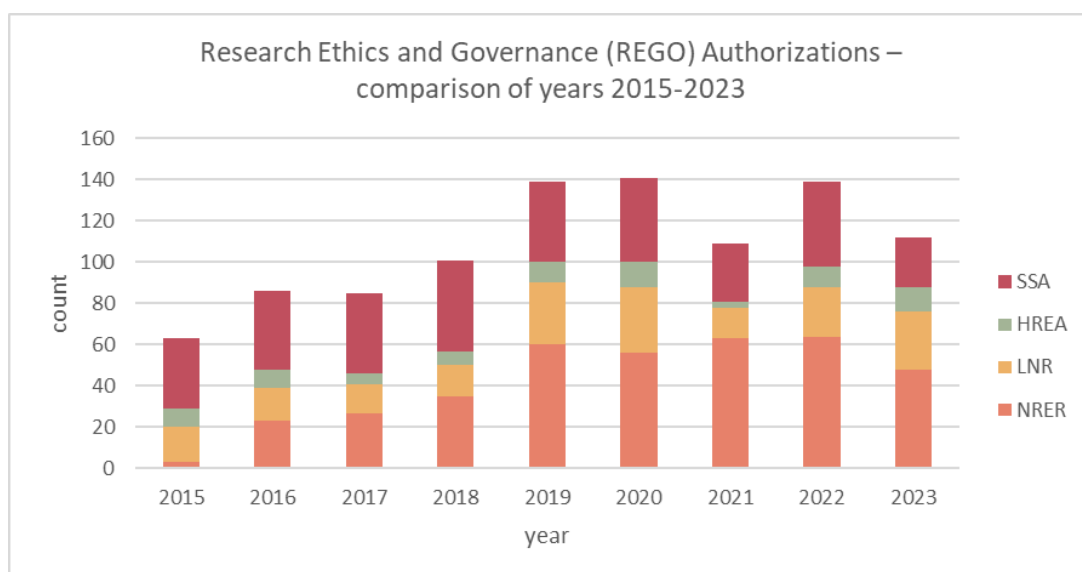


Figure 2.2: Research Ethics and Governance (REGO) Authorisation – comparison of years 2015-2023



Both Ethics and Governance submissions are monitored via clock days. This means each calendar day after a valid application has been received and is being processed by the DDH REGO office. It excludes time taken for the applicant to respond to queries with further information or time spent processing applications at other organisations for multi-organisational projects. That is, clock days are not a measure of total time elapsed since a valid application is received but, instead, are a measure of processing time by the Health Service. Ethics uses a 60-day clock target and Governance uses a 25-day clock target. Table 2.3 shows the average response time for Ethics applications and SSA applications authorised for conduct within DDH in 2023.

Table 2.3 | Average response time for Ethics applications and Research Governance applications authorised for conduct within Darling Downs Health – 2023

2023 Average response time	Days
For Ethics applications	21
For SSA applications	7.5 (clock days)

Table 2.4 lists the research projects given full authorisation for conduct within Darling Downs Health, by professional division. In the case of Darling Downs Health-led projects, this requires both ethics approval and research governance (i.e., Site Specific Assessment -SSA) authorisation. In the case of collaborations, this may mean both ethics approval and governance authorisation from Darling Downs Health or, where the study holds approval from an HREC which is signatory to the National Mutual Agreement, this may mean obtaining ethics approval from a signatory HREC, and governance authorisation (i.e., SSA only) from Darling Downs Health.

Table 2.4 | Research projects (SSA's) authorised for conduct within Darling Downs Health

Darling Downs Health		Collaborative		External projects	
Allied Health	2	Allied Health	0	Allied Health	1
Nursing & Midwifery	1	Nursing & Midwifery	2	Nursing & Midwifery	1
Medicine	5	Medicine	12	Medicine	2
Other	1	Other	1	Other	1

Table 2.5 lists the total projects submitted to the HREC chair not requiring ethical review (NRER). NRER or QA exemptions means investigators who conduct quality assurance or quality improvement activities (hereafter; QA), or write case reports, to publish their findings in peer reviewed journals. Through this process quality projects are subjected to scientific review, which aims to ensure the scientific rigour of the evaluation project.

Table 2.5 | NRER projects authorised for conduct within Darling Downs Health – 2023

Darling Downs Health		Collaborative	
Allied Health	5	Allied Health	0
Nursing & Midwifery	4	Nursing & Midwifery	0
Medicine	32	Medicine	6
Other	1	Other	0

## 2.4 Research projects approved

Research projects approved by the HREC, both low/negligible risk and greater than low risk.

### Q1 2023 | Approved projects

Health sciences Librarian-Mediated Search Service – The Australian and New Zealand Experience

Effects of Computer-based Upper Limb Therapy delivered using the AbleX for Acute Strike Patients: A Randomised Controlled Trial

Q Fever trends in relation to rainfall and temperature in the Darling Downs: A 4-year Retrospective Observational Study

Which Non-neuropsychiatric Non-motor Symptoms of Parkinson's Disease Contribute Most to Caregiver Burden

ENDING-STI evaluation of community involvement

Regional analgesic techniques in primary knee arthroplasty: A Retrospective Study

Co-design of the St George Community Wellbeing Centre Evaluation Framework

Reducing the environmental impact of non-infectious geometry and volume

Evaluation of the Southern Queensland Rural Health's St George Allied Health Education & Training Hub

### Q2 2023 | Approved projects

Cost implications of, and the relationship between, Allied Health, Workforce and Patient Flow in a sub-acute setting: A Comparative Study

Haemorrhagic complications in Percutaneous Nephrolithotomy (PCNL) in Queensland

A retrospective cohort study on the use of chemical sedation and their longer-term impacts on elderly patients presenting to the Toowoomba Hospital Emergency Department with acute agitation

Clinical and Demographic Characteristics of memory Clinic patients in a Regional Centre

Variability in Management and Outcomes in Traumatic Splenic Injuries across Australia: A Retrospective Study

Inter – and Intra-observer reliability when measuring scaphoid geometry using computer-tomography

The impact of suicide prevention training on the practice of Emergency Department Clinicians: An Exploratory Study

Using translational simulations to evaluate relational coordination in rural obstetric emergencies

### Q3 2023 | Approved projects

Outpatient surgical management of non-melanoma skin cancers of the head and neck in a regional centre: an updated analysis of costs and outcomes

Impact and value of the Vulnerable Communities' Group in regional Queensland: A mixed-methods study

How do clinicians sustain research activity alongside workload?

A qualitative investigation of roles and contributions of spiritual care practitioners in mental health

Attitudes toward waste reduction and recycling amongst medical and non-medical staff in hospitals in the Darling Downs Health and South-West Hospital and Health Service

Exploring use of life story work in residential aged care to enable person-centred communication and relational care: a video-reflexive ethnography study

#### Q4 2023 | Approved projects

Barriers to research faced Geriatric and General Medicine Trainees.

iSISTAQUIT (implementing Supporting Indigenous Smokers to Assist Quitting) scale-up in indigenous populations of Australia.

On Country

Development of a model of communication for learning conversations between medical supervisors and trainees to enhance experimental/work-based learning.

Health Professionals, health information and families with young children.

Haemorrhagic complications of Percutaneous Nephrolithotomy (PCNL) in Queensland.

GP Virtual Care Capacity Support Program.

Evaluation of spinal injection and cannulation learning simulation tools for students.

The patient experience, benefits and challenges of a nurse led Tele oncology service at Roma Hospital.

## 2.5 NRER projects approved

Non-research activities exempt from ethics review include quality assurance activities and case reports. Quality assurance activities and case reports, where there is intent to disseminate findings outside Darling Downs Health, must be submitted to the HREC Chair for confirmation of status and provision of an NRER letter.

#### 2023 | NRER Approved projects

First Nations COVID-19 Vaccination Training Project – Evaluation Yazidi Audit Toowoomba Hospital

Biceps tendonitis associated with perioperative non-invasive automatic blood pressure monitoring: a case report

Audit of investigation and management of early pregnancy pain and/or bleeding at Toowoomba Base Hospital Emergency Department.

Review of patient-controlled analgesia devices prescribed by the Toowoomba Emergency Department

Journey of Voluntary Assisted Dying Patient in Darling Downs Health

A review of rotavirus notifications in the Darling Downs and Southwest regions

Intensive Research Training Program (IRTP) Evaluation

An investigation to evaluate the prescribing and recommendations for antiresorptive therapy in patients admitted to a regional hospital with a minimal trauma neck of femur fracture

Audit on Emergency Laparotomy Outcomes

Ultrasound Cleaning in the Operating Theatre

Quality Assurance of Rural Emergency and Critical Care Training (REACT) Workshops

Acromioclavicular dislocation: a common injury impairing a fit population

An audit of the indication for interhospital transfer in rural Darling Downs hospitals

Management of women with gestational diabetes in rural hospital antenatal clinics

Screening and follow up of antenatal mental health: an audit of clinical practice in the Darling Downs Hospital and Health Service

Adult presentations with suicidal ideation in rural Darling Downs Emergency Departments

An audit of antenatal screening standards for women presenting to rural Darling Downs and Metro South antenatal clinics



## 2023 | NRER Approved projects

Assessment of dental practitioner attendance at head and neck cancer multidisciplinary meetings in Australia and New Zealand

Venous blood gas use in the Toowoomba Hospital Emergency Department

Cholelithiasis: A review of management and outcomes in a regional setting

Benchmarking of Transition Care Program dietetic service in Queensland

Healthy Skin Program

Pre-orchidectomy fertility preservation in a regional Queensland Centre - Patient attitudes to sperm banking

DFV Evaluation of Toowoomba Hospital

Evaluation of theatre drug waste/disposal due to drug expiry

Rare cutaneous manifestations in Multiple Myeloma patients - a short case series

An audit on Data Quality and Application of Named Entity Recognition in Pre-anaesthetic Electronic Health Record Data

Oncology and Haematology Patient Survey Demographics and perceptions around clinical trials

Head and neck necrotising fasciitis: an Australian rural perspective

A nutrition assistant-led follow up phone clinic; a model for higher quality dietetic follow up

Case report: Management of an invasive group A Streptococcal outbreak

Evaluation of the clinical pharmacist service to the emergency department, with a focus on identifying areas for further improvement

Evaluate the source, accuracy and completeness of medication histories utilised in the cardiology outpatient clinic compared to a medication history taken by a pharmacist

Time to theatre: a prospective general study in a rural centre

Darling Downs Health Dietitian First Gastroenterology Clinic

Ridley Mural (Not Research and Not QA)

A Rare Case of Bullous Pemphigoid from Hydroxymethylglutaryl-CoA (HMG-CoA) Reductase Inhibitor Exposure

## 2.6 Site Specific Assessments Authorised (SSAs)

All research projects wanting to be completed at Darling Downs Health require a Site-Specific Assessment (SSA) before the research can commence. An SSA considers regulatory and professional standards; risk; impacts and legal requirements at each site. The SSA also helps a site to decide if there are enough resources available to effectively conduct the research.

## 2023 | Site authorised projects

Early Sedation with Decmedetomidine vs Placebo in Older Ventilated Critically Ill Patients (SPICE IV)

Mapping Maternal Health and Gynaecological Services in Rural, Regional and Remote Australia: Uptake, Barriers, and Recommendations

Effects of Computer-based Upper Limb Therapy Delivered Using the AbleX<sup>®</sup> for acute Stroke Patients: A Randomised Controlled Trial

Evaluating the impact of changes in nursing skill mix following the implementation of nurse-to-patient ratio legislation in Queensland Health's (QH) 16 public Residential Aged Care Facilities

Composition, Quality and Delivery of Major Haemorrhage Protocols (MHP) and critical bleeding clinical practice guidelines in hospitals across Queensland Health

Global Cohort Study: Hernias, Pathway and Planetary Outcomes for Inguinal Hernia Surgery (HIPPO)

InReach Kids Evaluation

Symptom monitoring With Feedback Trial (SWIFT)

Clinical and Demographic Characteristics of Memory Clinical Patients in a Regional Centre

A Phase 1b/2 Multicentre, Open-label Basket Study Evaluating the Safety and Efficacy of Bemarituzuman Monotherapy in Solid Tumours with FGFR2b Overexpression (FORTITUDE-301)

A retrospective cohort study on the use of chemical sedation and their longer-term impacts on elderly patients presenting to the Toowoomba Hospital Emergency Department with acute agitation.

Outpatient surgical management of non-melanoma skin cancers of the head and neck in a regional centre: an updated analysis of costs and outcomes.

A Review of the Implementation and Functioning of Adolescent Day Programs in Queensland

How do Clinicians sustain research activity alongside clinical workload?

Australia and New Zealand Emergency Laparotomy Audit – Quality Improvement (ANZELA-QI)

Pancreatic Cancer: Understanding Routine Practice and Lifting End results (PURPLE) A prospective Pancreatic Cancer clinical registry)

Stillbirth risk assessment and shared decision making around timing of birth: Pilot evaluation. A sub-study of the Safer Baby Bundle Initiative

Investigating a sustainable training model to improve paediatric video fluoroscopic swallow study (VFSS) quality and safety (Phase 2 only)

The impact of suicide prevention training on the practice of Emergency Department Clinicians. An exploratory study

Cost implications of, and the relationship between, allied health workforce and patient flow in a sub-acute setting: A comparative study

Secondary Analysis PARIS 1 and PARIS 2

Evaluation of the Queensland Mental Health Community Support Services (MHCSS) Program

Barriers to research faced by Geriatric and General Medicine Trainees

HD12 CATER-HL - An ALLG phase II study of CHOP and Tislelizumab in Elderly patient with Hodgkin Lymphoma

Australian Dementia Network (ADNeT) Registry

A Phase III, Multicentre, Randomized, Open-label Study Evaluating Efficacy of Sotorasib Platinum Doublet Combination Versus Pembrolizumab Platinum Doublet Combination as a Front-Line Therapy in Subjects with Stage IV or Advanced Stage 111B/C Nonsquamous Non-Small Cell Lung Cancers, Negative for PD-L1, and Positive for KRAS p.G12C (Code Break 202)

# NRER spotlight | Dr Kyle Sutton

Commencing in early 2022 the Emergency Department was newly able to prescribe patient-controlled analgesia (PCA) devices. Prior to this, all PCA devices were prescribed by the Anaesthetic Acute Pain Service (APS) team. An audit was completed reviewing this new process in order to evaluate any areas for improvement, with the specific aim to improve safety and effectiveness of PCA prescription.

All 23 PCAs prescribed by the Emergency Department for rib fractures between January 2022 and December 2022 were retrospectively reviewed. The results showed that this new process was functioning well with 100% of PCAs having an acceptable regimen (correct dosing and lockout time), and the commencement of all PCAs were in keeping with current guidelines. The results also highlighted several areas for improvement. Firstly, only 52% of patients had simple co-analgesics prescribed in addition to the PCA device. In patients with no contraindications, paracetamol and or ibuprofen should be prescribed to optimise analgesic control. Additionally, the rate at which aperients were charted needed to be improved to reduce opioid induced constipation. Further improvements could also be made by reducing co-prescribing of non-regular sedatives/opioids in addition to the PCA device which may lead to excessive sedation.

Incidentally, the results also highlighted that following a short admission many PCAs were changed by the APS team. Most frequently Fentanyl PCAs were changed to an alternative PCA due to inadequate duration of analgesia, often disrupting patient sleep. Subsequently, most of these Fentanyl PCAs were changed to Oxycodone or Morphine PCAs. Given that the Emergency Department is currently restricted to prescribing only Morphine or Fentanyl PCAs there may be a role in choosing Morphine PCAs over Fentanyl PCAs (unless contraindicated) for rib fractures.

These findings were presented at the Anaesthetic Department meeting, where any additional ideas and recommendations were then considered by the Emergency Department. As a result of the project, the current PCA prescription form will be reviewed with the aim of adding checkboxes to improve simple analgesia prescribing rates and reduce the rates of non-regular opioid/sedative co-prescription.

## 3. Research Development and Engagement

### 3.1 The Darling Downs Health Innovation and Research Collaborative (DDHIRC)

DDHIRC is a network of health care educators and providers within the Darling Downs region with a vision to facilitate research translation to improve health outcomes for Darling Downs and South West QLD residents, of which Darling Downs Health (DDH) is a founding member.

#### DDHIRC events for 2023

- Hosted an Annual DDHIRC Research Symposium in November with keynote speaker Professor John Prins, Executive Director Health Translation Queensland, speaking on 'Clinical Trials in Rural, Regional and Remote Health'.
- Provided 24 face-to-face research skills workshops.
- Provided 2 multiday Intensive Research Training Programs with mentorship for 10 Health Service employees.

#### Notable achievements

Some notable achievements for DDHIRC include working with the Rural Research Collaborative Learning Network (RR-CLaN) to support training clinicians in research, developing an evidence based clinical resource tool, presentation of research findings at an international conference, visitation from the MRFF, and three media reports about DDHIRC activities or projects.

DDHIRC also facilitates an annual small grants program to enable clinicians and academic researchers to form collaborative research project teams in order to address local problems. In 2023, DDHIRC awarded two \$20,000 grants to commence in 2024:

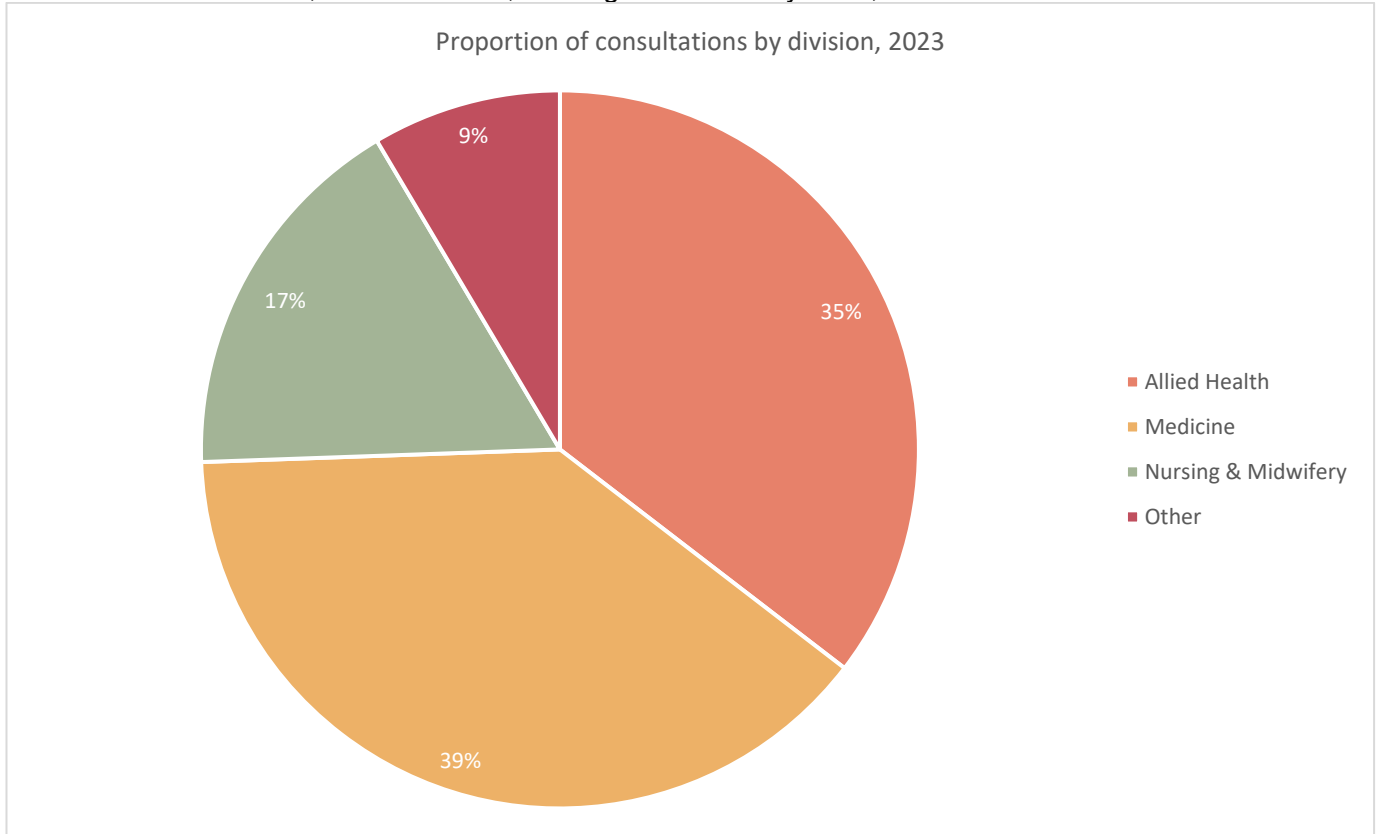
- *Pharmacist Recruitment and Retention on the Darling Downs*
- *Safe Yarns Build Bridges: Aboriginal and Torres Strait Islander Peoples perspectives of cultural safety and comfort with Aboriginal Health Practitioners in the Darling Downs Hospital and Health Services.*

### 3.2 Staff consultations

The Research Support Office provides support to staff for both research and quality assurance and quality improvement (henceforth QA) activities. QA activities typically include clinical audit, service development and service evaluation projects and do not require ethics approval. While these projects typically utilise simple study designs and are aimed at informing local practices, their impact on the Health Service can be considerable, often leading to changes in clinical practices in response to findings. Support may also be provided for case reports, which, while neither research nor QA, are classified as QA for the purposes of this report.

During this reporting period 223 consultations were provided by the Research Support Office to staff. Figure 3.1 provides a comparison of consultations by professional division. The 'Other' category consisted of consultations by Workforce, Public Health Unit, Clinical Governance, Programs and Planning, Indigenous Health, Art Therapy and interprofessional teams.

Figure 3.1: Comparison of consultations by professional stream.  
 Note: Allied Health n=79; Medicine n=87; Nursing and Midwifery n=38; Other n=19.



The majority of consultations were by staff based in Toowoomba (89.7%). Rural consultations comprised staff from Western Cluster 4.0%, South Burnett Cluster 3.6%, Southern Cluster 1.8%, and outside Darling Downs (e.g., Brisbane) less than 1%.

### 3.3 Education

This section represents pre-arranged opportunities to provide research education to Darling Downs Health staff. The research education provided by the Research Development and Engagement Unit includes those events provided by external partners but facilitated by the Research Development and Engagement Unit, as well as activities presented by Darling Downs Health staff, made available to partner organisations and internal staff through the DDHIRC collaborative. Thirty-four education sessions were provided to Darling Downs Health staff in 2023. Details are provided in Table 3.2.

Table 3.2: Education sessions, 2023.

Note: \*Although IRTP sessions are open to DDHIRC partner organisations, only Darling Downs Health attendee numbers are recorded in the table.

Month	Topic	Darling Downs Health Attendees	
February 2023	Identifying a research problem and refining a research question	5	Multidisciplinary
	Literature search essentials (IRTP)	4	Multidisciplinary
	Endnote essentials (IRTP)	4	Multidisciplinary
March 2023	Introduction to research and quality activities	45	Surgery and Urology
	Introduction to research and quality activities	24	Paediatrics
	Introduction to research and quality activities	20	Anaesthetics

Month	Topic	Darling Downs Health Attendees	
	Reviewing the literature: critically appraising scientific papers (IRTP)	6	Multidisciplinary
	Endnote for writing (IRTP)	6	Multidisciplinary
	How to write a literature review (IRTP)	6	Multidisciplinary
	Identifying and drafting your aims, objectives, outcome measures (IRTP)	6	Multidisciplinary
April 2023	Research and quality activities in DDH	28	Medical education
May 2023	Overview of data collection and analysis (IRTP)	5	Multidisciplinary
	Beginners guide to qualitative data collection and analysis (IRTP)	2	Multidisciplinary
	Beginners guide to qualitative data collection and analysis (IRTP)	3	Multidisciplinary
	Planning your research: timelines, budgets, resources (IRTP)	5	Multidisciplinary
	Completing your ethics application (IRTP)	5	Multidisciplinary
June 2023	Research and quality activities in DDH	10	PHU
July 2023	Research and quality activities in DDH	18	Allied Health
August 2023	Identifying a research problem and refining a research question (IRTP)	6	Multidisciplinary
	Literature searching and Endnote basics (IRTP)	6	Multidisciplinary
September 2023	Identifying and drafting your aims, objectives, outcome measures (IRTP)	7	Multidisciplinary
	How to write a literature review (IRTP)	7	Multidisciplinary
	Selecting relevant and robust literature for review (IRTP)	7	Multidisciplinary
	An overview of qualitative and quantitative research methodologies (IRTP)	7	Multidisciplinary
October 2023	REDCap Demonstration	20	Multidisciplinary
	Research Methodology (IRTP)	8	Multidisciplinary
	Beginners Guide to Qualitative (IRTP)	6	Multidisciplinary
	Beginners Guide to Quantitative (IRTP)	4	Multidisciplinary
	Qualitative tool development & analysis (IRTP)	6	Multidisciplinary
	Basic Survey design (IRTP)	4	Multidisciplinary
November 2023	Endnote for writing (IRTP)	6	Multidisciplinary
	Research Resources and Budgets (IRTP)	6	Multidisciplinary
	Completing your ethics application (IRTP)	6	Multidisciplinary
	Designing an interview schedule and undertaking thematic analysis (IRTP)	10	Multidisciplinary

## 3.4 Projects

### Darling Downs Health Toowoomba Hospital Foundation investment proposal

The Research Development and Engagement Unit was successful in obtaining funding support through the Toowoomba Hospital Foundation, to be allocated to research development activities such as training and research partnership activities.



## Research Framework 2023

In 2023 a Research Framework was developed and implemented. The Framework provides a means for Darling Downs Health staff to identify their function in relation to research within the Health Service, and their subsequent accountabilities.

## Clinical Trials Manager

Following a competitive recruitment process, Dr Abil Saj was appointed to a temporary, 1FTE role of Clinical Trial Manager for Darling Downs Health and commenced in the role on September 27th, 2023. Dr Saj brings a wealth of experience to the role with recent experience as a Clinical Trials Coordinator at the Princess Alexandra Hospital and PhD in genomics. This role provides scope, capacity, and capability to expand clinical trials across the Health Service and will lead the development, monitoring and actioning of scaling-up clinical trials.

## Toowoomba Hospital Research Coordinator

In September, following a competitive recruitment process, Dr Laura Cox commenced as Research Coordinator Toowoomba Hospital.

Funding for this position has kindly been donated by Pure Land Learning College via the Toowoomba Hospital Foundation at 0.6 FTE for three years.

The role is specifically designed to support senior medical officers to build research capability in order to support their junior workforce, through providing assistance with; administration of research ethics, governance, and grant applications; management of grant funding, coordination of data collection, and project oversight.

## Intensive Research Training Program

The Research Support Office worked closely with the Darling Downs Health Innovation and Research Collaborative (DDHIRC) to design and develop an Intensive Research Skills Training Program (IRTP), targeting novice researchers. This program provides systematic, hands-on training through workshop days, to develop a research protocol to the ethics submission stage, and links DDH staff with academic mentors to support them through this process. The program was launched in February 2023, with a second cohort in August. Workshop presenters were drawn from DDHIRC member organisations including the University of Southern Queensland, The University of Queensland Rural Clinical School, Southern Queensland Rural Health, and Darling Downs Health. While participation was open to all DDHIRC member associates, three of the five participants in cohort one were Darling Downs Health staff, and all seven participants in cohort 2 were from Darling Downs Health.

One participant has gone on to use their IRTP project as the basis for a Research Masters with their IRTP Mentor as their supervisor; five participants submitted study protocols for ethical review; and two participants are collaborating with their mentors to conduct a systematic review prior to undertaking their research.

The IRTP program has proven to be an effective mechanism for developing research capacity in staff and facilitating collaborative relationships with academic partners. Feedback from participants has informed improvements in subsequent cohorts, and the program will continue to run in 2024.

## 4. Research grants awarded

### 4.1 Toowoomba Hospital Foundation and Pure Land Learning College Research Grants 2023

Each year the Toowoomba Hospital Foundation through generous support from Pure Land Learning College Toowoomba hold two Research Grant rounds for Darling Downs Health staff. The research grants enable Darling Downs Health staff who are novice or experienced researchers access to funding to support their research endeavours. This year, a total of \$67,650.19 was awarded to 5 research projects.

Details of the recipients are as follows:

#### Round 1 Recipients — April 2023

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<b>Primary investigator</b>	Dr Maxine O'Brien – Experienced researcher
<b>Team</b>	Grace Wang (USQ), Allan Pascoe, Daniel Spencer
<b>Research Grant</b>	<i>Enhance retention in opioid treatment program in regional, rural and remote areas.</i>
<b>Grant</b>	\$24,951.51
<b>Synopsis</b>	Opioid treatment program (OTP) refers specifically to medication-assisted treatment for persons diagnosed with opioid use disorders (OUD) using opioid agonists, e.g., methadone. This research investigates the impacts of rurality on treatment retention and identifies barriers to OTP dosing in regional / rural / remote areas from clinician and client perspectives. Findings of this research will likely improve access to OTP for those who live in these areas and reduce possible harms associated with missing doses/treatment dropouts, leading to better health outcomes.

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<b>Primary investigator</b>	Rebecca McConnell – Novice researcher
<b>Team</b>	Ros Darracott (USQ), Theresa Johnson, Racheda Khanam, Iftikhar Husnain
<b>Research Grant</b>	<i>Cost implications of, and the relationship between, allied health workforce and patient flow in a subacute setting: A comparative study.</i>
<b>Grant</b>	\$14,913.48
<b>Synopsis</b>	The research aims to investigate the relationship between allied health workforce and patient flow in a sub-acute setting, with a view to calculating the cost implications. The objectives of the research are to firstly investigate if and how allied health workforce impacts on discharge delays, and then to estimate the cost of any delays to delivery of sub-acute care.

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Figure 4.1: Megan O'Hara Sullivan, Ros Darracott (USQ), Rebecca McConnell & Theresa Johnson

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<b>Primary investigator</b>	Michael Roberts – Novice researcher
<b>Team</b>	Dr Michael Roberts
<b>Research</b>	<i>Bilateral scaphoid symmetry: comparative geometry and volume.</i>
<b>Grant</b>	\$7,142.20
<b>Synopsis</b>	This research seeks to support the use of healthy opposite scaphoids in the planning for scaphoid correction surgeries. It is hoped to employ this technique to improve patient surgical outcomes reducing surgical and rehabilitation time. The research aim is to define the symmetry between bilateral scaphoid bones. This is being done by CT scanning 15 healthy individuals' wrists and using 3D rendering software to analyse the differences between sides.

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## Round 2 recipients – September 2023

<b>Primary investigator</b>	Donna Rouse – Experienced researcher
<b>Team</b>	Anna Tynan
<b>Research</b>	<i>How do clinicians sustain research activity alongside clinical workload.</i>
<b>Grant</b>	\$5,220.00
<b>Synopsis</b>	The aim of this research is to explore the factors which underpin successful integration of research into the clinical role by health clinicians in Darling Downs Health. It is hoped that understanding what drives success for some clinicians will help inform interventions to support other budding researchers within the Health Service to integrate research into their clinical roles.

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<b>Primary investigator</b>	Georgia Parsons – Novice researcher
<b>Team</b>	Anna Tynan, Maayken van den Berg
<b>Research</b>	<i>Effects of Computer-based Upper Limb Therapy Delivered Using the AbleX® for Acute Stroke Patients: A Randomised Controlled Trial.</i>
<b>Grant</b>	\$15,423.00
<b>Synopsis</b>	This study aims to provide important insights into the strength of Virtual Reality as a supplemental therapy option alongside conventional training to support better outcomes in upper limb function and patient Quality of Life within the acute recovery stage after stroke.

## 4.2 Other research grants awarded 2023

A number of other research grants were awarded to Darling Downs Health Staff in 2023 totalling \$48,979.00. Details of these grants are as follows:

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<b>Name</b>	Health Practitioner Research Grant – Office of the Chief Allied Health Officer Department of Health
<b>Project</b>	The Darling Downs Rural Hand Therapy Project
<b>Primary investigator</b>	Susan Williams – Novice researcher
<b>Team</b>	Team - Anna Tynan (Mentor DDH); Lin Wegner (DDH and SQRH), Gail Kingston (THHS) and Angela Kibble (DDH)
<b>Research</b>	<i>Effects of Computer-based Upper Limb Therapy Delivered Using the AbleX® for Acute Stroke Patients: A Randomised Controlled Trial.</i>
<b>Grant</b>	\$29,039.00
<b>Synopsis</b>	The aim of this project is to examine the impact and acceptability of an alternative model of care for rural patients within the Darling Downs region who require hand therapy following limb injury and/or surgery.

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**Name** Darling Downs Health Innovation and Research Collaborative Research Grants  
**Primary investigator** Naomi Kinast – Novice Researcher  
**Team** Ashlee Stirling DDH, Snez Stolic UniSQ, Michelle Rathjen SWHHS, Melissa Taylor UniSQ, Lee O'Malley UniSQ, Geraldine Roderick UniSQ  
**Research** *Teleoncology - A Nurse led model that provides the delivery of systemic anti-cancer treatments throughout Darling Downs and Southwest Hospital & Health Services.*  
**Grant** \$5000.00  
**Synopsis** The aim of this study is to determine the feasibility of the Teleoncology model by interviewing consumers and health care professionals to share their experience of the service and its successes and challenges. This project will be the first to evaluate the service within the Darling Downs, Western Downs, and South West Health Services.

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**Primary investigator** Lisa Waugh  
**Team** Sally Havers DDH, Lucy Parker SQRH, Uba Nwose UniSQ, Lainie Cameron UniSQ, Gordon Mander SQRH.  
**Research** *Strategies for improvement of hand hygiene practices in Aged Care: a participatory action research study.*  
**Grant** \$5000.00  
**Synopsis** The aim of this project is to investigate hand hygiene practices, develop hand hygiene improvement strategies specifically designed for the aged care setting and undertake evaluation of these strategies using a participatory action research approach. This project will enable much greater understanding of hand hygiene practices within the aged care setting specifically as well as the strategies for improvement that best fit this environment. In addition, this project will aim to describe alternative hand hygiene practice assessment measurements more appropriate for use in this setting and potential ways to monitor practices and improvements.

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**Primary investigator** Naomi Anderson  
**Team** Jessie Elliott UniSQ, Clara Walker SQRH, Silas Lui DDWMPHN, Paul Gardiner (UniSQ now UQ RCS), Lynette Brown DDH, Judith Cooze DDH, Karina Baigrie DDH, Jill-Anne Wheeler RMEA, Sonja March UniSQ  
**Research** *Listening to community and clinicians to understand enablers and barriers to vaccination of First Nations children aged 0-5 years. A World Health Organisation (WHO) Tailoring Immunisation Programs (TIP) study.*  
**Grant** \$4,969.00  
**Synopsis** The aim of this project is to understand the enablers and barriers to vaccination of First Nations children 0-5 years in the South Burnett?

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**Primary investigator** Theresa Johnson  
**Team** Ros Darracott DDH, Rebecca Flemming DDH, Rasheda Khanam UniSQ, Iftikhar Husnain UniSQ, Ryan McVey DDH  
**Research** *Cost implications of the relationship between allied health workforce and patient flow in a sub-acute setting: A Pilot Study*  
**Grant** \$4,971.00  
**Synopsis** This initial study will pilot the methodology for establishing the relationship between allied health workforce and patient flow, and the costs of delays in Allied Health service delivery in the DDHHS context. This can then inform larger and comparative studies at Medical Unit 5 as well as other wards and facilities in DDHHS.

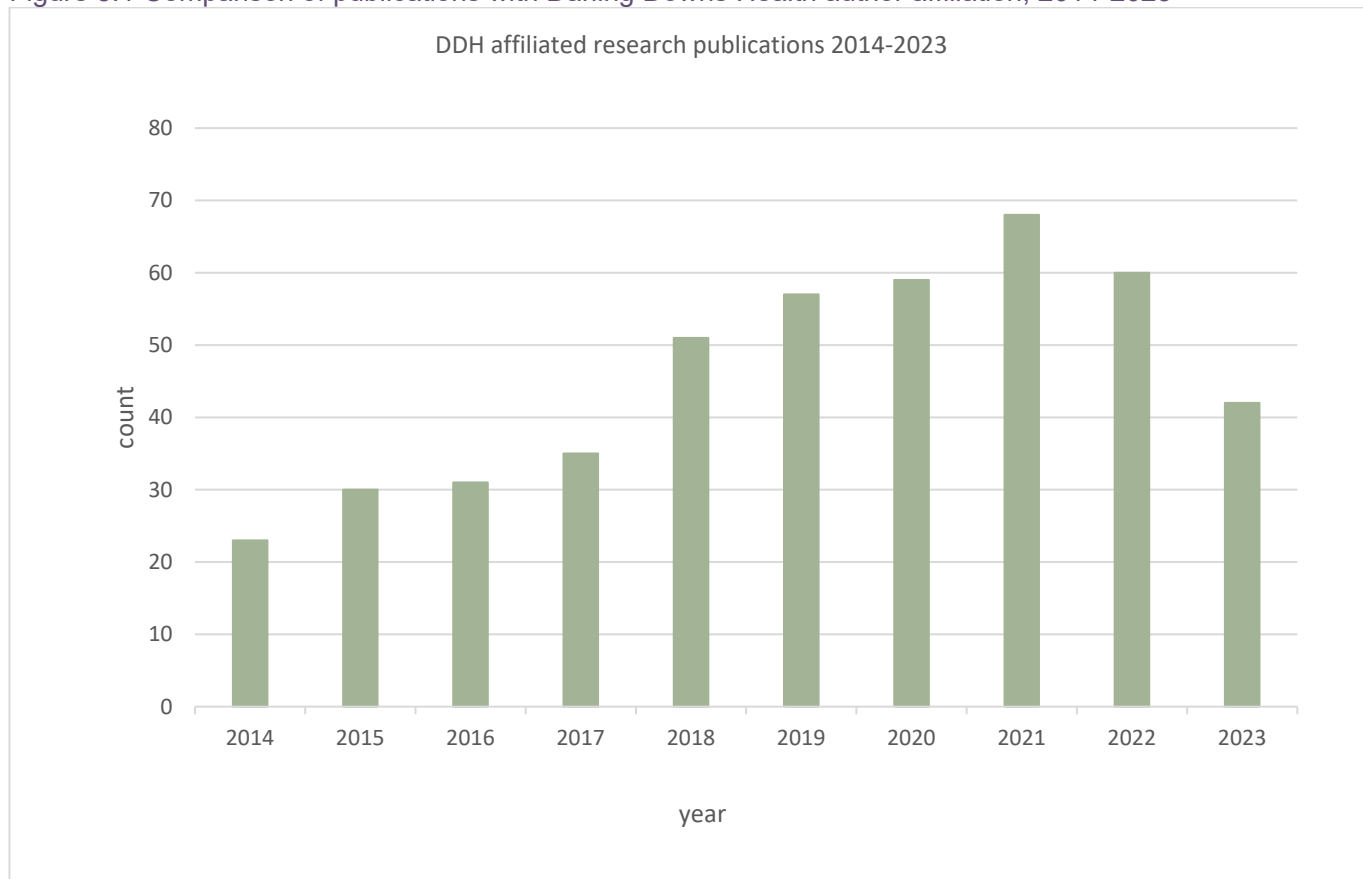
# 5. Research outputs

## 5.1 Publications

Forty-two new research publications with Darling Downs Health author affiliations were identified as published this year, comprising 41 research reports and one published conference abstract.

The majority of publications were from Medicine (28), with the Cunningham Centre producing five publications, Allied Health and the Library producing three each, Nursing & Midwifery and Research producing two each, and Queensland Rural Medical Education producing one. (This adds up to 44 as two publications had authors from more than one discipline.) This total is down on previous years. Figure 5.1 provides a comparison of publication numbers since 2014.

Figure 5.1 Comparison of publications with Darling Downs Health author affiliation, 2014-2023



Publications identified for the year are listed below with Darling Downs Health affiliated authors in bold type. Where it can be ascertained, the professional division of the Darling Downs Health authors is recorded in parentheses following the reference; specialty is included where known.

## Journal Articles

- Atrey, A., Yates, A. J., O'Connor, M., Thomson, Z., Waddell, J. P., Zylberg, A., Wall, C., . . . Khoshbin, A. (2023). The International Initiative to Measure Perceived Risk in Arthroplasty: The Results from a multinational survey. *Journal of Arthroplasty* 38 (11), 2247-2253. doi: <https://doi.org/10.1016/j.arth.2023.08.003> [Medicine/Orthopaedics]
- Brown, T., Edwards, A., Pashley, A., Lehn, B., Vasani, S., Hodge, R., & Bauer, J. (2023). Nutritional status and post-operative complications in patients undergoing surgery for advanced pharyngeal or laryngeal cancer. *European Archives of Oto-Rhino-Laryngology*, 280(12), 5531-5538. <https://doi.org/10.1007/s00405-023-08139-x> [AH/Nutrition & Dietetics]
- Diwan, V., Hoy, W. E., Wang, Z., Zhang, J., Cameron, A., Venuthurupalli, S. K., . . . Govindarajulu, S. (2023). Hospitalizations Among Adults with CKD in Public Renal Specialty Practices: A Retrospective Study from Queensland, Australia. *Kidney Medicine*, 5(9), 100700. doi: 10.1016/j.xkme.2023.100700 [Medicine/Nephrology]
- Gauhar, V., Chew, B. H., Traxer, O., Tailly, T., Emiliani, E., ...Desai, D., ... Castellani, D. (2023). Indications, preferences, global practice patterns and outcomes in retrograde intrarenal surgery (RIRS) for renal stones in adults: results from a multicenter database of 6669 patients of the global FLEXible ureteroscopy Outcomes Registry (FLEXOR). *World Journal of Urology*, 41(2), 567-574. <https://doi.org/10.1007/s00345-022-04257-z> [Medicine/Urology]
- Hegerty, C., & Ostini, R. (2023). Benefits and harms associated with an increase in gestational diabetes diagnosis in Queensland, Australia: A retrospective cohort comparison of diagnosis rates, outcomes, interventions, and medication use for two periods, 2011–2013 and 2016–2018, using a large perinatal database. *BMJ Open*, 13, e069849. <https://doi.org/10.1136/bmjopen-2022-069849> [Medicine]
- Hong, Z. H., Dickey, M., Wong, P., & Gasper, H. (2023). An extraordinary response to dual immune checkpoint inhibitor and vascular endothelial growth factor inhibition in a patient with hepatocellular carcinoma and follicular lymphoma. *Internal Medicine Journal*, 53(6), 1085-1086. <https://doi.org/https://doi.org/10.1111/imj.16116> [Medicine/Cancer Care]
- Ilarda, E., McIlveen, P., Tynan, A., & Senz, A. (2023). Emergency department staff experiences of the Bröset Violence Checklist. *Journal Of Advanced Nursing* (Early online). <https://doi.org/10.1111/jan.15961> [Research]
- Kar Ray, M., Theodoros, T., Wyder, M., Nghiem, S., Chiu, J., Morrison, T., . . . Lombardo, C. (2023). Proactive detection (PROTECT) and safety planning to shorten emergency department stays for psychiatric patients. *Psychiatric Services*, 74(1), 17-23. doi: 10.1176/appi.ps.202100659 [Medicine/Psychiatry]
- Kelly, M. L. (2023). Medullary carcinoma in the colon. *ANZ Journal Of Surgery*, 93(3), 710-711. <https://doi.org/10.1111/ans.17901> [Medicine/Surgery]
- Kelly, M., Colbran, R., & Moar, X. (2023). Sporadic visceral neuropathy of the large bowel. *ANZ Journal Of Surgery*, 93(3), 718-719. <https://doi.org/10.1111/ans.17922> [Medicine/Surgery]
- MacAskill, W., Hoffman, B., Johnson, M. A., Sharpe, G. R., Rands, J., Wotherspoon, S. E., . . . Mills, D. E. (2023). The effects of age on dyspnoea and respiratory mechanical and neural responses to exercise in healthy men. *Physiological Reports*, 11(16), e15794. doi:10.14814/phy2.15794 [Medicine/Rural]
- Martin, P., Argus, G., Fox, J., Gurney, T., McGrail, M., Kumar, S., & Kondalsamy-Chennakesavan, S. (2023). Nature and extent of disruptions to staff clinical supervision practices in health care settings due to COVID-19: A survey study. *Australian Journal of Rural Health*, 31(5), 1008-1016. <https://doi.org/https://doi.org/10.1111/air.13036> [AH/Cunningham Centre]
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- Martin, P., Lizarondo, L., Kumar, S., Tian, E. J., Kondalsamy-Chennakesavan, S., & Argus, G. (2023). Characteristics of perceived effective telesupervision practices: A case study of supervisees and supervisors. *Plos One*, 18(7), e0288314. doi: 10.1371/journal.pone.0288314 [Cunningham Centre]
- Martin, P., Pighills, A., Sinclair, L., & Argus, G. (2023). Healthcare workers' understanding of interprofessional education and collaborative practice in regional health settings: A survey study. *Focus on Health Professional Education*, 24(3), 78-94. [Cunningham Centre]
- McCosker, C., Beccaria, G., Beccaria, L., & Machin, T. (2023). The impact of low socioeconomic status and primary health care access on emergency department presentations in young children in regional Queensland. *Journal of Paediatrics and Child Health*, 5(9), 1053-1038. doi:10.1111/jpc.16450 [Nursing]
- McDonald, D., (2023). Medical College Accreditation Project [Editorial]. *Journal of Health Information and Libraries Australasia*, 4(1). <https://doi.org/https://orcid.org/0000-0001-8385-3671> [Library]
- McDonald, D., & Conroy, S. (2023). Twilight Talks: Engaging health consumers with public lectures. *Journal of Health Information and Libraries Australasia*, 4(1), 40-48. <https://doi.org/https://doi.org/10.55999/johila.v4i1.145> [Library; Medicine/Emergency]
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- Morgan, S. D. J., Wall, C. J., de Steiger, R. N., Graves, S. E., Lorimer, M. F., & Page, R. S. (2023). Obesity is associated with an increased risk of undergoing shoulder arthroplasty in Australia. *Journal of Shoulder and Elbow Surgery*, 32(8), 1740-1745. <https://doi.org/10.1016/j.jse.2023.03.012> [Medicine/Orthopaedics]
- Ngoo, A., Kwok, M., Ong, M., Perera, M., Desai, D., & Wolanski, P. (2023). A prospective, randomized controlled multicentre trial comparing the Bard Inlay Optima and the Cook Universa Soft Stent. *Urology*, 181, 38-44. doi: <https://doi.org/10.1016/j.urology.2023.07.030> [Medicine/Urology]
- Nguyen, A. D. K., Siu, R., Kleinschmidt, G., Sood, B. P., & Shandiz, E. E. (2023). Epstein–Barr virus reactivation-related meningoencephalitis with transverse myelitis in pregnancy. *Clinical Case Reports* 11(9), 1-5. doi:10.1002/ccr3.7923 [Medicine/Neurology, Radiology, Internal]
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- Wall, C. J., de Steiger, R. N., Mulford, J. S., Lewis, P. L., & Campbell, D. G. (2023, Jan). Perception of perioperative risk for arthroplasty patients: A poll of Australian orthopaedic surgeons. *The Journal of Arthroplasty*, 38(8), 1418-1422. <https://doi.org/10.1016/j.arth.2023.02.056> [Medicine/Orthopaedics]
- Watson-Brown, P., & Anderson, D. (2023). Differentiated thyroid cancer: A guide to survivorship care. *Australian Journal Of General Practice*, 52(1-2), 47-51. doi:10.31128/AJGP-02-22-6327 [Medicine/ENT]
- Williams, S., Wegener, L., & Kingston, G. A. (2023). The Rural Hand Therapy Project - providing hand therapy services closer to home. *Rural and Remote Health*, 23(7672). doi:10.22605/RRH7672 [Allied Health/OT]

## Published conference papers

- Lee, C. C. M., Manickam, L., Paranjothy, S., Tampi, S., & Ti, L. k. (2023). Assessment of right ventricular systolic function by tricuspid annular systolic motion: an observational study utilising simultaneous transthoracic and transoesophageal echocardiography. In: Selected prize abstracts from the Australian and New Zealand College of Anaesthetists Annual Scientific Meeting and the Obstetric Anaesthesia SIG Satellite Meeting, May 2023, Sydney, Australia. *Anaesthesia and Intensive Care*, 51(S3), 1-15. doi:10.1177/0310057x231202616 [Medicine/Anaesthetics]

## Other research outputs

This section lists research outputs by Darling Downs Health staff not published in peer reviewed journals, including conference presentations, theses, practice guidelines, etc.

Nine outputs were identified, the majority being conference presentations, along with one magazine article and one practice guideline.

- Lowy, H., Borja, V., Bailey, S., Bjorksten, C., Kochman, A., Longworth, J., . . . Mellor, Y. (2023). Standard of practice in mental health for pharmacy services. *Journal of Pharmacy Practice & Research*, 1. doi:10.1002/jppr.1874 (AH/Pharmacy) (practice standard)
- Minchell, J. (2023, March). Scoping out smoking: A new specific scope of practice on the Darling Downs. *The Hive*, 41, 20-21. <https://www.acn.edu.au/membership/publications> [Nursing] [magazine article]
- O'Brien, Maxine. (2023, 26-28 April). Putting people before paperwork: Organisational outcomes of a two-stream intake model at Toowoomba AODS. [Oral]. 2023 Australian & New Zealand Addiction Conference, Gold Coast. <https://anzmh.asn.au/addiction-conference-2023> [AH/Psychology] [unpublished conference presentation]
- O'Brien, Maxine. (2023, 26-28 April). Outcomes of mindfulness-based relapse prevention followed by a novel graduate group program. [Poster]. 2023 Australian & New Zealand Addiction Conference, Gold Coast. <https://anzmh.asn.au/addiction-conference-2023> [AH/Psychology] [unpublished conference presentation]
- O'Brien, Maxine. (2023, 26-28 April). Neurofeedback to assist with complex trauma treatment in an AODS Setting: A trial in progress. [Poster]. 2023 Australian & New Zealand Addiction Conference, Gold Coast. <https://anzmh.asn.au/addiction-conference-2023> [AH/Psychology] [unpublished conference presentation]
- O'Brien, Maxine. (2023, 9 June). Using neurofeedback to assist with phase one complex trauma treatment: A trial in progress. [Oral]. 24th International Mental Health Conference, Gold Coast. [AH/Psychology] [unpublished conference presentation]
- Ponnappalli, Arvind, Cliff, Lee-Ann, Forster, Michelle, Turner, Karen M T. (2023, 6-8 June). Cultural adaptation and contextual fit of evidence-based programs: A whole of community approach to family and child wellbeing. [Paper]. 1st International Congress of Evidence-Based Parenting Support, Online. [AH/Psychology] [unpublished conference presentation]
- Stockill, Nicole. (2023, April 3). Nicole's story. PEDro Physiotherapy Evidence Database. Retrieved 13/4/2023 from <https://pedro.org.au/english/learn/pedrotacklesbarriers/> [AH/Physiotherapy]
- Ward, Nicole. (2023, 23-25 July.) Can community-based obesity prevention interventions reduce both obesity and climate change? [Oral]. Dietitians Australia 2023 Conference, Melbourne, Australia. [AH/Dietetics] [unpublished conference presentation]