

Central Coast Local Health District

Annual Research Report for 2022-2023





Acknowledgement of Country

Central Coast Local Health District acknowledges that we are located on the lands of Australia's first people. The traditional custodians of the land covered by our District are the Darkinjung people.

We pay respect to these lands that provide for us. We acknowledge and pay respect to the Aboriginal ancestors that walked and managed these lands for many generations before us.

We acknowledge and recognise all Aboriginal people who have come from their own country and who now call this country their home. We acknowledge our Elders, both past and present, our elders are our knowledge holders, teachers and pioneers.

We also acknowledge our Aboriginal youth who are our hope and who are our future leaders.

CENTRAL COAST LOCAL HEALTH DISTRICT

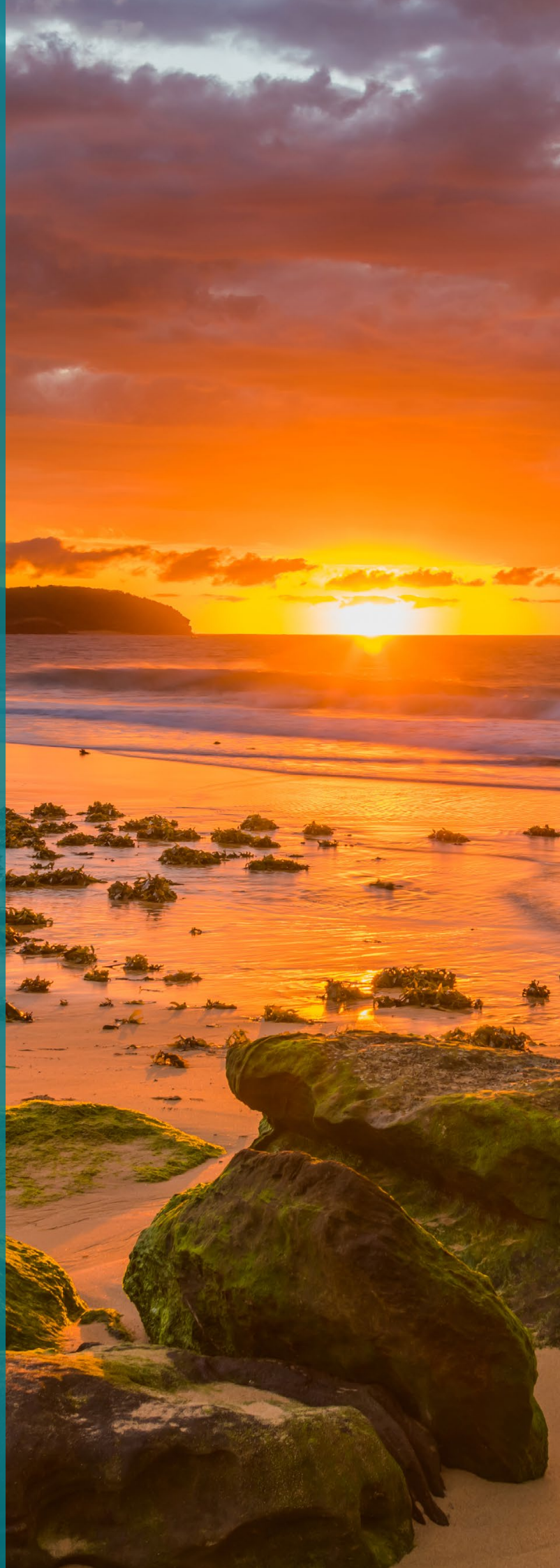
Holden Street
GOSFORD NSW 2250
Tel. (02) 4320 2111
www.cclhd.health.nsw.gov.au

Produced by:

Quality, Strategy and Improvement Directorate
Research Manager, Research Office
Level 10, Central Coast Clinical School & Research Institute
77A Holden St, Gosford NSW 2250
Tel. (02) 4320 2085
Email: CCLHD-Research@health.nsw.gov.au

Contributors:

Scott McLachlan, Dr Brent Jenkins, Professor Nick Goodwin, Fiona Wilkinson, Dr Katherine Bolton, Yin Wang, Georgie Quick, Caitlin Queripel, Brie Attard, Dr Jennie King, Kirstie Waterman, Dr Suzanne Lewis, Ingrid Tonnison, Associate Professor Amanda Dawson, Professor Brett Mitchell, Associate Professor Sarah Jeong, Professor Alison Hutton, Associate Professor Allison Cummins, Dr Sean Sadler, Dr Karen Hutchinson, and CCLHD staff.



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Foreword

CCLHD Chief Executive

Building a culture of research and innovation

This year has been a busy year for research at Central Coast Local Health District (CCLHD). I am proud of what has been achieved by our staff and their enthusiasm and commitment to improve the quality of care we provide to our patients through ongoing quality improvement and research initiatives.

Our research vision for CCLHD to become a leader in developing, implementing, and evaluating models of integrated care is being led by Professor Nick Goodwin, Director of the Central Coast Research Institute (CCRI) and Director of Research for CCLHD. Professor Goodwin and the CCRI team have secured further grant funding for several projects and are continuing to investigate funding and collaborative opportunities which will build research capacity on the Central Coast. Along with the Research Manager, Dr Katherine Bolton, Professor Goodwin has established a Clinical Trials Network Group to provide support to the Clinical Trials Units and work with representatives from these units to develop an operational plan for clinical trials. This is an important step in implementing the National Clinical Trials Governance Framework which requires clinical trials operations be part of hospital accreditation moving forward.

Our partnerships have been further strengthened with the appointment of Honorary Conjoint Scholar, Associate Professor Alison Hutton from the University of Newcastle (School of Nursing and Midwifery) and the extension of appointments for Professor Brett Mitchell of Avondale University, and Associate Professor Sarah Jeong from the University of Sydney and NSW Ministry of Health. Having local staff working collaboratively with these highly experienced and successful researchers is pivotal in developing high quality grant proposals and research projects that will make a difference for our local community and build a culture of research and innovation for our staff.

Several events were held this year including the Research and Innovation Symposium, with the inaugural Research Awards and pre-symposium workshops near the end of 2022, and a Research Networking event early in 2023, to name a few. It has been enlightening to hear from some of our researchers and partners at our Board Research Committee meetings about their research journey and body of work.

I look forward to being involved in continuing to implement the Strategic Research Plan's objectives in the coming year, focusing on growing leadership and research capabilities, as well as involving consumers and our partners to deliver research that will lead to demonstrable and sustainable improvements to people's health and wellbeing.



A handwritten signature in black ink, appearing to read 'Scott McLachlan'.

Scott McLachlan
Chief Executive

Foreword

CCLHD Board Research Committee Chair

Building research activity through investment, engagement and partnerships

NSW Health sees research as an integral part of the health system, helping to deliver better treatments, interventions and outcomes for patients. The CCLHD recognises the importance of having an active research portfolio as it benefits patients and the community with innovative new treatment opportunities, but also staff who have the opportunity to expand their skillset and progress their specialities in novel ways.

Here on the Central Coast, we acknowledge that a growing population with a clear ageing profile will present challenges in the future. The pressure on emergency departments and an increase in chronic illness will require the LHD to develop new innovative solutions, some of which will be developed by research programs led here on the Central Coast.

As part of its Strategic Research Plan 2022-2026, the District is focused on continuing to invest in an active research program. Key to this investment is the Central Coast Research Institute (CCRI), a joint venture with the University of Newcastle that strives to undertake translational research into the development and implementation of new models of integrated care.

A key example of the importance of CCRI in the research ecosystem on the Central Coast is its lead in a major research project on palliative care. This project was supported by the Australian Government's Medical Research Future Fund (MRFF) in partnership with the NSW Regional Health Partners. This ground breaking research involving clinicians, patients and carers has led to the development of a new model of care for people with dementia at the end of their lives. Further transformational research like this is expected from CCLHD's investment in the CCRI.

The CCLHD funds research directly through its Caring for our Future research grants. These relatively small but important grants allow researchers to gain essential skills in the research process and to build important data sets to aid future grant development. Over the past couple of years, the LHD has invested over \$200,000 into a wide range of research areas including:

- Integrated wound management;
- Evaluating clinical procedure videos;
- Addressing unmet contraception needs in women who access drug and alcohol services;
- Evaluating a multidisciplinary clinic for people living with motor neurone disease.

Critical to building a strong research culture is engagement with medical staff who fit research activities around their demanding clinical load. The 2022 Research and Innovation Symposium held on 1 December 2022 had approximately 80 attendees who experienced over 50 presentations and numerous posters highlighting the research taking place across the District. In an effort to further recognise our top researchers, the inaugural CCLHD Research Awards recognised the strong research undertaken by Dr Jennie King (Nursing and Midwifery Research Consultant) and emerging researcher Jacqueline Jagger (Nurse Practitioner, Haematology).

The CCLHD continues to build strong partnerships across the research ecosystem in NSW. Along with University of Newcastle, CCLHD has built partnerships with Hunter Medical Research Institute (HMRI) and other universities to support new research initiatives. In addition, the District works closely with NSW Regional Health Partners to secure new research funding. We are also growing our commercial partnerships with organisations such as HammondCare to bring new innovative health care solutions to the region.

Another strong partnership is with the region's indigenous stakeholders with the creation of an Aboriginal Health Research Group to ensure that the needs of this community are fed into the research agenda in a way that is culturally sensitive and responsive to the needs of the community.

Despite the lingering impact of the COVID19 pandemic on health staff, 2023 saw new investment, strong partnerships and engagement that support research activities now and continues into the future.



A handwritten signature in blue ink that reads "B A Jenkins".

Dr Brent Jenkins
BRC Chair

Foreword

CCLHD Director of Research

Translating research evidence into practice to improve care for our Central Coast community

A key ambition of the CCLHD's research strategy is to produce evidence that can be translated into policy and practice. This is important to drive better health and wellbeing outcomes for our Central Coast community, but also to enhance the quality, accessibility and effectiveness of the health and care services that we provide.

Over the past year, it has been gratifying to see the growth in research projects that engage with, and support co-creation of, evidence-informed solutions with clinicians, consumers and carers—especially to those that have been taken forward to the next stage of innovation. Three good examples include:

- Use of the findings from the NSW Regional Health Partners' Rapid Applied Research Translation grant that identified the components of a new model of end of life care for people living with dementia. These have supported model of care changes at CCLHD and stimulated new partnerships with primary, community and aged care sectors to co-develop joint solutions, driven through the clinical leadership of the research program leads;
- Development, and commercialisation, of the Dino Op Program where the research demonstrated how the use of child-friendly information and materials have provided better continuity of care and reduced anxiety amongst children having surgery with reduced costs of care as a result of less time spent dealing with anxiety issues; and
- Initiation of the All-Inclusive Care for Older People (ALICE) project in which our Central Coast Research Institute has worked closely with the CCLHD, Hunter New England and Central Coast PHN, Central Coast Council and the Department of Regional NSW to evaluate the evidence, assess local needs, and co-design with local community members a neighbourhood model of care to reduce social isolation, improve care continuity and prevent unnecessary hospitalisations.

This Annual Report has also compiled a select list of research and quality improvement projects that demonstrate the value of our research—whether this be across the District's clinical trials portfolio or through investigations tackling a wide range of issues such as nutrition, exercise, breastfeeding, inter-disciplinary team work and enhanced medical procedures.

Our ability to support research and research translation would not be possible without the sustained growth we have seen over the year in collaborative working and capacity building with the likes of NSW Regional Health Partners, the University of Newcastle, Hunter Medical Research Institute, and the Office for Health and Medical Research. The dedicated commitment of our Research Office team, of course, remain the unsung heroes that allow all of our ambitions to be supported.



A handwritten signature in black ink, appearing to read 'Nick Goodwin'.

Professor Nick Goodwin
Director of Research

Timeline of Key Events

September 2022	<ul style="list-style-type: none"> • Health Professionals Research Education Program (HPREP) session held in partnership with University of Newcastle and Hunter New England Local Health District on 'Effective Research Translation: Evidence Based Care' via online delivery.
November 2022	<ul style="list-style-type: none"> • HPREP session held on 'Using Evidence to improve the quality and value of Healthcare – the Learning Health System' via online delivery. • Pre-Symposium Workshops held over two days in the Central Coast Clinical School and Research Institute (CCCSRI, Building A).
December 2022	<ul style="list-style-type: none"> • CCLHD Research and Innovation Symposium held in the CCCSRI (Building A). • Announcement of recipients of inaugural Maree Gleeson Award for Excellence in Research and Emerging Researcher Award at the CCLHD Research and Innovation Symposium.
February 2023	<ul style="list-style-type: none"> • First Rural Research Collaborative Learning Network (RR-CLAN) session held in partnership with multiple regional and rural LHDs as well as Queensland sites on 'How to do a Literature Review' via online delivery.
March 2023	<ul style="list-style-type: none"> • Second RR-CLAN session held on 'Introduction to REDCap' via online delivery. • Rollout of the NSW Health Clinical Trials Management System (CTMS) at CCLHD. • HPREP session held on 'MRFF Grant Scheme: Strategies for Success' via online delivery. • Workshops held in CCCSRI with a working party from the Board Research Committee to develop the Annual Implementation Plan for 2022-2023 for the Strategic Research Plan 2022-2026.
April 2023	<ul style="list-style-type: none"> • RR-CLAN session held on 'Demystifying Consumer and Community Involvement in Research' via online delivery.
May 2023	<ul style="list-style-type: none"> • RR-CLAN session held on 'How to read and interpret a systematic review' via online delivery. • Research Networking Event held in the CCCSRI for Honorary Conjoint Scholars and health professionals involved in research to present to local staff and have a Q&A session. • International Clinical Trials Day table manned in Gosford Hospital by staff from the Research Office, Pharmacy and Clinical Trials Units to raise awareness of the clinical trials taking place across the District.
June 2023	<ul style="list-style-type: none"> • HPREP session held on 'Enhancing Clinical Trials: National, State and Local landscapes' via online delivery. • Representatives from the Research Office attended the ARCS Conference, REDCap Conference and the Aboriginal Health & Medical Research Council (AH&MRC) Ethics Forum in Sydney.

Key Research Statistics for 2022-2023

592

Total projects currently under management by CCLHD Research Office

104

Open clinical trials taking place across the District

95

New research project applications received (4% increase)

27

New quality improvement applications received (33% decrease)

577

Total subscribers to the CCLHD Research e-mail list

343

Number of participants at the Health Professionals Research Education Program (HPREP) education sessions via remote access (Zoom) in September and November 2022, and March and June 2023 (from CCLHD, HNELHD, University of Newcastle and HMRI) with 19 presenters

77

New publications by CCLHD staff listed in the CARE Repository (listed at back of this report)

1185

Total publications by CCLHD staff listed in the CARE Repository

\$1.9M

Total annual research income (18.7% increase)

Overview of Research Indicators

Research Plan

The CCLHD Research Strategic Plan 2022-2026 was finalised and published in December 2021 and the annual Implementation Plan was actioned in 2022/23. A new Implementation Plan is in place for 2023/24. The Key Focus Areas for this Plan are:

1. Leadership

Growing Research Leadership and Excellence

2. Capabilities

Building Research Literacy, Capacity and Capabilities

3. Partnerships

Developing Dynamic Partnerships and Collaborations

4. Community

Involving Consumers and the Community in Research

5. Impact

Driving Research that has an Impact

Growing Research Leadership and Excellence

The Honorary Conjoint Scholars Program has further expanded to provide further support and leadership for our researchers and opportunities for collaborations with the appointment of Honorary Conjoint Scholar, Professor Alison Hutton from the School of Nursing and Midwifery, College of Health, Medicine and Wellbeing, University of Newcastle (UON). The appointments of Professor Brett Mitchell (of Avondale University) and Associate Professor Sarah Jeong (University of Sydney and Ministry of Health) have also been extended to allow continuation of their successful Honorary Conjoint roles. The appointment of three scholars last year have continued, being Associate Professor Allison Cummins (Midwifery Discipline Lead) from the School of Nursing and Midwifery, College of Health, Medicine and Wellbeing, UON; Dr Sean Sadler from the Discipline of Podiatry, School of Health Sciences, Western Sydney University; and Dr Karen Hutchinson (Postdoctoral Research Fellow) from the Centre for Healthcare Resilience & Implementation Science, at the Australian Institute of Health Innovation, Macquarie University.

Implementation of the Strategic Research Plan 2022-2026 commenced in 2022/23 with workshops held for development of an annual Implementation Plan which is governed by the Board Research Committee.

Building Research Literacy, Capacity and Capabilities

The Research Education & Training program continued to provide research support, education and resources to help promote research and meet the different needs of well-established researchers and new emerging researchers within CCLHD. The Research Education & Training program provides opportunities to attend workshops, connect with mentors, find collaborators and network and discuss their projects with a broader audience. The partnerships between the Research Office, Library Services, Nursing and Midwifery Directorate and University partners enabled the provision of the following workshops during 2022-23 for CCLHD staff:

- Navigating the Ethics & Governance Process
- Introduction and Overview of REDCap
- Improve your Quality Improvement
- Collaborative Grant Writing Workshop
- Kick Start Your Research Project
- How to complete a Research application in the Research Ethics & Governance Information System (REGIS)

The Research Office is facilitating pre-SSA submission meetings so that researchers can discuss the requirements for their upcoming project application with a Research Governance Officer to improve the quality of the application and streamline the review and authorisation process. This has enabled the Research Office to meet and exceed the target set by the Ministry of Health to review and authorise at least 75% of greater than low risk research projects in the Research Ethics & Governance Information System (REGIS) within 60 days, with 100% reached and maintained for the four quarters of the 2022-23 financial year.

The Research Office also manages appointments with a biostatistician to support QI and research projects through a contract with the Clinical Research Design & Statistics team at the Hunter Medical Research Institute (HMRI). There have been at least 17 staff members attend initial consultations with the HMRI biostatistician. The Research Office also provides training for staff on the use of [REDCap \(Research Electronic Data Capture\)](#) for data management and surveys.

The Research Manager continued to present to Quality and Safety Committee or staff meetings in the District to provide information about the requirements for ethical review of QI and research projects, with 5 presentations to Committee or team meetings from July to September 2022 (including Clinical Council, Health Promotion, Junior Medical Officers, Women, Children & Families, and Community, Chronic & Complex Care); and to another 8 committees in January to June 2023 (including Paediatric staff specialists, Obstetrics and Gynaecology staff specialists, Radiation Oncology, Allied & Dental Health, Medical Imaging, Lean Six Sigma participants and the Near-Peer Medical Teaching Research Symposium). These presentations will continue to as many department and service committees/ forums as possible to assist staff with navigating these requirements, build their capacity and reduce the risk of ethical breaches.

The [CCLHD Researcher Pathway](#) is an important initiative that is now available in My Health Learning. The pathway serves as a platform for staff members to access essential research education offerings, enabling them to embark on research projects and enhance their knowledge and skills as researchers. The Researcher Pathway comprises several components that aim to support researchers at the beginning of their research journey. The Pathway was developed by a working party from the Operational Research Committee.

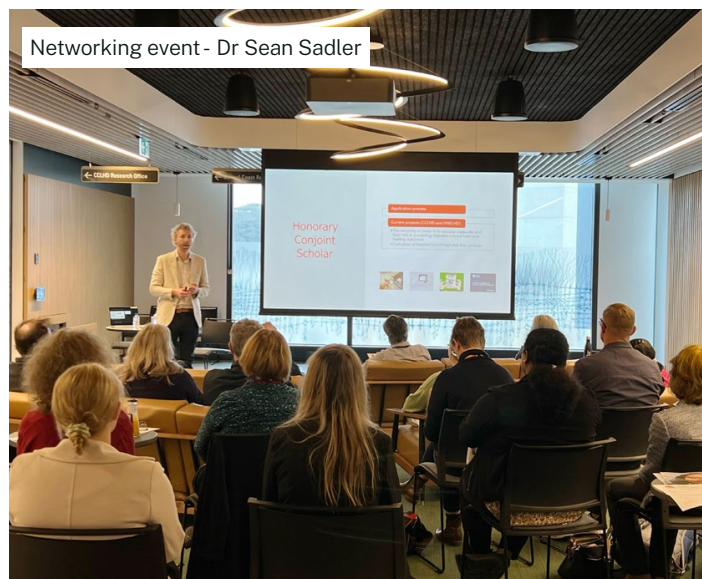
Developing Dynamic Partnerships and Collaborations

Research Collaboration continued with the CCLHD Research Office and Research Advantage team at UON and Hunter New England Local Health District (HNELHD) delivering further Health Professionals Research Education Program (HPREP) online sessions (across the three organisations). The HPREP session held in September 2022 focused on 'Effective Research Translation: Evidence Based Care' and a session was held in November 2022 on 'Using Evidence to improve the quality and value of Healthcare – the Learning Health System'. The HPREP session held in March 2023 focused on developing grant applications, in particular the 'MRFF Grant Scheme: Strategies for Success'; and in June 2023 there was a session titled 'Enhancing Clinical Trials: National, State and Local landscapes'. All sessions were recorded and are available on the HNELHD internet page and University of Newcastle website, with a link available from the CCLHD intranet.



The '2023 CCLHD Research Networking – Meet our Research Experts' event was held on 17 May 2023 at Central Coast Research Institute (CCRI). This networking session provided an opportunity for local research health professionals and CCLHD Honorary Conjoint Scholars to present and share their experiences with local staff. It also provided a time and location for informal discussions and networking to take place. The speakers were: Professor Ian Incoll (Orthopaedic Surgery, CCLHD); Professor, Faculty of Medicine and Public Health, UON; Subject Coordinator, Graduate Programs in Surgical Education, University of Melbourne), Dr Craig Kukard (Director of Cancer Services; Head of Medical Oncology, CCLHD and Lecturer, UON), Dr Jennie King (Nurse Manager,

Nursing & Midwifery Research, CCLHD), Dr Sean Sadler (Podiatry, School of Health Sciences, Western Sydney University and CCLHD Honorary Conjoint Scholar), Professor Brett Mitchell (Nursing, Avondale University and CCLHD Honorary Conjoint Scholar), and Dr Karen Hutchinson (Physiotherapist; Australian Institute of Health Innovation, Macquarie University and CCLHD Honorary Conjoint Scholar).



There were 26 people registered for this Research Networking Event and 35 attended on the day. A feedback survey was circulated to attendees after the event and the average score for the event was 84 out of 100. The three most valuable experiences from this event according to the participants were the networking opportunities it provided, followed by increased knowledge obtained by attendees, and providing an opportunity to meet the Research Office staff. For future events, it was suggested that more time be provided for informal networking.

Collaboration has been demonstrated through continued attendance of CCLHD Research Office staff at the NSW Regional Health Partners (NSWRHP) Clinical Trials Community of Practice (and presentations) and the NSW Clinical Trials Community of Practice organised by the Ministry of Health (clinicaltrialsNSW). Research Office staff also attended the Office for Health & Medical Research (OHMR) REGIS/Research Ethics & Governance Unit's Roundtable meetings held in Sydney in November 2022 and April 2023.

The Research Office has been facilitating a CCLHD Clinical Trials Network Group to provide support and a networking opportunity for staff in the Clinical Trials Units across the District, including assistance with implementing the new Statewide Clinical Trials Management System (CTMS) which was launched at CCLHD on 1 March 2023. This year the Clinical Trials Network Group held an event at Gosford Hospital to bring awareness to International Clinical Trials Day, which falls on the 20th of May each year. The Research Manager was involved in a podcast that was released on International Clinical Trials Day titled '[Clinical Trials in Focus](#)' and highlighted the importance of conducting internal monitoring of clinical trials that are sponsored by the District. Currently, there are 49 clinical trials on the internal monitoring program at CCLHD.

In the coming year plans have advanced for the development of a Central Coast Research Group to help build engagement, skills and capacity across clinicians, managers, academics, industry, and consumers. This includes close collaboration with NSW Regional Health Partners to support consumer engagement in research, research co-design, and further research skills building courses and opportunities.

Significant funding for collaborative research was released during the year including \$6 million in funding from OHMR to establish the Rural, Regional and Remote Clinical Trial Support Unit Northern Cluster in collaboration with CCLHD, Hunter New England LHD, Mid North Coast LHD and Northern NSW LHD. The purpose of the Clinical Trial Support Unit is to increase clinical trial capacity and capabilities across the cluster, focused directly on rural, regional and remote populations.

In addition, the \$5.6 million NSWRHP Regional Cancer Research Network benefited from renewed leadership under Professor Nikola Bowden of the Hunter Medical Research Institute, with the CCLHD benefiting from a \$40,199 'shovel ready' grant to the SLAM-B project team (Self-administration of bortezomib for patients with myeloma: a pilot study) as well as access to its growing regional membership network.

Involving Consumers and the Community in Research

Work has commenced to develop structured processes for involving consumers and community engagement in research projects, through consultation with the Consumer Manager and with assistance from NSWRHP. This involvement of consumers and the community in research needs to be meaningful and considered throughout the entire life cycle of projects.

Driving Research that has an Impact

Of note in research translation, was the conclusion of the Medical Research Future Fund (MRFF) Rapid Applied Translation Grant funded project (through NSW Regional Health Partners) titled 'Capacity building in research for palliative care staff to enable a better end-of-life experience for the Central Coast Community'. Findings from this research have supported the submission for Enhancing End of Life Care funding from the Ministry of Health (including dedicated funding for a dementia care coordinator position), as well as the design of the new Palliative Care Unit at Wyong. The scalability of the research findings is evident from interest received from other health organisations to collaborate in the co-design of new models of care in home care settings on the Central Coast, including a funded project with HammondCare and ADSSI Ltd.

The project has contributed new knowledge, resulting in one published manuscript (Lewis et al., 2023), and four further manuscripts under review or in draft. Findings from the project have been presented at 18 conferences (including several international conferences, and an invited presentation). Awards were given for poster presentations at the Palliative Care NSW 2022 Conference (Jessica MacDonald, Palliative Medicine Advanced Trainee) and the 2022 CCLHD Research and Innovation Symposium (Suzanne Lewis, Chief Investigator). One team member, Daneill Davis, was awarded Allied Health Researcher of the Year at the CCLHD Excellence in Allied Health Awards 2022. The project team was also announced as a finalist for Research and Innovation at the 2023 Caring for the Coast Awards.

Research Governance

The Operational Research Committee (ORC) and Board Research Committee (BRC) met on a two monthly basis with a focus on the implementation of the Strategic Research Plan 2022-2026, as well as updating the CCLHD Research Governance Framework for the Responsible Conduct of Research.

The key functions of the ORC are to provide research support and mentorship to CCLHD staff and researchers, and to operationalise the District's current Research Plan. Members of the Committee were instrumental in providing support to the Research Office and local researchers throughout the year.

The key functions of the BRC are to oversee the development of research strategy, monitor research governance and mitigate research risks for CCLHD. The Committee monitors research activity, governance reports, research finances and human resources. It oversees the implementation of the Strategic Research Plan and reports on key research indicators to the CCLHD Board, with a continued focus on the development of the Central Coast Research Institute and meeting the Key Performance Indicators for site governance review of research projects.

The CCLHD Research/ Clinical Trial Monitoring Program is conducted in line with the requirements of the [Australian Code for the Responsible Conduct of Research \(2018\)](#), [National Statement on Ethical Conduct in Research \(2007; updated 2018\)](#) and the CCLHD Research Governance Framework. CCLHD sponsored clinical trials are monitored one year after site authorisation and every two years until project completion to ensure that the research being undertaken conforms to approval conditions from the Human Research Ethics Committee (HREC) and in accordance with NSW Privacy legislation and the relevant policies, procedures and guidelines. There are currently 49 clinical trials monitored under this program, as at end of June 2023.

Governance Structure for Research at CCLHD:

CCLHD Board

Board Research Committee (BRC)

Chair: a Board member

Executive Sponsor: District Director Quality, Strategy & Improvement

Members: 10 including CCLHD Chief Executive (CE), 2 Board members, District Directors, Director of Research, Research Manager and Chair of the ORC

Operational Research Committee (ORC)

Chair: District Director Nursing & Midwifery

Executive Sponsor: District Director Quality, Strategy & Improvement

Members: Up to 24 including Director of Research, Research Office staff, CCLHD staff, JMOs, community representative, student and UON representatives

Research Management

Prior to the commencement of a research project at a CCLHD site, researchers are required to submit a Site Specific Assessment (SSA) or Access Request (AR) to the Research Office for authorisation of the project, following ethics approval by a Human Research Ethics Committee (HREC). Access Requests are for projects which require access to local participants (patients, carers or staff), tissue or data but which are being conducted offsite by another organisation. Alternatively, for a low/negligible risk (LNR) research project that has no ethical concerns and is only being conducted at the District, it can be submitted to the CCLHD Research Office for review and authorisation as an HREC-Exempt LNR Research project, in accordance with Section 5.1.22 of the National Health and Medical Research Council's (NHMRC) [National Statement on Ethical Conduct in Human Research, 2007 \(updated 2018\)](#).

During the 2022-2023 financial year, the Research Office received 95 new research applications (Figure 1) from a number of departments across the District's various clinical and support services (Figure 2). This was an increase of 4% on the number of new research applications received in 2021-2022 (with 91 projects).

Of the 95 new research applications (Figure 1):

- 48 were Human Research Ethics Application (HREA) SSAs (a 19% decrease on last reporting period);
- 36 were Human Research Ethics Committee (HREC)-Exempt Low/Negligible Risk (LNR) Research applications (a 100% increase on last reporting period); and
- 11 were Access Requests (an 21% decrease on last

reporting period).

The 48 HREA SSAs included 13 clinical drug trials, which were funded as follows (Figure 3):

- 7 commercially sponsored clinical drug trials; and
- 6 collaborative group (or investigator-initiated) clinical drug trials.

The Research Office also approved 27 Quality Improvement (QI) projects in 2022-2023 (Figure 4), a decrease of 33% from the last reporting period. These QI projects made up 22% of the total QI and research project applications received this period (Figure 5).

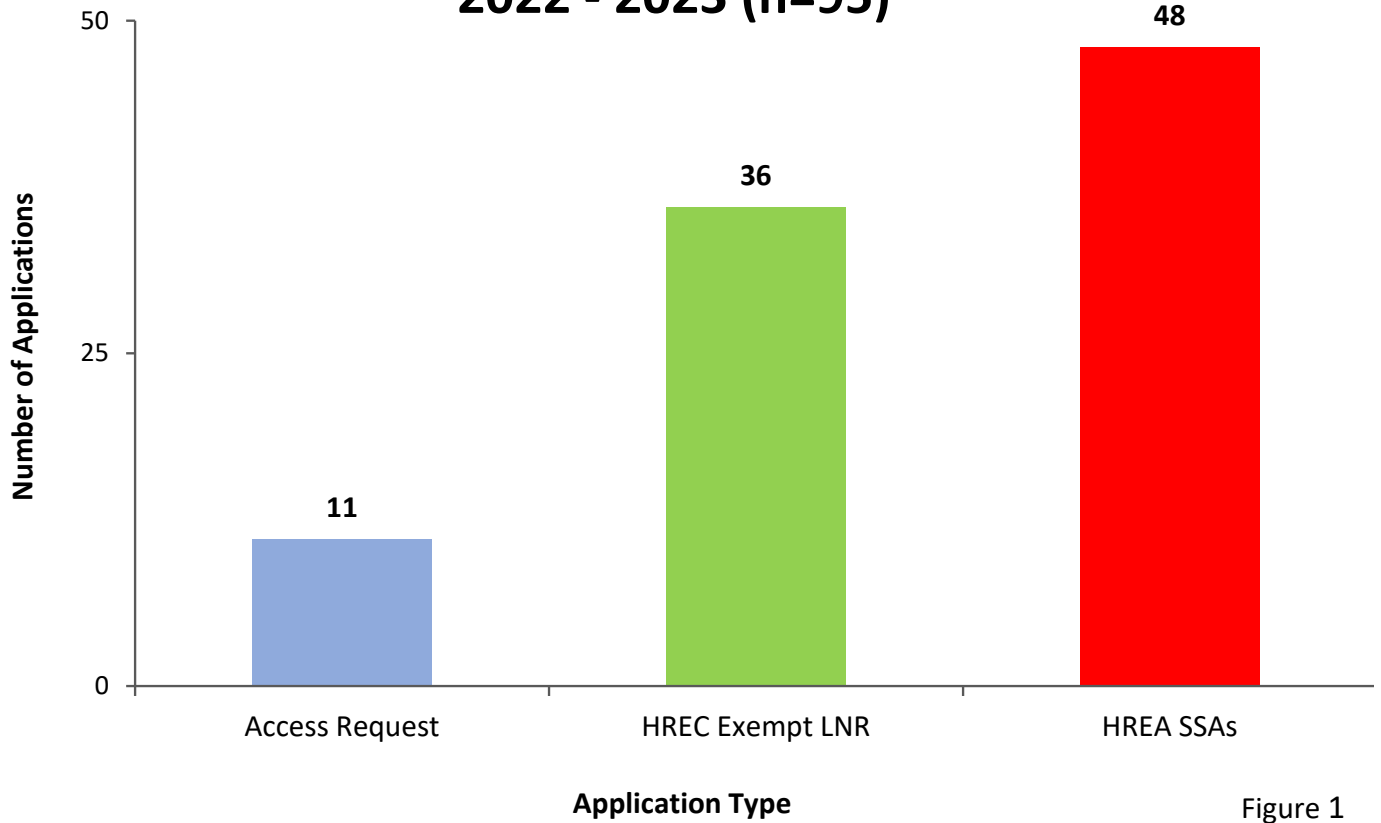
Six (6) Non-Research Activity (NRA) applications were approved for case series and case reports, where there was intent to publish; and no New Health Technology Assessments were reviewed.

The total number of active applications being managed by the Research Office as at 30 June 2023 was 592, consisting of 385 research projects, 153 QI projects, 16 Health Technology Assessments and 38 NRA/ case reports.

CCLHD Research Office team (from left to right): Georgie Quick (Research Support Officer), Caitlin Queripel (Research Governance Officer), Dr Katherine Bolton (Research Manager), Brie Attard (Research Governance Officer) and Yin Wang (Research Governance Officer).



Research Applications Submitted 2022 - 2023 (n=95)



- Access Request - Access Request applications
- HREC Exempt LNR - Human Research Ethics Committee Exempt Low/Negligible Risk Research
- HREA SSAs - Human Research Ethics Application (HREA) Site Specific Assessments via REGIS

Distribution of Research & Quality Improvement Projects within CCLHD Top Departments / Health Services 2022 - 2023

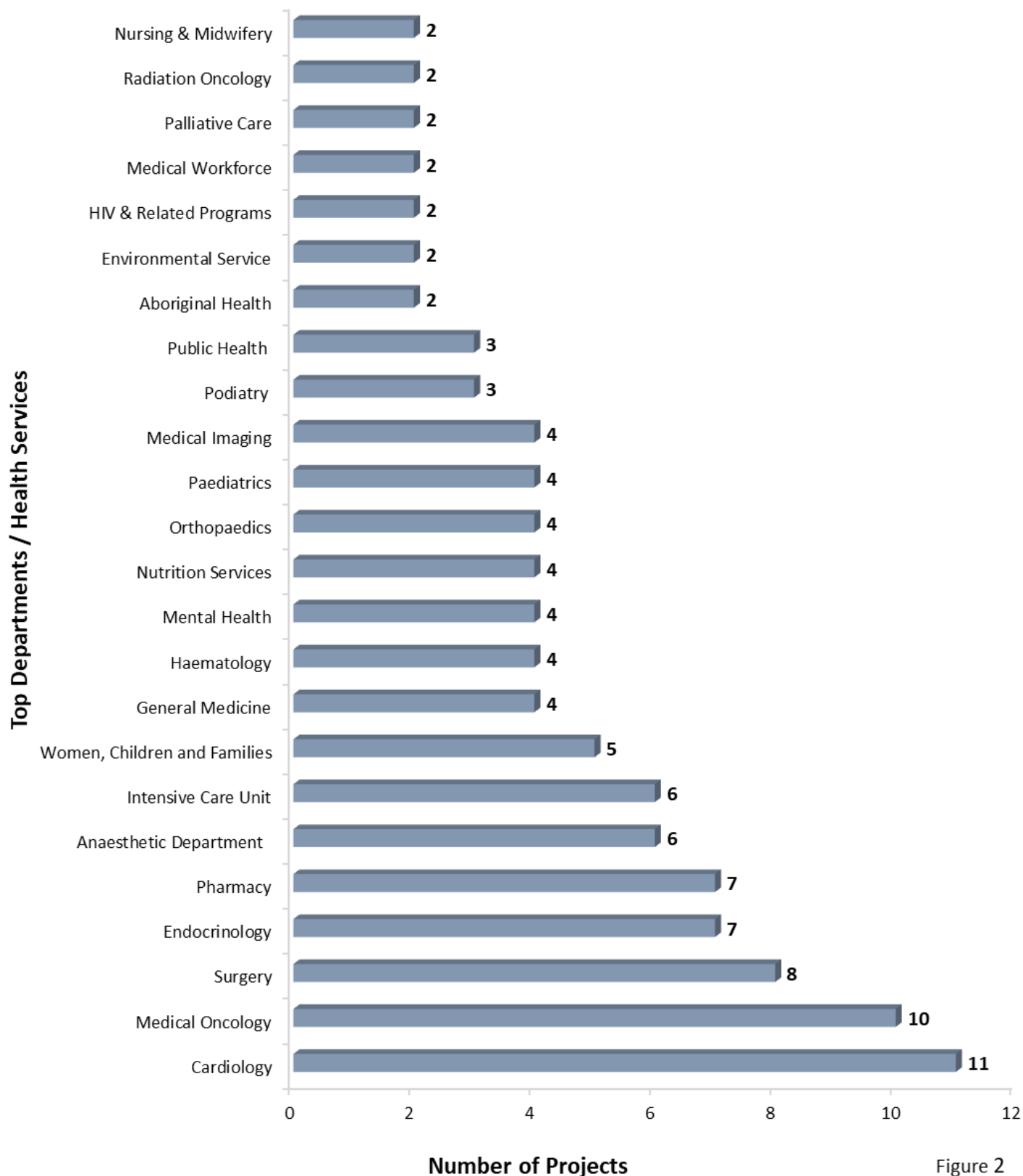


Figure 2

Clinical Drug Trials Submitted 2022 - 2023 (n=13)



Figure 3

Collaborative -Collaborative Group Funded (investigator-initiated)
Commercial -Commercially Sponsored

Number of Quality Improvement Projects 2018 - 2023 (n=248)

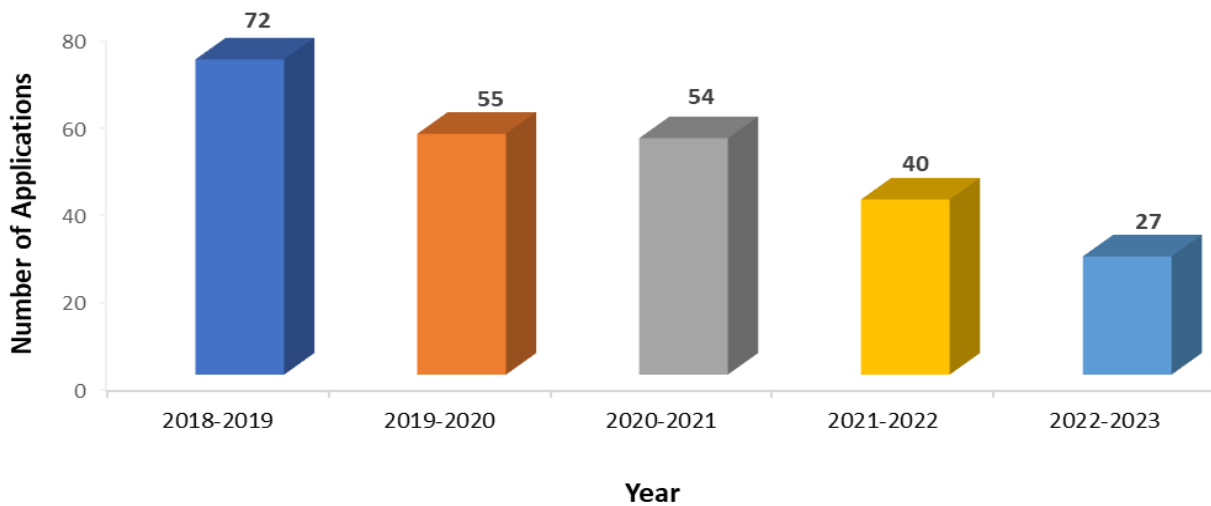


Figure 4

Research & Quality Improvement Applications Submitted 2022 - 2023 (n=123)

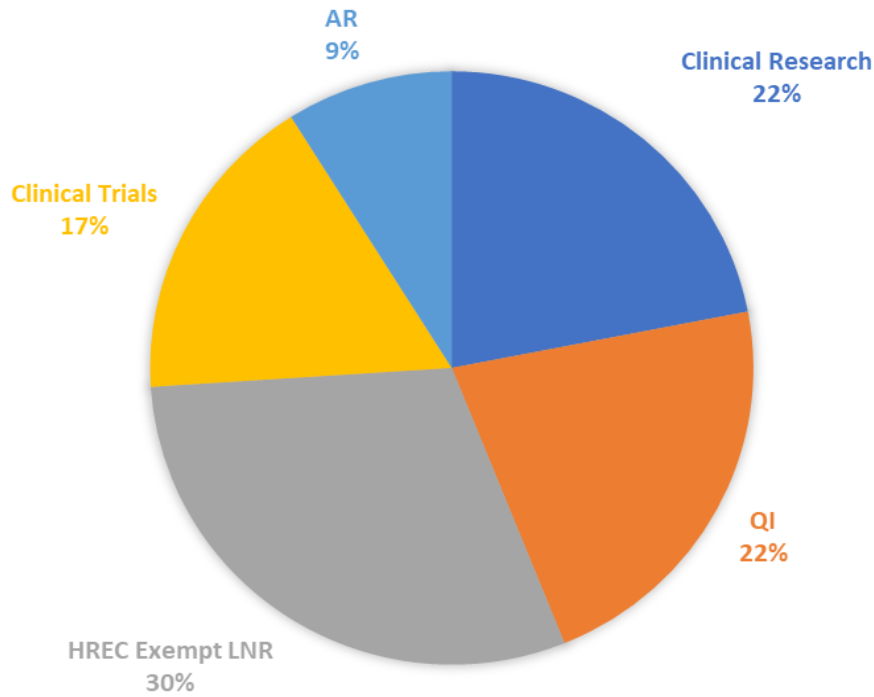


Figure 5

AR - Access Requests
HREC Exempt LNR - Human Research Ethics Committee Exempt Low/Negligible Risk research
QI - Quality Improvement projects

Research Activity

The following charts (Figures 6-8) reflect the distribution of research applications submitted to CCLHD over the past 5 years. The number of research project applications received in the past financial year (95 projects) has increased by 4% since the previous year when 91 projects were received (Figure 7).

The total distribution of all applications received between 2018 and 2023 (Figure 6) shows 40% of total applications submitted were categorised as Quality Improvement, 18.9% were Other Clinical Research Projects (not clinical trials), 14.4% Clinical Drug Trials, 13.3% ethics-approved Low/Negligible Risk (LNR) research, 7.7% Human Research Ethics Committee (HREC) Exempt LNR research, 5.6% Access Requests, and 0.2% Clinical Device Trials.

The number of QI applications submitted to the Research Office dropped to 27 compared to 40 last year (Figure 4); a 33% decrease. However, this is due to a change in the way that QI projects are registered with the District, with submissions now taking place via a QARS registry rather than an application form to the Research Office. This process change was developed in consultation between the

Healthcare Improvement Unit, Patient Safety & Accreditation and Research Office staff. This change means that not all projects will be tallied as reviewed by the Research Office unless there are potential ethical concerns or intention to publish or present the outcomes of the project. The number of QI projects entered into the new QI QARS Registry from December 2022 when it was launched until the end of June 2023 was 46, with 12 of these requiring review by a Research Governance Officer to check for ethical concerns and provide an acknowledgement letter to confirm that it is a QI project that doesn't require ethical review. A new QI Guide and QI/Research Decision Tool have been developed and published on the intranet to assist staff with their submissions and provide information about different QI methodologies.

The number of Clinical Trials has increased, with 17 applications for new clinical drug or device trials in this reporting period (Figure 8), compared to 14 last year (an increase of 21%), and 54% of these being commercially sponsored (Figure 3), up from 43% last year.

Research Publications: CCLHD Archive and Research E-library (CARE)

The CCLHD Archive and Research E-library (CARE) is an online collection of historical material and published research articles from the CCLHD. The historical archive holds material such as annual reports, photos, memorabilia and newspaper clippings illustrating the history of public health services on the Central Coast. The published research articles are by former and current CCLHD staff, and staff are encouraged to submit their publications to this repository via cclhd-libraries@health.nsw.gov.au.

By 30 June 2022, the Research Hub contained records for approximately 1185 published research articles (an 18% increase since the last reporting period). Full text is available where publisher terms and conditions allow or can be obtained on request from the CCLHD Library. A list of the publications added to CARE over this reporting period is included at the end of this report.

CARE is available to staff and members of the community to browse at: <http://elibrary.cclhd.health.nsw.gov.au/>. Items added to CARE are also added to the National Library of Australia's TROVE database (<https://trove.nla.gov.au/>), making them even more widely discoverable. When adding research publications to CARE, Library staff take the opportunity to encourage CCLHD researchers to apply for and use an [ORCID](#) digital identifier, a unique identifier that integrates into research workflows including grant applications and submission of articles for publication in scholarly journals. Staff are also encouraged to follow the CCLHD policy on correct citation of CCLHD affiliation outlined in the procedure [PR2016_023-Research Documentation Developed for External Publication](#).



Research & Quality Improvement Applications Submitted 2018 - 2023 (n=678)

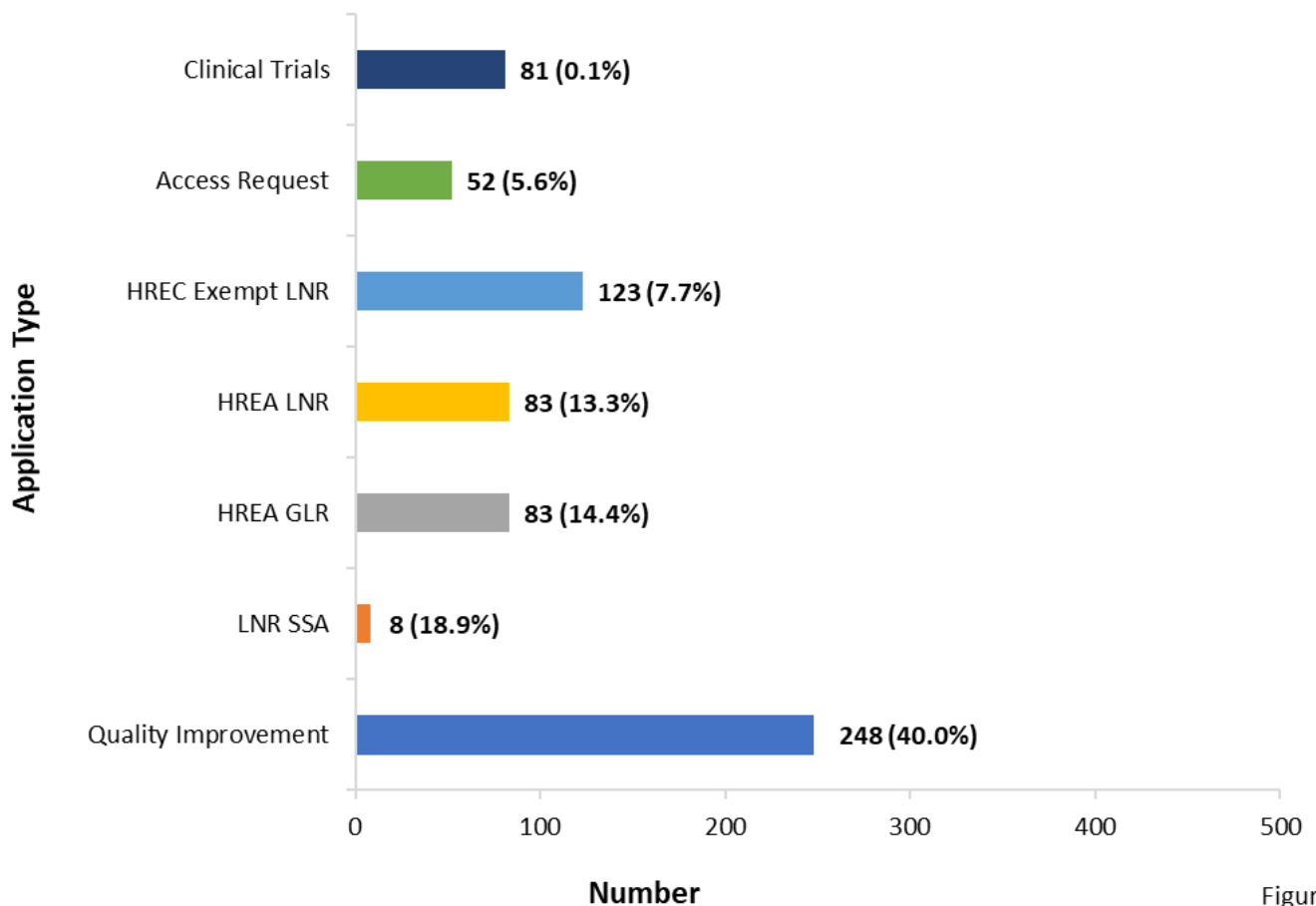


Figure 6

- HREC Exempt LNR -Human Research Ethics Committee Exempt Low/Negligible Risk research
- HREA GLR -Ethics approved (via Human Research Ethics Application) Greater than Low Risk research
- HREA LNR -Ethics approved (via Human Research Ethics Application) Low/Negligible Risk research
- LNR SSA -Low/Negligible Risk Site Specific Assessment

Number of Research Projects 2018 - 2023 (n=437)

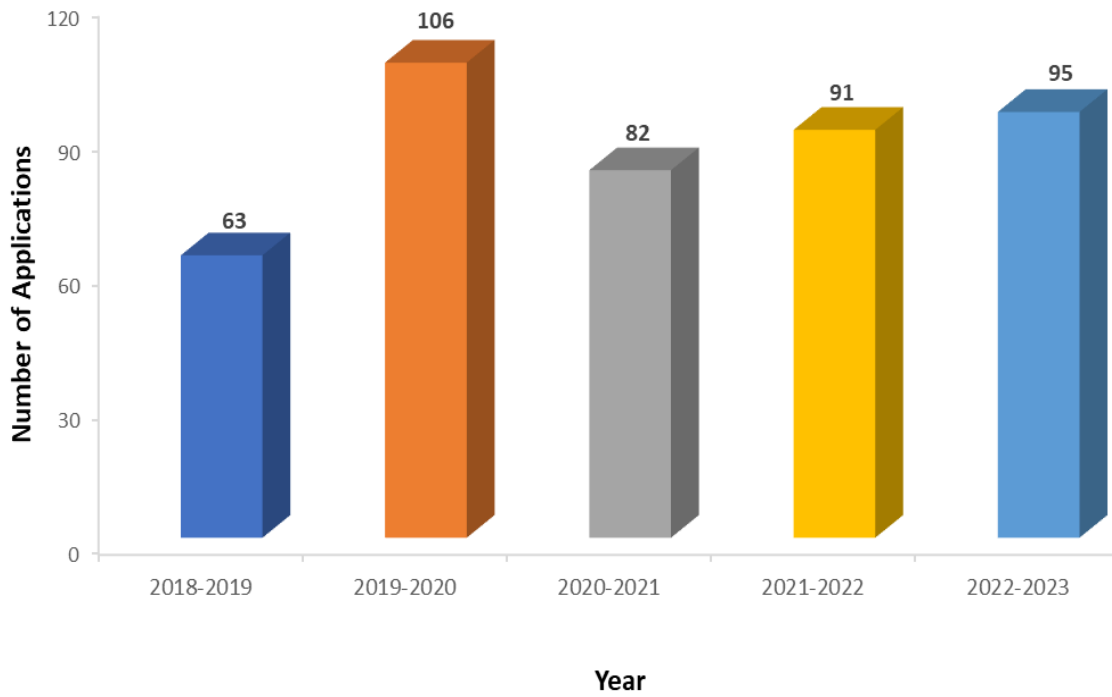


Figure 7

Number of Clinical Drug and Device Trials 2018 - 2023 (n=75)

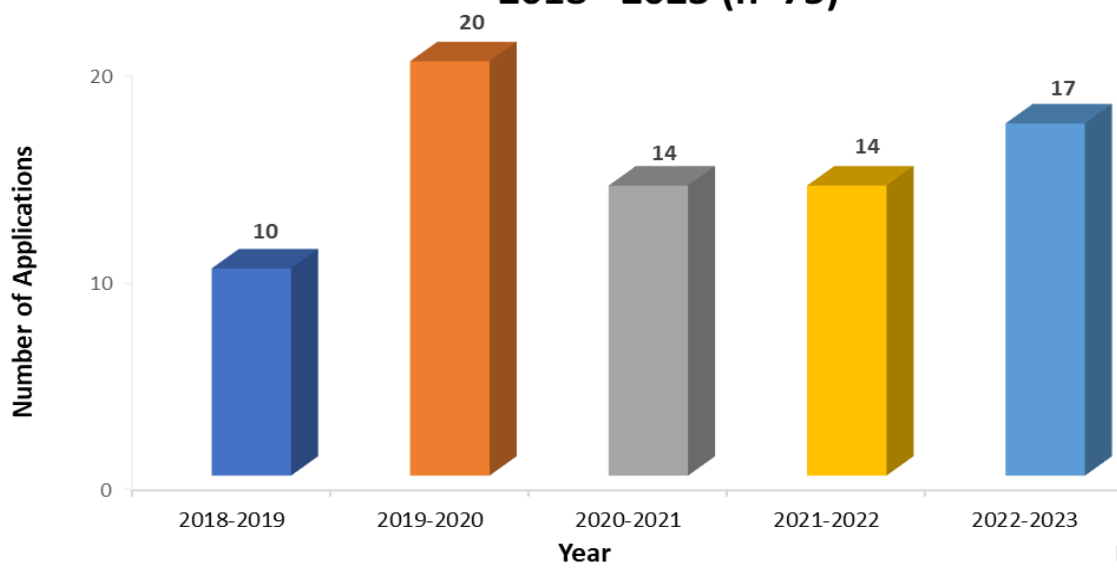
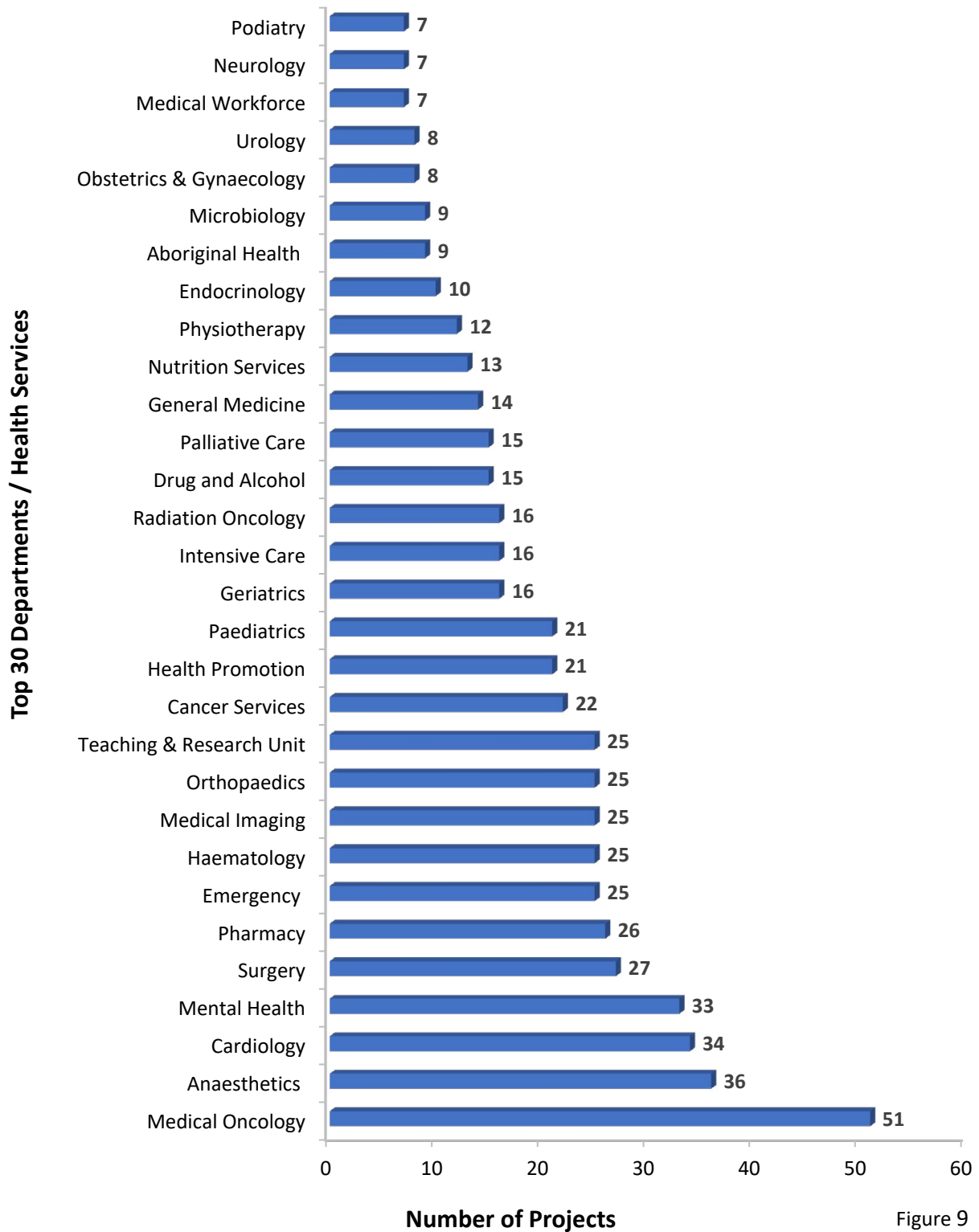


Figure 8

Distribution of Research & Quality Improvement Projects within CCLHD Top 30 Departments / Health Services 2018 - 2023 (n=578)



Research Finance

In the financial year 2022-2023, the total income for research was \$1,885,263 (up from \$1,588,778 last reporting period) and the total expenditure was \$2,016,071* (down from \$2,416,976 last year). The income for research grants is set out in the funding success categories in the next section.

The research expenditure included:

- \$417,708 for the Research Office of 4.0 FTE. Revenue generated by the office was \$34,988.
- \$75,653 in Government Research Grants, including temporary funding for 1.6 FTE staff for 3 months of the year and \$43,871 in Non-Government Grants.
- \$1,463,288 in Clinical Trial Cost Centres to conduct commercially sponsored research, including funding for 15.3 FTE staff from 5 clinical departments (up from 12.5 FTE last year).
- \$24,468 from Special Purpose and Trust Research accounts for the conduct of research projects where monies had been donated or grants/scholarships received specifically for the purpose of funding projects.

* The reason expenditure is higher than revenue is that the Research Office, a number of Research Grants and Clinical Trials have been allocated a budget from the CCLHD's total expenditure budget. This expenditure budget is funded from the Ministry of Health (MoH) subsidy payment to the CCLHD as a whole amount and then allocated out as budget (not revenue). The expenditure budget for 2022-23 was \$681,718, and the revenue budget allocated was \$313,234, being a variance of \$368,484.



CCLHD Researchers' Funding Success

Funding Awarded in a Previous Financial Year and Expended in the 2022 - 2023 Financial Year

NSW Health Round 2, Translational Research Grant Scheme (TRGS) - \$975,212

CCLHD Year 1 (2017 - 2018 Financial Year) Expenditure - \$303,795

CCLHD Year 2 (2018 - 2019 Financial Year) Expenditure - \$182,761

CCLHD Year 3 (2019 - 2020 Financial Year) Expenditure - \$366,246

CCLHD Year 4 (2020 - 2021 Financial Year) Expenditure - \$67,004

CCLHD Year 5 (2021 - 2022 Financial Year) Expenditure - \$9,344

CCLHD Year 6 (2022 - 2023 Financial Year) Expenditure - (\$240)

Project title: *Thirsty? Choose Water! Behavioural Interventions and Water Stations in secondary schools.*

Chief Investigator: Niki Kajons - Health Promotion

Site Investigators: Peter Lewis and Colleen Gately - Public Health; Justine Gowland-Ella, Jane Whatnall, Wendy Harris and Samantha Batchelor - Health Promotion; Michael David - University of Newcastle

Summary: Childhood overweight and obesity is a significant public health issue. A key contributing factor is sugar sweetened beverages (SSBs) consumption. Promoting increased water consumption and provision of chilled water stations can reduce SSBs consumption. This project is assessing whether a behavioural intervention and chilled water stations, alone or combined, increase water consumption and effect changes in students' knowledge, attitudes or consumption of SSBs in year 7 secondary school students.

Medical Research Future Fund (MRFF) Rapid Applied Research Translation (RART) Grant, NSW Regional Health Partners - \$352,350

CCLHD Year 1 (2019 - 2020 Financial Year) Expenditure - \$239,256

CCLHD Year 2 (2020 - 2021 Financial Year) Expenditure - \$75,310

CCLHD Year 3 (2021 - 2022 Financial Year) Expenditure - \$2,134

CCLHD Year 4 (2022 - 2023 Financial Year) Expenditure - \$0

Project title: *Thirsty? Choose Water! Behavioural Interventions and Water Stations in secondary schools.*

Chief Investigator: Niki Kajons - Health Promotion

Site Investigators: Peter Lewis and Colleen Gately - Public Health; Justine Gowland-Ella, Jane Whatnall, Wendy Harris and Samantha Batchelor - Health Promotion; Michael David - University of Newcastle

Summary: This project, initially funded through NSW Health TRGS, received additional funding from MRFF to expand the program into rural high schools in the Hunter New England LHD and Mid North Coast LHD. The project was expanded to assess the ability to deliver the program effectively in rural settings and to examine the behavioural outcomes in rural students, compared to the initial regional schools. The project is assessing the scalability of the intervention in different settings.

Medical Research Future Fund (MRFF) Rapid Applied Research Translation (RART) Grant – Palliative Care, NSW Regional Health Partners - \$300,000

CCLHD Year 1 (2020 -2021 Financial Year) Expenditure - \$24,015

CCLHD Year 2 (2021 -2022 Financial Year) Expenditure - \$221,848

CCLHD Year 3 (2022 – 2023 Financial Year) Expenditure - \$54,137

Project title: *Enabling Better Care at the End of Life for the Central Coast Community*

Chief Investigator: Nick Goodwin – CCRI

Summary: This research seeks to support clinicians and managers working in palliative and end of life care the opportunity to grow their research knowledge and skills. It seeks to support the continued development of the CCLHD’s long-term strategy for the implementation of palliative and end of life care to the Central Coast community. The approach included a series of skills building workshops followed by a priority-driven research phase in which 3 separate projects have been investigating the end of life journey for people with dementia and the experience of people in emergency departments at the end of life. The research is in collaboration with the University of Newcastle and HMRI.



Innovations in Cancer Control Grants, Cancer Institute - \$75,000

CCLHD Year 1 (2019 - 2020 Financial Year) Expenditure - \$2,417

CCLHD Year 2 (2020 - 2021 Financial Year) Expenditure - \$4,331

CCLHD Year 3 (2021 - 2022 Financial Year) Expenditure - \$874

CCLHD Year 4 (2022 - 2023 Financial Year) Expenditure – \$0

Project title: *Clinical Variation Rectal Cancer*

Chief Investigator: Melanie Cook/ Matt Sproats - Cancer Services

Summary: The project is investigating the proportion of rectal cancer patients who are referred for consideration of neo adjuvant therapy within the Central Coast Local Health District (CCLHD), as well as reviewing current practice guidelines and the role of the colorectal Multi-Disciplinary Team (MDT) meeting in the management of rectal cancer.

CCLHD Caring for our Future Research Grant 2019 - \$20,000

CCLHD Year 1 (2020 - 2021 Financial Year) Expenditure – \$5,520

CCLHD Year 2 (2021 - 2022 Financial Year) Expenditure - \$3,425

CCLHD Year 3 (2022 – 2023 Financial Year) Expenditure - \$380

Project title: *Women’s Health Project: Bringing Family Planning and Drug and Alcohol Services Together on the Central Coast*

Chief Investigator: Vicki Chase - Drug and Alcohol Service

Associate Investigator: Kelly McNamara

Summary: The project is evaluating the effectiveness of providing contraception services within a Drug and Alcohol Service.

Innovations in Cancer Control Grants, Cancer Institute - \$64,769

CCLHD Year 1 (2019 - 2020 Financial Year) Expenditure – \$1,934

CCLHD Year 2 (2020 - 2021 Financial Year) Expenditure - \$0

CCLHD Year 3 (2021 - 2022 Financial Year) Expenditure - \$27,410

CCLHD Year 4 (2022 – 2023 Financial Year) Expenditure – \$0

Project title: *Head and Neck Cancer Survivorship on the Central Coast*

Chief Investigator: Craig Kukard - Cancer Services

Summary: This project is addressing the management needs of Central Coast residents who are survivors of head and neck cancer by formalising post treatment care pathways through electronic documentation and making it accessible to all relevant providers.

CCLHD Caring for Our Future Research Grant 2018 - \$20,000

CCLHD Year 1 (2021 - 2022 Financial Year) Expenditure - \$9,961

CCLHD Year 2 (2022 – 2023 Financial Year) Expenditure - \$3,158

Project title: *Pets are family too: Integrating the human-animal bond into patient-centred care*

Chief Investigators: Cheryl Travers – Public Health Unit, Tia Covi – Carer Support, Andrew Dixon – Public Health Unit, Tiyaana Gostelow – Mental Health Unit, Ann-Margaret Withers - RSPCA

Associate Investigators: Kami Dibden – Volunteers Department, Sandra Ma – RSPCA Community, Kersti Seksel – Sydney Animal Behaviour Service, Alison Read – Neurology

Summary: This project trialled a process to integrate the human-animal bond into patient-centred care for patients who are in institutional care for an extended length of stay. This involved identifying the needs of pet-owning patients in relation to their pets, identifying carers, and trialling ways to meet the needs of patients and facilitating personal pet visits. The process included pet visits to the hospital, helping with pet care plans, and education sessions for staff regarding the human-animal bond.

CCLHD Caring for our Future Research Grant 2019 - \$12,000

CCLHD Caring for our Future Emerging Researcher Grant 2019 - \$4,000

CCLHD Year 1 (2021 - 2022 Financial Year) Expenditure - \$0

CCLHD Year 2 (2022 – 2023 Financial Year) Expenditure - \$5,252

Project title: *Evaluation of Clinical Procedure Videos*

Chief Investigators: Jacqueline Colgan – Critical Care, Cardiac Services, Kim Miles - Education and Training Services

Summary: This project is assessing if clinical procedure videos increase self-efficacy among acute cardiology care nurses who assist with low volume high risk procedures, compared to traditional paper based procedures.

CCLHD Caring for our Future Research Grant 2019 - \$18,468

CCLHD Year 1 (2022 – 2023 Financial Year) Expenditure - \$18,468

Project title: *Integrating a Clinical Pharmacy Review into a Diabetes Outpatient Clinic to improve Medication Management*

Chief Investigators: Linzi Robson, Jessica Hagan - Pharmacy

Summary: The project is evaluating the impact of the role of a Clinical Pharmacist in a High Risk Foot Clinic.

CCLHD Caring for our Future Research Grant 2021 - \$19,955

CCLHD Year 1 (2022 – 2023 Financial Year) Expenditure - \$837

Project title: *Evaluation of a Community-Based Multidisciplinary Clinic for People Living with Motor Neurone Disease*

Chief Investigators: Anna Schutz -Neurology, Karen Hutchinson –Australian Institute of Health Innovation, Macquarie University

Summary: The project is evaluating the role and impact of the specialist motor neurone disease (MND) multidisciplinary clinics in addressing the complex needs of all people living with MND and their families on the Central Coast.

Funding Awarded in the 2021 - 2022 Financial Year for expenditure in the 2023 – 2024 Financial Year

CCLHD Caring for our Future Research Grant 2021 - \$20,000

Project title: *Self-administration of Chemotherapy for Patients with Myeloma*

Chief Investigators: Jacqueline Jagger –Cancer Services and Nursing, Michael Swab -Pharmacy

Summary: The project introduces a new model of care for eligible myeloma patients which would enable them to self-administer chemotherapy at home.

CCLHD Caring for our Future Research Grant 2021 - \$20,000

Project title: *Evaluation of a New Model of Integrated Wound Management*

Chief Investigators: Jonathan Brinton, Anne Purcell –Community Nursing

Summary: The project evaluates the effectiveness of the Specialist Wound Centre (SWC) model of care.

CCLHD Caring for our Future Research Grant 2021 - \$7,600

Project title: *Empirical Antibiotic Use in Suspected Viral Respiratory Infections: Influenza vs SARS-CoV-2*

Chief Investigators: Sim Galimam, Nicole Cerruto -Pharmacy

Summary: The project aims to analyse and evaluate for changes in patterns of antimicrobial prescribing for patients in the CCLHD with suspected viral respiratory illness before and after the introduction of the SARS-CoV-2 virus. It also aims to formulate guidelines and processes to optimize antimicrobial use during respiratory illness outbreaks.

CCLHD Caring for our Future Research Grant 2021 - \$20,000

Project title: *Culturally Appropriate Anxiety and Depression Health Screening Tool for First Nations Women*

Chief Investigator: Lynelle Hill –Women, Children & Families

Summary: The project is aiming to improve mental health screening for First Nations pregnant women and mothers of children 0-6 years on the Central Coast.

CCLHD Caring for our Future Research Grant 2021 - \$19,450

Project title: *Aligning Research with Practice in the CCLHD High Risk Foot and Podiatry Services*

Chief Investigators: Clare Linton, Vivienne Chuter, Sean Sadler –Podiatry (CCLHD and UON)

Summary: The project aims to develop a co-designed implementation plan to help adopt new Australian guidelines for diabetes related foot disease (DFD) in the CCLHD Podiatry Department and Interdisciplinary High Risk Foot Services. The research aims to address high rates of hospitalisations, ulcers and amputations from DFD.

CCLHD Caring for our Future Research Grant 2021 - \$20,000

Project title: *Healthcare Workers Surge Capacity in Natural Disasters*

Chief Investigators: Cheryl Travers, Andrew Dixon –Public Health Unit

Summary: The project is designed to explore the factors that affect healthcare workers' ability and willingness to work during natural disasters and extreme weather events.

Funding Awarded in the 2022 - 2023 Financial Year for expenditure in the 2023 – 2024 Financial Year

NSWRHP Regional Cancer Research Network: Shovel-Ready Project Grant 2023 - \$40,199

Project title: *SLAM-B: Self-administration of Bortezomib for patients with myeloma: A pilot study*

Chief Investigators: Jacqueline Jagger –Cancer Services and Nursing, Michael Swab -Pharmacy

Summary: The project introduces a new model of care for eligible myeloma patients which would enable them to self-administer chemotherapy at home.

Central Coast Research Institute

The Central Coast Research Institute for Integrated Care (CCRI), the joint venture between the University of Newcastle and the CCLHD that was established in March 2020, enjoyed a sustained year of growth. Over its first three years the CCRI has completed 12 collaborative research projects with another 17 projects in progress at the end of June 2023.

CCRI Research in Numbers, period to end June 2023

\$7.08m total value of grants with CCRI

12 completed projects

17 'in progress' projects

36 journal publications, **17** reports, **3** book chapters, **1** book

109 conference presentations

The year brought to conclusion the CCRI's first long-term research project – *Enabling Better Care at the End of Life for the Central Coast Community*. Funded by a \$300,000 grant from the NSW Regional Health Partners' MRFF Rapid Applied Research Translation scheme, the project supported a research co-design phase in which a series of workshops with consumers and care professionals determined the priority needs in palliative and end of life care services. Two clinically-led mixed-methods research projects were then initiated focusing on people and carers living with dementia at the end of life (Principal Investigators (PIs): Dr Sally Carr and Daneill Davis), and experiences of people accessing emergency care at the end of life (PIs: Dr Tom Osborne and Associate Professor Sarah Jeong). A third project undertook a rapid review of the evidence to establish the components necessary for an effective model of care for people living with dementia at the end of life (PIs: Dr Suzanne Lewis and Professor Nick Goodwin).

Of particular importance to the outcomes from this research has been the self-reported ability it has had in building capacity and experience amongst our clinicians to go through the full experience of designing, implementation and leadership of a research program. Moreover, the work has led to discussion of strategic changes within the CCLHD in how care may be better coordinated around people's needs, and initiated a co-design project with consumers, carers, professionals, academics and aged care providers to work through how a new integrated care model for palliative and dementia care might be designed and implemented. The project has been named as a finalist in Research and Innovation in the Caring for the Coast Awards 2023, a testament to the enthusiasm and commitment of the research team and the ability to translate its results into benefit to our

community.

Perhaps the centrepiece initiative for the CCRI year has been the All Inclusive Care for Older People (ALICE) co-design project. Supported by a broad consortium of Central Coast stakeholders – including the CCLHD, Hunter New England Central Coast Primary Health Network (HNECCPHN), Central Coast Council and the Department for Regional New South Wales – ALICE has co-developed a neighbourhood-based model of integrated community care through a co-design process with health and aged care professionals and service providers, including community consultations, a joint strategic needs assessment outlining the needs of older across the Coast, and the development of an evidence resource pack.

The ALICE project has emerged with an evidence-based and co-designed care model combining intensive care co-ordination of health and aged care to older people with complex needs in the home environment with community-embedded capabilities that enhance access to low-acuity care, build social connectedness and promote healthy place-making. The project will provide a benefits realisation model, supported by HMRI, which gives an understanding of the cost-effectiveness of such an approach in addition to the expected benefits to older people and their carers.

Another key research initiative for the CCRI has been its involvement in the \$2.5m NHMRC Centre of Research Excellence on Health and Social Care Integration (CREHSCI) led by the University of Sydney. The CCRI's role in this is to help support knowledge generation and dissemination through leading the Australia-wide collaborative hub of the International Foundation for Integrated Care. Key initiatives will include the hosting of an international summer school at Gosford on 10-11 November 2023 and co-hosting the 3rd Asia-Pacific Conference on Integrated Care in Sydney on 13-15 November 2023, where CCRI's Director, Professor Nick Goodwin, is acting as Chair of the Scientific Committee. As the CREHSCI research program progresses, the CCRI seeks to create a work plan that will include conducting evidence reviews – through the CCRI's Integrated Care Evidence Service – webinars, workshops, special interest groups, and other activities.

In early 2023, CCRI became the host to the development of the CCLHD and University of Newcastle's Central Coast Health and Wellbeing Living Lab, a \$1.5m initiative funded by the Greater Cities Commission. The Living Lab is a tried and tested open innovation methodology that uses participatory action-based research, development, and deployment of solutions to health care problems – in this case, for active and healthy ageing.

Over the next two years, the Living Lab will seek to incubate digital innovation that supports community connectivity to reduce social isolation and loneliness; support self-care in the home; promote healthy and active ageing; and enable the use of home-based technology that promotes, preserves and restores capacity for independent and dignified living. In May

2023 the CCRI launched a sister initiative-Healthy@Home-in partnership with the NSW Smart Sensor Network and the University of Newcastle's Australian Research Council (ARC) Connected Sensors for Health. Its purpose is to test out the useability and impact of sensor-based technologies in the homes of older people to support ageing in place.

During the year the CCRI also became a partner with Hunter New England LHD in leading HMRI's Healthcare Transformation Research Program. The \$450,000 three-year program seeks to encourage capacity building and research partnerships that examine how trans-disciplinary and translational research projects can lead to transformative outcomes in people's health and wellbeing. Small grant funding through the scheme was awarded to the palliative and dementia care co-design project (described above), and a community of practice established to help build a network of researchers and professionals keen to pursue such research.

The year has also welcomed a number of higher degree students working with the CCRI. This has included Annefrans van Ede's internship from the University Leiden, Netherlands, examining the maturity of the Central Coast in managing population health-based programs like ALICE. The CCRI also welcomed two new PhD students: Cate Dingelstad from HNECCPHN working on the ALICE project and focusing on methods and impact of co-design, co-creation and co-development of integrated care solutions; and Tabitha Jones from

the University of Sydney supporting an interrogation of Australian health and care policy towards care integration as part of her work supporting the CREHSCI team.

In the coming year, the CCRI has committed to working with the CCLHD in developing a 'Central Coast Research Group' as well as enact its CCRI Affiliate Scheme. In both cases, a key objective is to increase the numbers of clinical academics and researchers active in working with CCRI, activate the CCRI's state-of-the-art research facilities, and support capability building in translational research and integrated care. Operational objectives include growing, and gaining, higher-value grant funded studies; continuing to build vibrant research collaborations; and engaging effectively with community members to address their priority needs. The ongoing work of the CCRI can be viewed at its website - www.ccri.asn.au - and can be followed on social media through Twitter @CCRIGosford and LinkedIn.



CCRI team (left to right): Prof Nick Goodwin, Dr Suzanne Lewis and Dr Zoi Triandafilidis

Research Highlights

CCLHD Caring for the Coast Awards 2022 – Excellence in Research Award

Winner of the Research and Innovation Award:

SLAM-B: Self-administration of Bortezomib for patients with myeloma: A pilot study.

This study aims to evaluate the feasibility of individuals with Multiple Myeloma (MM), an incurable blood cancer, being taught to self-administer one of the treatments for delivery at home, therefore reducing frequency of hospital visits, time and costs associated with travel, and potentially reduce health costs. Currently this treatment is administered at specialist cancer day units requiring patients to travel to the units for weekly or twice weekly injections for months or years. An evidence-based education resource for MM patients has been developed and individual nurse assessment and support is provided through telehealth. All aspects related to safe administration of the drug are being examined, as well as acceptability of this approach for the individual, carers and staff.

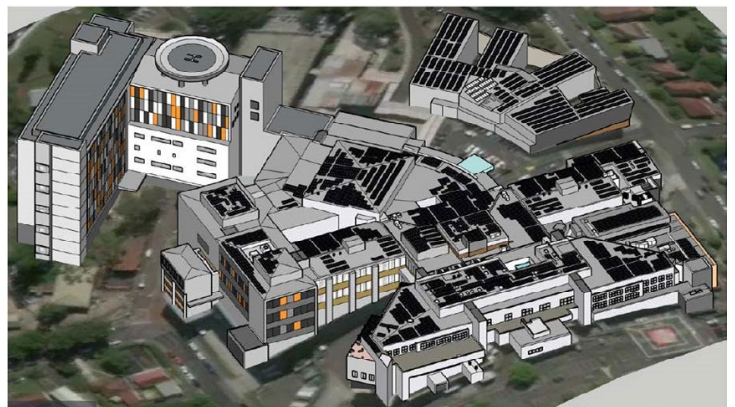


Finalists for the Research and Innovation Award:

- *The Specialist Wound Centre: A new model of integrated wound management.*



- *Large Scale Solar Panel Project and Electric Fleet Car Establishment - Gosford Hospital.*



2022 CCLHD Research and Innovation Symposium

It was an exciting year for the Research Office with the CCLHD Research and Innovation Symposium being held after several postponements due to COVID-19. This event began with two days of Pre-Symposium Workshops in the Central Coast Clinical School and Research Institute building on 29-30 November 2022. These well-received workshops were on various topics including grant development, qualitative research methods, biostatistics, literature review and quality improvement. The Symposium on 1 December 2022 was a success with over 50 presentations, including 26 oral presentations, 18 lightning talks and nine posters. Approximately 80 people attended across the day.

Attendees at the Symposium's plenary session, 'Translating Research into Policy and Practice', heard from three speakers who are leaders in their fields:

- Professor Alison Hutton (University of Newcastle and CCLHD Honorary Conjoint Scholar) - youth health and safety;
- Professor Brett Mitchell (Avondale University and CCLHD Honorary Conjoint Scholar) - infection control;
- Associate Professor Donna Hartz (University of Newcastle) - midwifery, with a focus on First Nations women.

Prizes for best presentations at the Symposium were awarded at the end of the day to:

- Dr Karen Hutchinson (CCLHD Honorary Conjoint Scholar, Macquarie University) for best oral presentation: 'Evaluation of an implemented integrated multidisciplinary clinic for people living with motor neurone disease on the Central Coast';
- Maham Amin (Clinical Nurse Consultant (CNC), Infection, Prevention & Control) for best lightning talk: 'Patient perspectives of healthcare associated infection: "You don't know what impacts it will have on your life" + Case study';
- Dr Suzanne Lewis (Manager, Library Services) for best poster: 'A rapid review of models of care for people with dementia at the end of life'.

Presentation of the **CCLHD Research Awards for 2022** took place at the Research Symposium, with awards being presented by Emeritus Professor Maree Gleeson OAM. The inaugural recipient of the Maree Gleeson Award for Excellence in Research was Dr Jennie King (Nurse Manager (NM) Research), and the Emerging Researcher Award was presented to Jacqueline Jagger (Nurse Practitioner, Haematology). Their SLAM-B project, 'Self-administration of Bortezomib for patients with myeloma: A pilot study', also won the Research and Innovation Award at the District's 2022 Caring for the Coast Awards.



2022
RESEARCH & INNOVATION SYMPOSIUM
CENTRAL COAST LOCAL HEALTH DISTRICT
in partnership with **CCRI** Central Coast Research Institute for Integrated Care



Associate Professor Donna Hartz



Dr Jennie King, Prof Maree Gleeson and Jacqueline Jagger

Research Leaders – New Honorary Conjoint Scholar

The CCLHD Honorary Conjoint Scholar program began in June 2020, with the appointment of Professor Brett Mitchell and Dr Robyn Rosina (now retired) as the District's inaugural Honorary Conjoint Scholars. These appointments are sponsored by the District Director of Nursing and Midwifery and endorsed by the District Director Quality, Strategy and Improvement on behalf of the Board Research Committee.

Professor Alison Hutton is the Assistant Dean International in the School of Nursing and Midwifery at the University of Newcastle.

Professor Alison Hutton's work is influencing the way large-scale events operate worldwide, helping to create safer and more supportive environments for young people. Professor Alison Hutton is passionate about youth health and safety. Backed by the likes of the World Health Organization (WHO), her work in Australia and worldwide is leading to innovative new ways of supporting young people at social events such as Schoolies, outdoor music festivals and sporting tournaments.

"My work revolves around understanding what aspects of health are important to young people. We can then instigate supportive strategies for youth at events, such as dry zones, on-site first aid, free water and pastoral care to help young people party safely."

Outdoor events are a common coming-of-age activity for youth. Musical festivals and Schoolies are some of the biggest mass gatherings of people in Australia. And yet, these types of events can also present serious challenges and dangers. When it comes to formulating solutions, Alison asserts that context-based health strategies are more effective than telling teenagers to "just say no" to harmful behaviours. Practical forms of help and encouragement – such as dry zones at music festivals – give teenagers greater support while navigating high-risk situations. Alison's work also taps into the unique potential of events to deliver critical health information to large groups.

Large-scale events can bring hundreds, even thousands of young people together in one space. This provides a valuable platform for engaging with young people and listening to their experiences – as well as delivering information and support in a way that they may be more likely to access.

Alison's work has been implemented with great success at events worldwide, including World Cup soccer matches and music festivals in Sweden, Canada and the Czech Republic. Alison is also busy creating safer spaces for youth here in Australia. Among her most recent projects includes a collaboration with the Kurri Kurri Youth Health Service to help mitigate youth drug use in the lower Hunter. In both her research and teaching roles, Professor Hutton is committed to advocating for youth by listening to their challenges, providing tailored support and valuing their perspectives.

Professor Hutton's appointment at the District as an Honorary Conjoint Scholar will enable:

- Further support of local nursing and midwifery research and quality improvement at the District;
- Enhanced collaboration between nursing and midwifery academic staff at the University of Newcastle and clinicians in the District;
- Support for a career pathway for nurses and midwives within the District;
- Provision of mentorship and high-level professional development support around research; and
- Utilisation of the expertise of the Professor of Nursing.



Honorary Conjoint Scholars – Annual Activity Reports

Dr Karen Hutchinson is a research fellow at the Australian Institute of Health Innovation (AIHI), Centre of Healthcare Resilience and Implementation Science at Macquarie University, as well as a practicing physiotherapist.

Dr Hutchinson is co-leading the implementation evaluation of a multidisciplinary motor neurone disease (MND) clinic on the Central Coast, funded by a CCLHD Caring for our Future Research Grant, working in collaboration with Central Coast Research Institute (CCRI) and CCLHD. Dr Hutchinson has presented findings on the implementation evaluation of the MND multidisciplinary clinic (MDC) on the Central Coast and rapid review on integrated models of care in MND, with 4 abstracts being accepted for three conferences, including one international conference. She was an invited speaker at the Motor Neurone Disease NSW Special Interest Group Embracing Change Workshop in August 2022, and she won the best oral presentation award at the CCLHD Research and Innovation Symposium in December 2022.

In addition, Dr Hutchinson's CCLHD Honorary Conjoint Scholar position has been promoted through; presentation on Motor Neurone Disease Health Care Research Australia, at the Inaugural MND Clinical Research Learning Institute run by MND Research Australia and Fight MND, on the 12th November 2022; as an active member of the Australian MND Clinical Care Collective and through attendance at a 2-day workshop in Melbourne with health care professionals, researchers, people living with MND and carers; and as a collaborator on a paper accepted for publication on 'The complexity of multidisciplinary respiratory care in Amyotrophic Lateral Sclerosis' with the European Respiratory Society –Breath.

More locally, Dr Hutchinson attended and presented at the '2023 CCLHD Research Networking –Meet Our Research Experts' morning on the 20th May 2023. She participated in CCRI Affiliate Scheme Co-design process with Dr Zoi Triandafilidis from CCRI and regularly attends the CCRI Priority-Driven Research meetings. Dr Hutchinson has led a stakeholder advisory group to advise and guide MND MDC research at CCLHD and help raise awareness on the needs of people living with MND on the Central Coast. Dr Hutchinson is also supporting knowledge and information sharing and network building in implementation science and practice through linking CCLHD and CCRI networks to the Implementation Science Interest Group, run through the AIHI with Australia wide attendance.



Dr Sean Sadler is a practising clinical Podiatrist, Lecturer in the Discipline of Podiatry at Western Sydney University, and an Accreditation Assessor for the Australian Health Practitioners Regulation Agency, Podiatry Accreditation Committee. Dr Sadler also holds an Honorary Associate Lecturer position at the University of Newcastle.



Dr Sadler's Honorary Conjoint Scholar role with the CCLHD is currently focused on two research projects. The first is titled 'An evaluation of hospital-based high-risk foot services'. This study aims to investigate the care provided to patients by health professionals in the high-risk foot service across a number of hospitals through the CCLHD and HNELHD. The second project is titled 'The reliability of lower limb vascular measures and their role in predicting diabetes-related foot ulcer healing outcomes'. This study aims to investigate the reliability of measures of lower limb blood flow and determine if these measures are able to predict if a diabetes-related ulcer will heal.

Associate Professor Allison Cummins is the Head of Midwifery at the University of Newcastle, situated in the Central Coast Clinical School, and a Conjoint Scholar with the CCLHD. Associate Professor Cummins is a recognised National and International Midwifery leader. Her current research has a focus on scaling up midwifery models of care so all women can access the evidence informed model of care. Her most recent projects have measured birth outcomes for women with anxiety and depression who receive midwifery continuity of care. She has conducted two cohort studies in two of the largest health districts in NSW. The findings from this research demonstrate an association of reduced rates of preterm birth, reduced rates of adverse neonatal outcomes and increased rates of breastfeeding. These findings are important as women with anxiety and depression are more likely to have a baby born preterm. Building on this work Associate Professor Cummins has recently applied for a National Health and Medical Research Council partnership grant of which the CCLHD is a partnering health facility. Other research that has been undertaken with the support of the District includes Transitioning New Graduate Midwives to work in Midwifery Continuity of



Care models and mentoring a Doctor of Philosophy Student to conduct peer support groups combined with a mindfulness app for women with anxiety and depression. The peer support groups will be conducted with women from the CCLHD.

Associate Professor Cummins with the support from the Acting Director for Women, Children and Families, Lynelle Hill and Clinical Midwifery Educator Janelle Graney has set up a midwifery student led antenatal clinic in the Central Coast Clinical School, University of Newcastle consulting rooms. The clinics run every Monday and there are plans to evaluate both student learning and women's experiences from this initiative.

The latest collaborative work within the District is implementing Homebirth. Associate Professor Cummins is part of the steering committee and looks forward to evaluating the homebirth program once established.

Professor Brett Mitchell is a Professor of Health Services Research and Nursing at Avondale University, an Honorary Professor with UON, and an internationally recognised researcher in the area of infection prevention and control.

Professor Mitchell's research includes various projects at CCLHD:

1. Patient perspectives of healthcare associated infection: to generate a theoretical explanation of the main concerns of patients affected by different types of healthcare associated infection and how those patients act to resolve their concerns in the short and longer-term (at Gosford and Woy Woy Hospitals, in collaboration with the Infection, Prevention & Control (IPAC) team).
2. The effect of COVID-19 on healthcare associated infections: to measure if there has been any effect on healthcare associated infection rates as a result of the increased infection prevention awareness brought about by COVID-19 (at Gosford and Woy Woy Hospitals, in collaboration with the IPAC).
3. The CLEAning and Enhanced disinfection (**CLEEN**) study: a randomised controlled trial investigating the effect of improving the cleaning and disinfection of shared medical equipment on healthcare-associated infections: (a collaborative project at Gosford Hospital, includes 10 wards and ICU involving several CCLHD staff; commenced April 2023).

Professor Mitchell has been the recipient of multiple grants in the past year, including a Medical Research Futures Fund (MRFF) Clinician Researcher grant valued at \$1,493,004 for work on 'Preventing Hospital Acquired Pneumonia', and a NHMRC (National Health & Medical Research Council) grant valued at \$1,475,000 for a project 'Building evidence for strategies to prevent healthcare acquired infections'.

Professor Mitchell is a member of the CCLHD Nursing and Midwifery Research Advisory Group, and continues to support CCLHD nursing staff with developing their research projects and provides mentorship for the IPAC team.



Associate Professor Sarah Yeun-Sim Jeong is a Gerontological Nurse Specialist, Senior Analyst at NSW Ministry of Health (Research & Evaluation, Centre for Population Health) and Adjunct Associate Professor at the University of Sydney (School of Nursing).

Associate Professor Jeong has established her research expertise in social, ethical, and political issues pertaining to care for older people, especially related to Advance Care Planning, Palliative Care, End-of-life care, Dementia care, and Healthy Ageing across lifespan. In the past year Associate Professor Jeong has actively participated and contributed to several research projects including 'Improving the end-of-life care journey for people with dementia and their carers'; 'Improving the experience of Central Coast residents and carers who access emergency care towards the end of life'; 'Models of care to support people with dementia at the end of life'; and 'Co-Designing an Integrated Model of Palliative and Dementia Care' (a collaborative project between CCLHD, CCRI and HammondCare).



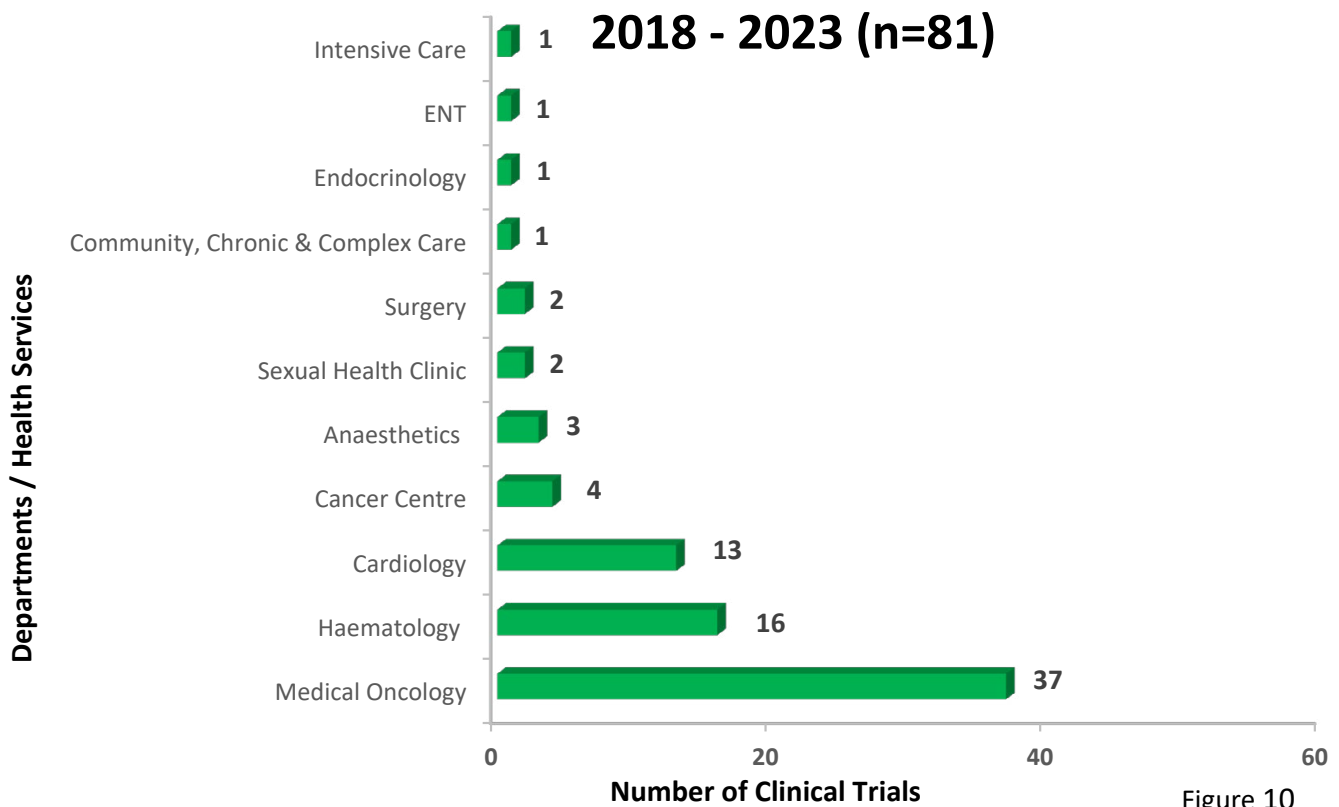
Clinical Trials at CCLHD

Clinical trials play an important role in patient care by providing access to the newest interventions (treatments, therapies and diagnostic tests). They also provide other benefits for participants including the opportunity to play an active role in their own health care, gain a greater understanding of their condition, and receive closer monitoring of their condition, care and treatment. Investigators benefit from involvement in clinical trials as they provide an opportunity to network with their peers and increase their knowledge about new treatment possibilities.

The diagram below outlines the distribution of clinical trials across CCLHD departments and health services over the past 5 years (Figure 10). There were 104 authorised/ active clinical trials at the District as at 30 June 2023.

The exemplars that follow highlight some of the recent clinical trials that have taken place, or are being undertaken, at our District.

Distribution of Clinical Trials within CCLHD Departments / Health Services



Clinical Trials Pharmacy

The CCLHD Clinical Trials Pharmacy provides support to Haematology, Medical Oncology, Radiation Oncology, Cardiology, Intensive Care, Anaesthetics, Paediatrics and the Ear, Nose & Throat department in the conduct of their clinical drug trials. The team currently manages Investigational Product for 81 trials.

The Clinical Trials Pharmacy provides a range of services, including:

- Stock management, dispensing and control of Investigational Products
- Review and adherence to trial protocols
- MOSAIQ (Oncology Medical Information System) care plan building and review
- Provision of advice on protocol design and placebo selection
- Patient counselling and compliance monitoring
- Development and allocation of randomisation codes, and unblinding in an emergency

Additionally, CCLHD Pharmacy has on-site aseptic manufacturing facilities and staff (at both Gosford and Wyong Hospitals), enabling our District to participate in clinical drug trials which require this capacity (e.g. for the preparation of novel treatments with short expiry times).



CCLHD Clinical Trials Pharmacy team (from left to right): Jade O'Grady (Senior Pharmacy Technician –commenced 2022), Debbie Haig (Lead Pharmacist for Clinical Trials –commenced 2006) and Melinda Street (Pharmacist –commenced 2023).

Clinical Trials Exemplars

Project Title	The LARK clinical trial – Liver Ablative Radiotherapy utilising Kilovoltage intrafraction monitoring (KIM)
Study type	Clinical Trial
Site Principal Investigator	Dr Simon Tang
Site	Gosford Hospital
Department	Radiation Oncology
CCLHD Local Reference Number	1222-116C
REGIS STE number	2022/STE01636
Clinical Trial Registry Number	NCT02984566
Trial Sponsor	University of Sydney
Project Status	Authorised



What is the research question?

The aim of study is to evaluate the accuracy of treatment delivery in patients receiving liver radiation with and without Kilovoltage Intrafraction Monitoring (KIM). It is hoped that this information will improve cancer targeting accuracy for all patients in the future.

Stereotactic Ablative Body Radiation Therapy (SABR) requires accurate knowledge of the location of the tumour and its physiological motion in relation to surrounding structures. Movement of the target can result in geographical inaccuracies in SABR treatment and can compromise treatment outcome. A major challenge for liver SABR is the management of respiratory motion. A combination of using cone beam CTs before and after radiation delivery along with implanting radio-opaque fiducial markers around the tumour to verify the location of the tumour is the current standard of care with liver SABR technique. KIM is an Australian-pioneered technology which uses standard equipment of a standard linear accelerator to monitor tumour motion throughout treatment.

The research component of this study is the incorporation of KIM technology, and all other aspects of the study protocol are standard of care involved with liver SABR. The primary objective of this trial is to prospectively assess the dose distribution with and without the incorporation of KIM in liver SABR to evaluate its impact on treatment targeting accuracy. This research is being conducted by multiple hospitals in Australia in conjunction with the Radiation Physics Laboratory at the University of Sydney.

What is the study investigating and how?

Patients will be identified through specialist and general practitioner referral, and through oncological multidisciplinary team meetings. The current standard practice adopted to identify patients suitable for liver SABR treatment; includes the review of medical records, routine investigations, and patient consultation. Only patients identified as suitable to receive liver SABR treatment will be approached to participate in this research. Once the participants have consented to participate in this trial, they will be required to complete a brief quality of life questionnaire which takes about 5-10 minutes to complete. This questionnaire will be repeated over the course of their treatment, and the follow up visits out to 2 years. Using data acquired during the treatment session, the delivered radiation dose (with KIM) will be determined for each patient on the trial. This delivered radiation dose will be compared to the dose the patient would have received without KIM to quantify the benefit of this novel technology.

What are the outcomes?

The project is still in the recruitment phase. Since joining the trial early in 2023, Gosford Hospital has had the highest recruitment rate for this study. 5 patients are currently recruited and 1 patient is in the screening phase. In addition to contributing toward the trial goals, Gosford Hospital patients have benefitted from access to world-leading technology for motion management in Liver SABR.

Have there been any publications or presentations?

There are currently several publications underway relating to this trial which will be submitted in 2023 to 2024, including a case-study on Gosford Hospital's first experiences with use of the KIM technology for Liver SABR.

Project Title	Enhancing Guidewire Efficacy for transradial access: The EAGER Randomised Controlled Trial
Study type	Clinical Device Trial
Site Principal Investigator	Dr Tom Ford
Site	Gosford Hospital
Department	Cardiology
CCLHD Local Reference Number	1022-094C
REGIS STE number	2022/STE01556
Clinical Trial Registry Number	ACT registration: 12622001557729
Trial Sponsor	Central Coast Local Health District
Project Status	Authorised

What was the research question?

Transradial access for coronary angiogram is now standard for coronary angiography. It requires a guidewire to be directed up the radial artery to the aortic root to allow safe mobilisation of catheters over it into the aorta to complete the procedure. The traditional guidewire made for femoral angiograms and predating transradial angiography is the peripheral 0.035" fixed core PTFE J-tipped wire (FC0.035) with a 3mm J tip curve radius. Radial arteries are smaller than femoral arteries and typically range from 2.2mm in diameter in women, to 2.7mm in men, both smaller than the J tip curve radius of 3mm in the FC0.035 wire which may predispose to radial spasm or vessel trauma.

New hydrophilic wires with a 1.5mm J tip, known as a 'Baby J' wire, have been developed which can track tortuous peripheral and subclavian arteries with the potential to optimise transradial cardiac catheterisation. These wires are in routine use throughout Australia and worldwide but their use has not been studied in randomised trials against the traditional peripheral access wire.

If indeed the 'Baby J' wire was demonstrated to have a higher success rate in gaining access to the aortic root compared to the FC0.035 wire, it would lead to less wire changes, and less need for alternate arterial punctures and subsequent predisposition to further vascular complications. If this were the case it would suggest that the 'Baby J' wire should be considered for first line use in transradial coronary angiography.

What was the study investigating and how?

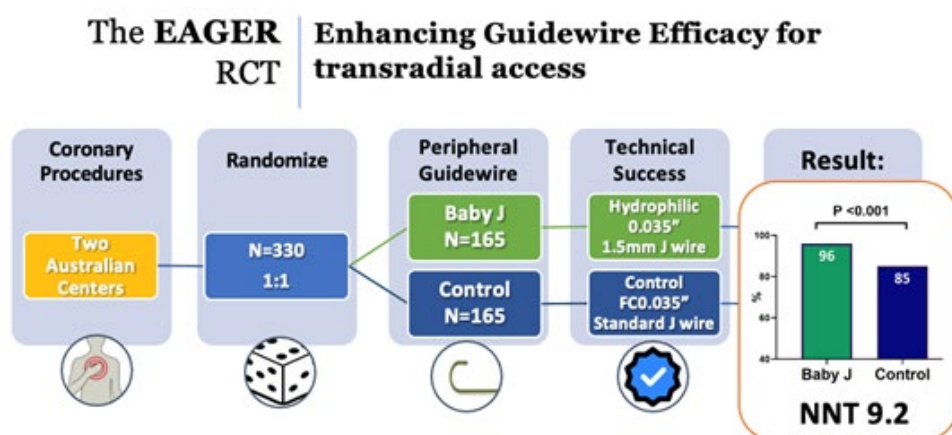
Patients undergoing clinically indicated coronary angiography and/or PCI from the radial approach were randomised 1:1 to either 'Baby J' peripheral guidewire or control standard peripheral J wire (FC0.035). The primary endpoint was technical success, defined as access to the aortic root with the randomised

guidewire. Secondary endpoints included total procedural time, time to aortic and coronary intubation, crossover rates to alternate wire or access site, radial artery spasm, haematoma (EASY criteria), bleeding complications (BARC criteria) and vascular complications (VARC 2 criteria). Major adverse cardiac events (MACE) and clinical endpoints were adjudicated by a blinded independent clinical events committee.

What were the outcomes?

330 patients were enrolled over a 9-month period from October 2022 to June 2023. The mean age was 69 years (36% female), BMI 29kg/m². The primary efficacy endpoint of technical success was achieved more frequently in the intervention group (96% v 85%; NNT 9.2; P <0.001). The overall procedure times were similar (median 1135 v 1354 seconds; P=0.094) but fluoroscopy time was significantly shorter in the intervention group (median 344 vs 491 seconds; P = 0.024). Radial completion of procedures was high and not different between groups (100% v 98%; P=0.2). Clinically significant bleeding (BARC2+) was more common in the control group (3% v 0%; P=0.017). There were no differences in MACE or vascular complications.

The hydrophilic 1.5mm 'Baby J' guidewire leads to greater success and reduced fluoroscopy time for transradial coronary procedures when compared to access using the standard J wire. Clinically significant bleeding and adverse events were low in both groups.



Project Title	An ALLG Window Study of Acalabrutinib plus Rituximab followed by R-DHAOx+ASCT in fit Mantle Cell Lymphoma (WAMM (NHL33))
Study type	Clinical Drug Trial
Site Principal Investigator	Dr Tasman Armytage
Site	Gosford Hospital & Wyong Hospital
Department	Haematology
CCLHD Local Reference Number	0820-097C
REGIS STE number	2020/STE03249
Clinical Trial Registry Number	ACTRN12619000990123
Trial Sponsor	Australasian Leukaemia & Lymphoma Group
Project Status	Closed (post analysis)

What was the research question?

Mantle cell lymphoma is a rare B-cell malignancy which may involve lymph nodes, spleen, bone marrow and extra-medullary organs. There are two main types of lymphocytes that can develop into lymphomas, B cells and T cells. Current standard of care for young patients include intensive chemotherapy and autologous stem cell transplantation. Therapy for older patients may include oral treatment with a Bruton tyrosine kinase inhibitor such as acalabrutinib.

Development of more effective treatments for Mantle Cell Lymphoma has improved in recent years, however optimal sequencing of treatments remains unknown.

This research project is to identify the safety and efficacy of Acalabrutinib + Rituximab followed by rituximab dexamethasone cytarabine oxaliplatin (R-DHAOx) +/- autologous stem cell transplant (ASCT or bone marrow transplant) and maintenance Acalabrutinib + Rituximab in fit patients with treatment naïve mantle cell lymphoma.

What was the study investigating and how?

All patients received:
 Induction phase: Acalabrutinib + Rituximab 2 cycles every 4 weeks, cycle = 28 days
 Rituximab 375mg/m² Intravenously D1
 Acalabrutinib 100mg orally, twice a day, D1-D28
 Followed by Chemotherapy phase (R-DHAOx 4 cycles every 21 days), Consolidation phase (BEAM Autologous stem cell transplant) and Maintenance phase.

Patients were given patient diaries to monitor adherence to treatment.

What were the outcomes?

The primary outcome of this project was to complete metabolic response rate. Response was assessed in accordance with the 2014 Lugano Response assessment for Non-Hodgkin's Lymphoma by review of PET/CT scan.

A composite secondary endpoint was change in response rate (Overall Response Rate (ORR), CMR, Partial Response (PR), Stable Disease (SD), Progressive Disease (PD), relapse after CR). Response was assessed in accordance with the 2014 Lugano Response assessment for Non-Hodgkin's Lymphoma by PET/CT scan. This was a composite secondary endpoint.

The project is undergoing final analysis. Gosford Hospital was the highest recruiter to this trial with 9 patients.

Have there been any publications or presentations?

Primary interim analysis is ongoing before presentation at American Society of Haematology (ASH) in December 2023.

Project Title	Phase II Study of Blinatumomab as Induction Therapy in Adolescent and Young Adult Acute Lymphoblastic Leukaemia (ALL09)
Study type	Clinical Drug Trial
Site Principal Investigator	Dr Tasman Armytage
Site	Gosford Hospital
Department	Haematology
CCLHD Local Reference Number	1019-139C
REGIS STE number	2019/STE15887
Clinical Trial Registry Number	ACTRN12618001734257
Trial Sponsor	Australasian Leukaemia & Lymphoma Group
Project Status	Closed to recruitment

What was the research question?

ALL09 is an ALLG collaborative group study to help improve to outcomes and tolerability of treatment for adolescent and young adult (AYA) patients (aged 15-40) with B acute lymphoblastic leukaemia. Outcomes for AYA patients treated with intensive paediatric-like chemotherapy protocols achieve high rates of long term remission.

This project was designed to determine whether the substitution of blinatumomab for conventional multi-agent chemotherapy in phase 2 induction of the ALL06 protocol leads to improved minimal residual disease negativity rates at day 79 when compared to a historical control cohort treated using standard ALL6 induction.

What was the study investigating and how?

Blinatumomab 28mcg/m² was administered intravenously via an ambulatory infusion device. Dose was administered continuously, and the infusion device was taken home with the patient. The patient required minimal instruction on the use of the infusion device, as it was programmed and monitored by the nursing staff. Digital data was captured to track dose compliance in the ambulatory setting. Blinatumomab was administered continuously over 2 x 28-day cycles, first during induction and second during the consolidation treatment, representing a 2-month gap between blinatumomab cycles. Standard of care treatment was provided outside of these 2 x 28-day cycles. Standard of care in this trial was the approved BFM-2000 adapted paediatric protocol currently used in centres in Australia.

What were the outcomes?

The study met its primary objective with improved post-consolidation minimal residual disease (MRD) negativity rates when compared to the previous ALL06 study.

Have there been any publications or presentations?

Main analysis of primary endpoint was completed and presented at the American Society of Haematology (ASH) meeting in 2022.

An abstract was accepted as a poster titled MG Blinatumomab in Combination with an Intensive Paediatric Protocol Results in High Rates of Day 79 MRD Negativity in Adolescent and Young Adult.

Paper published in the journal [Blood](#) in November 2022.



Project Title	Responsible Opioid Use for Hip and Knee Arthroplasty (OpioidHALT) Pilot Study
Study type	Clinical Trial
Site Principal Investigator	Dr Frances Page
Site	Gosford Hospital & Wyong Hospital
Department	Anaesthetics
CCLHD Local Reference Number	1121-135C
REGIS STE number	2021/STE04738
Clinical Trial Registry Number	12621000919819
Trial Sponsor	University of Sydney
Project Status	Authorised

What is the research question?

In Australia, 150 people are hospitalised and 3 people die every day from opioid-related events. Opioids are effective at reducing acute pain but the evidence in chronic pain (e.g., osteoarthritis) is weak, and opioids are associated with significant side-effects such as drowsiness, respiratory depression, addiction and death. Rates of prescription opioid use have remained high in Australia since 2013, with approximately 3 million adults using opioids and over 1.9 million adults initiating opioids each year. The prevalent use of opioids has been identified as a key driver for increasing opioid-related deaths in Australia.

The aim of this project is to establish the feasibility and acceptability of interventions to reduce preoperative opioid use among patients undergoing hip and knee arthroplasty compared to usual practice.

What is the study investigating and how?

This study is a two-arm prospective, assessor-blind randomised controlled pilot trial. People eligible for the study but who decline and those stating they are already under the care of pain clinic/ specialist, will be invited to be in an observational arm.

Participants will be randomised in a 1:1 ratio to: (1) pharmacist tele-health consultation to individualise pain management and opioid tapering plans; or (2) usual care. Randomisation will be conducted using a centralised, telephone-based randomisation service. One study investigator will contact the central randomisation service by telephone each time a patient is to be randomised to allow allocation concealment. Participants will be stratified by hospital site. Participants will be allocated a unique identifier such that data is non-identifiable and to facilitate assessor-blind data analysis.

What are the outcomes?

The project team will detect between-group differences in the extent of opioid tapering using inferential statistics. As appropriate for detecting differences in between-group proportions, the project team will use the Chi-square statistic and report the risk ratio with its 95% confidence interval (CI). Descriptive analysis will be used to report feasibility outcomes.

On 30th June, this project had completed follow up and patient data collection and is awaiting data cleaning and final queries. Funding has been received for a larger randomised controlled trial "OpioidHalt II" which Gosford Hospital will be participating in from early 2024.



Project Title	A comparison of lignocaine plasma levels and efficacy of two preparations of 2% lignocaine for airway topicalisation
Study type	Clinical Trial
Site Principal Investigator	Dr Frances Page
Site	Gosford Hospital
Department	Anaesthetics
CCLHD Local Reference Number	0123-003C
REGIS STE number	2019/STE16153
Clinical Trial Registry Number	ACTRN12620000730909
Trial Sponsor	Central Coast Local Health District
Project Status	Authorised

What is the research question?

Medical Retrieval teams are tasked with transporting patients from small rural community hospitals to our larger city hospitals. Teams can find themselves in small community hospitals without access to many of the drugs and equipment available in big hospitals. It is vital therefore that they carry with them all the essential lifesaving equipment they might need.

One procedure they may be called upon to do is insert a breathing tube into the windpipe of an awake patient (called awake intubation). The breathing tube (external diameter approximately 8mm) is passed via the nose, throat and voice box (upper airway) into the windpipe (tracheal intubation) after making the airway passages as numb as possible (topicalisation).

This is a double-blinded, randomised controlled clinical trial of healthy volunteers. The primary objective is to compare the plasma lignocaine level attained by the two preparations (Diluted 2% Topical lignocaine versus Alkalinised 2% intravenous lignocaine) in healthy volunteers, with a standardised method of upper airway topicalisation for endoscopy.

What is the study investigating and how?

The study population will be healthy physician volunteers who are prepared to attend the awake fiberoptic intubation course. Only physicians that meet the inclusion criteria will be eligible to participate in this trial as outlined in the project protocol.

The eligible participants will be randomised into two groups, diluted 2% topical lignocaine and alkalinised 2% intravenous lignocaine. Block randomisation allocates participants into blocks (10 people per study day) such that an equal number each day are randomly assigned to each treatment. Computer code provides four blocks of randomised allocations (2% topical lignocaine or 2% alkalinised) across the 40 participants.

What are the outcomes?

This project is ongoing at Gosford Anaesthetic Department and is currently recruiting participants, with nearly half recruited.

Clinical and Health Service Research Exemplars

Project Title	A randomised controlled trial investigating the effect of improving the cleaning and disinfection of shared medical equipment on healthcare-associated infections: The CLEAning and Enhanced disiNfection (CLEEN) study.
Study type	Health Research
Site Principal Investigator	Professor Brett Mitchell (CCLHD Honorary Conjoint Scholar, Professor Avondale University)
Site	Gosford Hospital
Department	Environmental Services
Local Reference Number	1022-194C
REGIS STE number	2022/STE02925
Clinical Trial Registry Number	ACTRN12622001143718
Trial Sponsor	Avondale University
Project Status	Authorised



What is the research question?

The CLEEN study is investigating if enhanced cleaning of shared medical equipment can reduce the number of healthcare-associated infections (HAIs). Contaminated shared medical equipment presents a primary transmission route for infectious pathogens yet is rarely studied. Prevention of infections through practical, implementable and translatable interventions is of critical importance in the era of antimicrobial resistance—not only to reduce the burden and impact for patients and health services now, but also to limit antimicrobial resistance and better prepare us for emerging infectious disease threats.

What is the study investigating and how?

The CLEEN study represents the first randomised controlled study in the world to provide level 1 evidence on the impact of additional cleaning of shared equipment on rates of HAIs. This study will introduce an enhanced cleaning intervention across 10 wards of one large Australian hospital. The study uses a stepped wedge randomised controlled design to implement the intervention over 36 weeks. The intervention includes additional training on cleaning products and technique, auditing of cleaning efficacy, and feedback to improve the quality of cleaning. During the intervention period, each ward receives 3 additional hours per weekday for the dedicated cleaning and disinfection of shared medical equipment. Equipment (such as commodes, blood pressure machines and mobility equipment) will be cleaned daily with combined detergent and disinfectant wipes. Audit results are used to improve the thoroughness of cleaning and to demonstrate the effectiveness of the training included in the study design.

What are the outcomes?

The primary outcome is to determine the proportion of in-patients aged ≥ 18 years old with a HAI as measured by a HAI point prevalence study. The secondary outcomes are to assess the thoroughness of cleaning and the cost-effectiveness of the intervention. The CLEEN study began in March 2023 and concludes in November 2023. Results will be available in 2024. Evidence from the CLEEN study will contribute to future policy and practice guidelines about the cleaning and disinfection of shared medical equipment. It will be used by healthcare leaders and clinicians to inform decision-making and implementation of best-practice infection prevention strategies to reduce HAIs in healthcare facilities.

For more information visit the study website at <https://cleenstudy.com/>

The study protocol has been published in the *Trials Journal*.

Browne K, White N, Tehan P, Russo PL, Amin M, Stewardson AJ, Cheng AC, Graham K, O’Kane G, King J, Kiernan M. A randomised controlled trial investigating the effect of improving the cleaning and disinfection of shared medical equipment on healthcare-associated infections: the CLEAning and Enhanced disiNfection (CLEEN) study. *Trials*. 2023 Feb 22;24(1):133.

Project Title	Evaluation of CCLHD High Risk Foot Clinic (HRFC) outcomes post-multidisciplinary team (MDT) implementation
Study type	Ethics-Exempt Low/Negligible Risk (LNR) Research
Investigators	Sarina Zhao, Jane Lafrenz, Manisha Nagaratnam, Stephanie Macfarlane (UON Medical students); Lili Yuen (supervisor – Staff Specialist, Endocrinology)
Department	Podiatry; Endocrinology; Vascular
Reference Number	1121-121C

What was the problem?

Diabetic foot complications, including extensive foot ulceration, are amongst the most common sequelae of diabetes mellitus, resulting largely from a combination of factors related to peripheral neuropathy, peripheral vascular disease and infection. It is estimated that 15% of those suffering from diabetes mellitus will develop diabetic foot ulcers (DFUs) over their lifetime, which are strongly associated with significant increases in both patient morbidity and mortality. Additionally, their treatment places a notable financial burden on both the patient and the healthcare system, and places a major burden on the patient's quality of life.

CCLHD services a population of around 350,000 residents. This is projected to increase to 397,370 by 2031. In comparison to greater Sydney, the Central Coast has a higher proportion of older residents, with 28.6% aged 60 or older compared to 20.5%. Additionally, the northern areas of the Central Coast surrounding Wyong are generally in the most disadvantaged 16-30% areas of Australia.

What was done?

The study was designed as a retrospective cohort study of two independent cohorts. The first cohort comprised patients who attended at least one appointment at the HRFC based at Gosford Hospital in 2017, and the other cohort consisted of those seen in 2019. These years were selected to compare patient and ulcer outcomes before and after a MDT approach was implemented at the HRFC to align its structure with the International Working Group on the Diabetic Foot (IWGDF) guidelines.

Cohorts were identified by accessing a retrospective record of patient data collated and stored by the Gosford Hospital Podiatry department, as per inclusion and exclusion criteria in the below table:

What was found?

Review of the Gosford Hospital Podiatry Department records identified 181 patients were scheduled to attend an appointment at the HRFC in 2017 or 2019. 120 patients met the inclusion criteria outlined in Table 1, forming the 2017 (n=61) and 2019 (n=59) patient cohorts. In these two cohorts, 207 ulcers met the inclusion criteria. When calculating the percentage of ulcers healed by 52 weeks and time to 100% healing, 141 met criteria, 69 in 2017 and 72 in 2019.

Baseline characteristics for patients and ulcers in 2017 and 2019 are described in Table 2 and 3 respectively. The two patient cohorts were similar aside from a statistically significant difference in the number of deceased patients from 2017 and 2019 at time of data collection (n=20 and n=10, p=0.045). None of these patients died during the 12 month study period as a result of DFU complications. The mean age at first HRFC appointment in each cohort was similar (66.0 yrs and 64.2 yrs, p=0.419). Ulcer load per patient was similar between both cohorts, as the median number of ulcers per patient was one in both 2017 and 2019 (p=0.586), and 27 (44%) and 24 (41%) patients in 2017 and 2019 respectively had more than one ulcer (p=0.691).

There was a statistically significant reduction in median ulcer healing time between 2017 and 2019 from 20.4 weeks to 14.2 weeks (p=0.021). There was also a 10.1% increase in the percentage of ulcers healed by the end of the study period from 40 (58%) in 2017 to 49 (68%) in 2019.

What is the change/benefit?

Overall, the findings of this study suggest that the implementation of a MDT approach at the Gosford Hospital HRFC led to improved DFU outcomes, most notably improved ulcer healing. This is reflected primarily in the 6.2 week decrease in time to 100% ulcer healing, and to a lesser extent the 10.1% increase in the number of ulcers completely healed within 52 weeks. Increased vascular surgery input in the 2019 HRFC likely explains the increase in incidence of amputation. However, the small sample size and differing ulcer severity between the 2017 and 2019 cohorts limited the study's ability to identify additional statistically significant outcomes. Nevertheless, we feel that this study corroborates existing research surrounding the importance of an MDT approach to the management of DFUs.

Project Title	Survey to explore Factors Influencing the Reporting of Medication-related Errors and Concerns in an Australian tertiary hospital setting
Study Type	Ethics-Exempt Low/Negligible risk (LNR) Research
Investigators	Claire McCormack (Team Leader Pharmacist); Milla Morrison (UON Pharmacy Honours student)
Department	Pharmacy
Reference Number	0722-060C

What was the problem?

Medications are used in abundance within our healthcare systems. Although they can show considerable health improvements when used appropriately, there is an immeasurable potential for errors to occur. Medication-related errors are common and can have significant impact on patient morbidity, mortality, and healthcare resources. It has been observed that medication errors occur in around 9% of medication administrations in hospitals, with an overall rate of two errors for every three patients estimated to occur, and half of these are deemed to be potentially avoidable. Reporting systems are implemented to capture errors and manage risks, with numerous factors proposed that can act as barriers or facilitators to system use. Downturns in reporting rates and/or increases in medication-related Hospital-Acquired-Complications (HACs) can prompt the need to review factors impacting on Healthcare Professionals (HCPs) reporting of medication-related errors. This project aimed to investigate awareness and use of medication-related error reporting systems and explore key facilitators and barriers that influence a HCPs willingness to report such errors in an Australian hospital setting.

What was done?

An anonymous, cross-sectional survey was conducted over a two-week period in August 2022 and was sent to all doctors, nurses and pharmacists currently working at CCLHD. In the absence of a previously validated survey tool, questions were constructed following a literature review and consisted of 5-point Likert scales, ranking factors and multiple-choice. Data was collected using an electronic survey platform (Microsoft Forms®) distributed via email link/QR-code. Microsoft® Excel was used to observe data trends and Fisher's Exact test was undertaken to determine statistical significance. The questionnaire collected key demographic characteristics through multiple-choice questions to determine the HCPs current role at CCLHD, years of experience, gender, whether the individual has witnessed/ been involved in a medication error, if they have reported an error and a range of how many errors they have reported, as well as if they knew how to report this error. Respondents had to indicate their level of agreement to a range of statements about key factors that might influence on reporting a medication error and they also had to rank these statements based on what they felt personally was most impactful.

What was found?

156 HCPs within CCLHD completed the survey, with 79% (n=123) responding that they knew how to submit a medication report, and 76% (n=119) having reported a medication error report. Nurses made up 50% of the responses, with the doctors and pharmacists being equal at 23.75% response rate (2.5% was dedicated to 'other'). There was a statistically significant correlation between reporting rates and experience (p-value = 0.02) as well as profession (p-value= <0.001). When comparing the individual professions, it is apparent that doctors were significantly less likely to have reported a medication error compared to nurses and pharmacists (p-value = <0.001) and less likely to know how to submit a medication error report compared to nurses and pharmacists (p-value = <0.001). On the whole across all professions, early career HCPs with experience <2 years were also significantly less likely to know how to report a medication error (p=0.02) with only 58% of respondents in this cohort indicating they knew how to report. The common barriers identified as the highest level of agreement, were time, 'being too busy to report medication errors' which is also consistent with a 'heavy workload'. Difficulty of reporting and low involvement of peers was also reported as barriers to reporting medication errors, whereas facilitators consisted of the relative level of patient harm, receiving feedback and feeling safe within the workplace. General feedback was given by respondents indicating the need for increased education regarding reporting systems as well as staff shortages being a driving barrier to both reporting on and causing increased medication errors. The role and value of pharmacists was highlighted, with a comment made that when fewer clinical pharmacists are on the wards, then fewer errors are identified.

156

survey responses



Figure 1: Number of respondents by profession

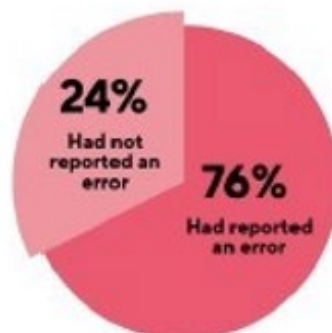


Figure 2: Overall medication error reporting experience

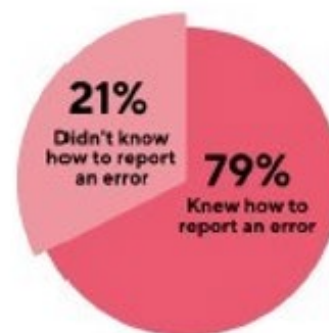
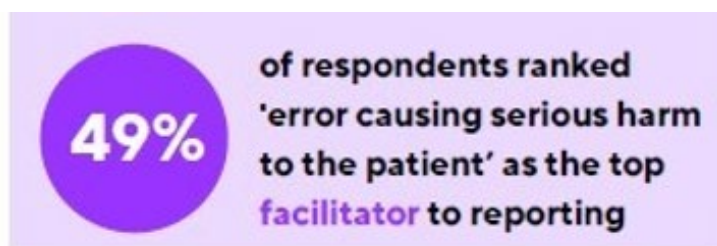


Figure 3: Overall medication error reporting knowledge and awareness



What is the change/benefit?

This study emphasises that there is less than optimal awareness and knowledge of the process of reporting medication errors within CCLHD, particularly among medical staff and early career healthcare professionals. It also highlights key barriers and facilitators relating to time to report, workload, role modelling, feedback and patient safety that could be targeted by CCLHD in local education and workplace culture development to improve error reporting rates with the overall aim of reducing medication errors. Since the study, a simpler, quicker reporting tool for pharmacists to capture the data on 'interventions' and 'near misses' has been implemented. The findings of the study also provide valuable knowledge to give other healthcare

settings a similar awareness of the potential areas to address to improve medication error reporting, particularly in the Australian setting where research in this area has been limited. At a District level, the Medication Safety Committee has re-assessed how they communicate regarding errors, and produce monthly educational summaries of de-identified incidents and more in-depth reviews. Further studies in the Australian context to support these findings and the development of a validated tool that can track HCP perceptions on how local factors and safety culture impacts medication error reporting over time and between sites would be potential future projects arising from this work.

Project Title	Evaluation of an implemented integrated multidisciplinary clinic for people living with motor neurone disease on the Central Coast
Study Type	Ethics-approved Low/Negligible risk (LNR) health research
Investigators	Dr Karen Hutchinson (CCLHD Honorary Conjoint Scholar, Research Fellow Macquarie University and Physiotherapist), Dr Anna Schutz (Neurologist), Dr Sally Carr (Senior Staff Specialist, Palliative Care), Professor Nick Goodwin (Director of Research CCLHD, CCRI)
Department	Neurology
Reference Number	0322-015C (CCLHD Caring for the Future Research Grant recipient)

What was the problem?

Person-centred care (PCC), integrated care and access to specialised motor neurone disease (MND) multidisciplinary clinics (MDC) are optimal approaches to the delivery of quality service for people living with MND (plwMND) for improved quality of life, health outcomes and care experiences. Since the changes in service delivery and aged-based funding models in Australia (My Aged Care and National Disability Insurance Scheme (NDIS)), collaborative interdisciplinary working practices, and connected and coordinated cross sector care for plwMND, have been impacted. The implementation evaluation of a privately run MND MDC on the Central Coast, New South Wales, Australia, explores the barriers and enablers to implementing a regional based MDC to support equitable, coordinated, and connected PCC across health, disability, and aged care sectors.

What was done?

A mixed methods implementation evaluation informed by qualitative methods using semi-structured interviews with plwMND, family caregivers, health and social care providers attending the clinic. Underpinned by the Theoretical Domains Framework (TDF), we adopted an inductive analysis approach, particularly the initial coding of data, to ensure non-TDF-related factors are not overlooked, and nuance and context are not lost. Successful implementation strategies, and barriers and enablers influencing adoption, delivery, and sustainability of MND MDC, were systematically identified through the TDF. We focused on implementation outcomes based on Proctor's framework, including acceptability, appropriateness, adaptability, fidelity, and feasibility.

What was found?

Preliminary results confirm the acceptability and appropriateness of providing equitable access to a specialist multidisciplinary team (MDT) that is 'closer to home' and adopts a person-centred approach to connect and support plwMND and their families within their local area. The MND MDC is held every 4 months in a private clinic, with no out-of-pocket expenses for the plwMND, and an option to attend via telehealth, as necessary. A case conference is conducted at the end of the clinic to discuss each plwMND, with palliative care and occasionally respiratory specialists attending via videoconferencing. Key enablers influencing the MND MDC implementation, relevant to the 14 domains of the TDF, are the multidisciplinary team expertise in MND management working together with MND NSW association and carers support (skills), strong clinical leadership, and understanding and cooperation within MDT (social/ professional role and identity), access to administration team, centrally located clinic space and technology (environmental context and resources), and the strong belief in providing a MND MDC to optimise care and treatment (belief about consequences). The barriers relate to lack of funding of MDT time, cross sector challenges and organisational boundaries (environmental context and resources), the limited representation of palliative and respiratory specialist teams and absence of gastroenterology team (skills), and limited understanding of optimal MND management (knowledge).

What is the change/benefit?

This evaluation demonstrates the commitment to implementing a MND MDC in a regional area, to optimise health outcomes and care experiences. However, there is a need to break down complex organisational boundaries to foster collaborative practices and partnerships, critical to developing the MND MDC. Obtaining financial support for the clinic is necessary to ensure sustainability. This research could help inform the design and development of regional based MND MDCs.

Project Title	Enabling more clinical trials: workforce capability and capacity mapping
Study Type	Ethics-approved Low/Negligible risk (LNR) research
Sponsor	Hunter Medical Research Institute (HMRI)
Coordinating Principal Investigator	Catherine Johnson (Clinical Trials Network, HMRI)
Reviewing Human Research Ethics Committee	Hunter New England LHD Human Research Ethics Committee
Site Principal Investigator	Dr Katherine Bolton (Research Manager)
Site team member	Mark Lacey (Nurse Unit Manager, Haematology Clinical Trials)
Site	Central Coast Local Health District
CCLHD Local Reference Number	1122-102C
REGIS STE number	2022/STE03561
Project Status	Authorised

Background:

Improving general clinical trial participation rates is a strategic priority of the Federal Government, NSW Health OHMR and NSW Regional Health Partners (RHP).

Understand capacity and capability is important to enable member organisations to provide and support better organised clinical trials sites, streamline clinical trials sites, streamline clinical trials processes, and make it easier to conduct and participate in safe, high quality clinical trials; and to establish new networks and partnerships.

Baseline review of clinical trial capacity and capability was undertaken across 4 NSW RHP footprint organisations in late 2020 and early 2021 and included Calvary Mater Newcastle (CMN), Central Coast Local Health District, Hunter New England Local Health District (HNELHD) and Mid North Coast Local Health District (MNCLHD). This project is to repeat this activity to understand changes and growth in the clinical trials capability and capacity across Central Coast LHD.

How was the study conducted?

The project team developed an online REDCap questionnaire. The first section included clinical trial questions across 5 key areas around clinical trial profiles; governance; professional development and training; finance and workforce. The second section included a deidentified workforce profile for each employee working directly with clinical trials. Principal investigators at each site identified staff who were invited to complete the survey. Staff included clinical trial unit managers and/ or heads of departments who participate in clinical trials. Participating staff received a link via email to complete the REDCap survey within 3 weeks. The survey was strictly confidential and only the researchers had access to information about each Clinical Trials Unit. Individuals and individual clinical trial units were not identified in anyway or made public.

What are the planned outcomes?

Data from the survey will enable the study team to assess clinical trials' capacity and capability across participating organisations and develop an organisational plan that: 1. provides for and supports better organised clinical trials sites; 2. streamlines clinical trials processes and make it easier to conduct and participate in safe, high quality clinical trials; and 3. supports new networks and partnerships that align with national and state-based strategies to enable more clinical trials.

What has been launched?

On May 2022, HMRI in conjunction with NSW RHP and the clinical trials team launched a brand-new online resource – the NSW RHP Clinical Trials Roadmap, a practical guide to the clinical trials journey for regional NSW. This Clinical Trials Roadmap is an interactive, evolving resource that provides practical advice to understand, develop, plan and start-up clinical trials. The Roadmap sets out key steps, resources, and contacts for two key types of clinical trials - investigator-initiated trials and sponsored trials.

The roadmap has had over 4395 views from 1198 visitors.

Year	Roadmap Views	Roadmap Visitors
2022	2468	593
2023	1927	605

You can view the Clinical Trials Roadmap website here <https://lnkd.in/gBDSexmK>

Project Title	Opportunistic patient vaccination for influenza and COVID-19
Study Type	Ethics-Exempt Low/Negligible risk (LNR) Research
Investigators	Dr Sarah Davies (Epidemiologist), Donna Moore (Immunisation Coordinator), Bronwyn Goulter (Immunisation Coordinator)
Department	Public Health
Reference Number	0423-036C

What was the problem?

A significant proportion of vulnerable people do not receive timely vaccination against seasonal influenza and COVID-19. Opportunities to vaccinate patients already in contact with the health system are missed, leading to preventable illness, hospitalisation and death, as well as increased treatment costs. Hospital admissions and outpatient presentations are a prime opportunity to provide preventive, patient-focused care however frontline clinicians are frequently too time-poor or may lack the specialist knowledge on patient vaccination/catch-up schedules to address under-vaccinated inpatients. In addition, there is not currently a service within CCLHD with clear responsibility for administering vaccinations to inpatients.

What was done?

In 2020 CCLHD successfully piloted an opportunistic inpatient influenza vaccination project in Gosford and Wyong Hospitals to improve timely coverage of at risk patients. The pilot project was led by Authorised Nurse Immunisers (ANIs), supported by the Public Health Unit and well-received by patients and frontline staff. Continuation of the pilot in subsequent years was disrupted by the COVID-19 response. In 2023, the Ward off Winter! project was initiated, building on the 2020 ANI-led model with an expanded scope including both influenza and COVID-19 vaccination as well as the collection and analysis of data to enable evaluation of the effectiveness of the model. The number of locations was also expanded to include Woy Woy Hospital in addition to Gosford and Wyong Hospitals as well as a number of outpatient clinics and outreach services. The project collected both quantitative and qualitative data from patients and staff to evaluate:

- Whether the project effectively reached those at higher risk of severe illness from influenza and COVID-19 infection
- Whether the project improved vaccination coverage in target groups
- What factors influenced patients to consent to or decline vaccination (to potentially improve future targeting/uptake)
- Patient and staff experience with the model (in progress)
- An estimate of overall costs and savings with the model (in progress)

Over a 10 week implementation period during 30 working days the project team screened 850 people and administered 339 influenza and 241 COVID-19 vaccinations to 398 individuals. 415 vaccinations were administered to hospital inpatients and 165 in outpatient and community clinic settings across 14 different services.

What was found?

The ANI-led model did reach people at higher risk of severe illness from influenza and COVID-19 infection. The majority of people screened through the project had age and/or medical conditions that placed them at higher risk and the majority of those eligible consented to vaccination.

- 70% of those screened were aged 65 or over.
- 76% of those eligible consented to flu vaccination
- 59% of those eligible consented to COVID-19 vaccination

The ANI-led model did assist in improving vaccination coverage. Most people screened had not yet been vaccinated for flu or COVID-19 this year and most patients surveyed who consented to vaccination stated they were likely or very likely to have a flu shot and COVID-19 booster this year indicating the project helped many to be vaccinated earlier than they would otherwise have been.

- In June less than half of people screened (37%) had already had a flu vaccination this year and less than a quarter (23%) were up to date with COVID-19 boosters.
- The most common reason given for consenting to vaccinations was the convenience of the service. Uptake also increased in people who were unlikely to get vaccinated this year either from a lack of motivation or lack of access
- The most common reasons given for consent in these groups were convenience and worry about infection.
- The model over-coming access barriers for many patients was a clear theme emerging from patient survey responses e.g.
 - “Probably wouldn’t have got to the chemist otherwise to get it, having trouble with my leg”
 - “I don’t have any transport so it’s tricky to get to GP. I would have had to try and organise it myself but that would take time. I’m so thrilled to have you come around!”

The main factors influencing patients' decisions to decline vaccination were worries about side effects, feeling they were too unwell at this time and for COVID-19 about 40% of those declining felt they did not need another booster. The concern about side effects was also greater for COVID-19 vaccination than for influenza. A small minority of patients surveyed expressed suspicions about the process of developing the COVID-19 vaccines, these patients however were vaccinated for influenza.

What is the change/benefit?

Once all elements of the evaluation are completed, this should provide an evidence base to support ongoing implementation of the patient winter vaccination program, highlighting its important contribution to safeguarding the health of some of CCLHDs most vulnerable community members.

Quality Improvement Exemplars

Project Title	Waiting List for Adult Community Mental Health
Study Type	Quality Improvement
Investigators	Katherine Nicholls (Clinical Psychologist)
Department	Mental Health
Reference Number	0322-024C

What was the problem?

The Care Coordination Team (CCT) provides community based non-acute mental health treatment for adults living on the Central Coast with severe and persistent mental illness, referrals for CCT are mainly received from the inpatient setting. In early 2022, there were over sixty people on the waiting list for CCT at the northern end of the Central Coast with the waiting time for some extending to almost a year. Within other non-acute teams that provide care for children, adolescents, or older people, no waiting list exists.

The waiting list for CCT had resulted in increased demand on acute services such as the Mental Health Acute Care Teams who were providing ongoing care to a sub-group of people on the CCT waiting list. This group of people were on Community Treatment Orders (CTOs) which are legal orders made by the Mental Health Review Tribunal or by a Magistrate that require a person to follow a mental health treatment plan while living in the community. Consumers not on a CTO were experiencing lengthy waits for outpatient mental health treatment. Waiting is distressing for people who do not have resources to access private care or are unable to be treated in the private sector due to the severity of their mental illness. Waiting for months for treatment does not instil hope or promote recovery.

The overall goal was to implement processes enabling the elimination of the waiting list for CCT so that people with severe and persistent mental illness wait no more than two weeks for this service.

The aims were eliminating avoidable delays in accessing this service so that access was timely and equitable and adapting processes so that the service was better able to meet changing and growing demands across the Central Coast.

What was done?

The project examined time waiting for CCT from May 2020 to April 2022 across the five Community Health Centres where the team is based, compared waiting times for the northern and southern sectors from May 2020 to April 2022 and compared referral rates to admission rates from April 2020 to April 2022

Following initial review of these results the project scope was extended and the problem was redefined.

What was found?

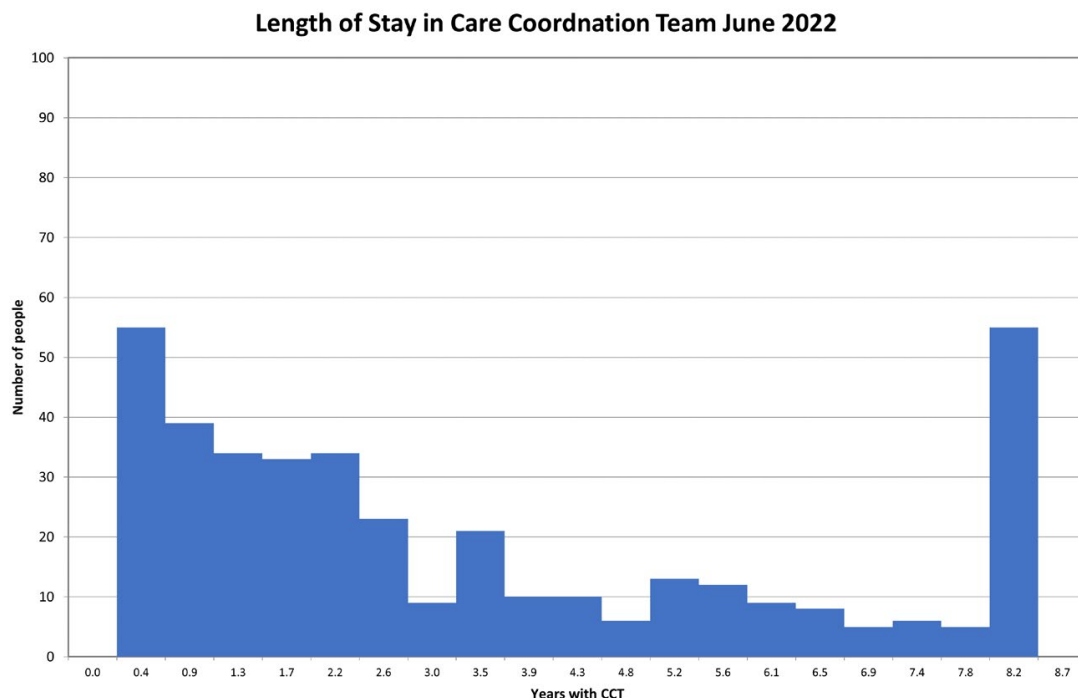
Statistical analysis confirmed people from the northern end of the Central Coast were waiting significantly longer for CCT compared to people in the southern sector. The admission rate was found to be lower than the referral rate. As caseloads for CCT are capped, admission to the team was dependent on flow through the service requiring discharge of consumers.

In May 2022, 50% of CCT consumers had a Length of Stay (LoS) of over two years. There was significant variation between LoS across clinicians and health centres which had resulted in inequality in waiting times for CCT across the Central Coast, with some consumers waiting over a year while others were allocated within weeks to months. As a result of the LoS within this service, leading to low numbers of discharges, the demand for the service had exceeded its capacity to provide non-acute mental health services for adults within the CCLHD.

The average LoS had been increasing since January 2018. Average LoS had increased from approximately eighteen months to three years. Fifty-five people had been with CCT for over eight years (see Figure 1).

Figure 1: Length of Stay in the Care Coordination Team June 2022

The findings of the project were presented to CCT across the five Community Health Centres. A Powtoon animation was used to present the data to provide a brief and compelling argument for change. A Discharge and Transfer of Care Report was designed, based on the “Discharge Planning and Transfer of Care for Consumers of NSW Health Mental Health Services Policy”. This report provides a comprehensive account of the service provided to people with an extended length of stay to ensure quality and accountability and provide information on factors contributing to extended LoS.

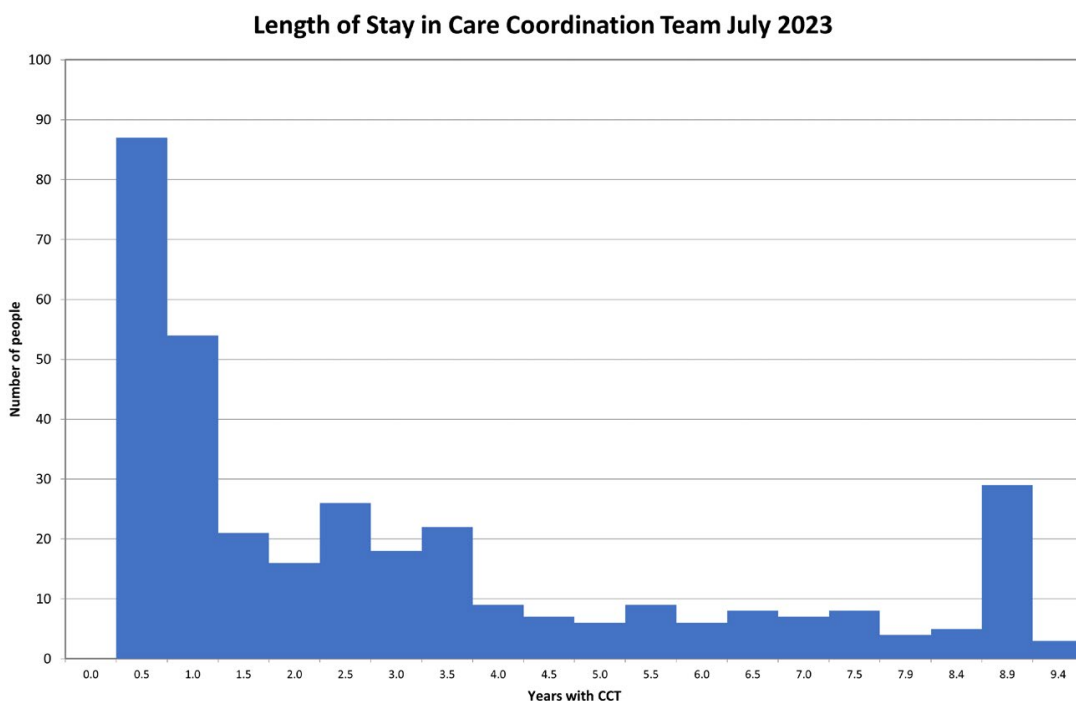


What is the change/benefit?

People with an extended LoS with the team are gradually being discharged to allow the team to take more clients from the waiting list (reflected by more people with a LoS of <6 months, see Figure 2). The benefits of this are reduced time waiting for people referred to CCT, continuity of care between the inpatient and community settings, reduced need for Acute Care Teams to provide ongoing care for those on CTOs.

At the beginning of the project, there were over sixty people on the waiting list for the Adult Community Mental Health Team at the northern end of the Central Coast, with the person at the top of the waiting list, waiting for approximately one year. Eighteen months later, the northern end of the Central Coast the waiting list has only five people, the person at the top of the wait list has been waiting for three weeks.

Figure 2: Length of Stay in the Care Coordination Team July 2023



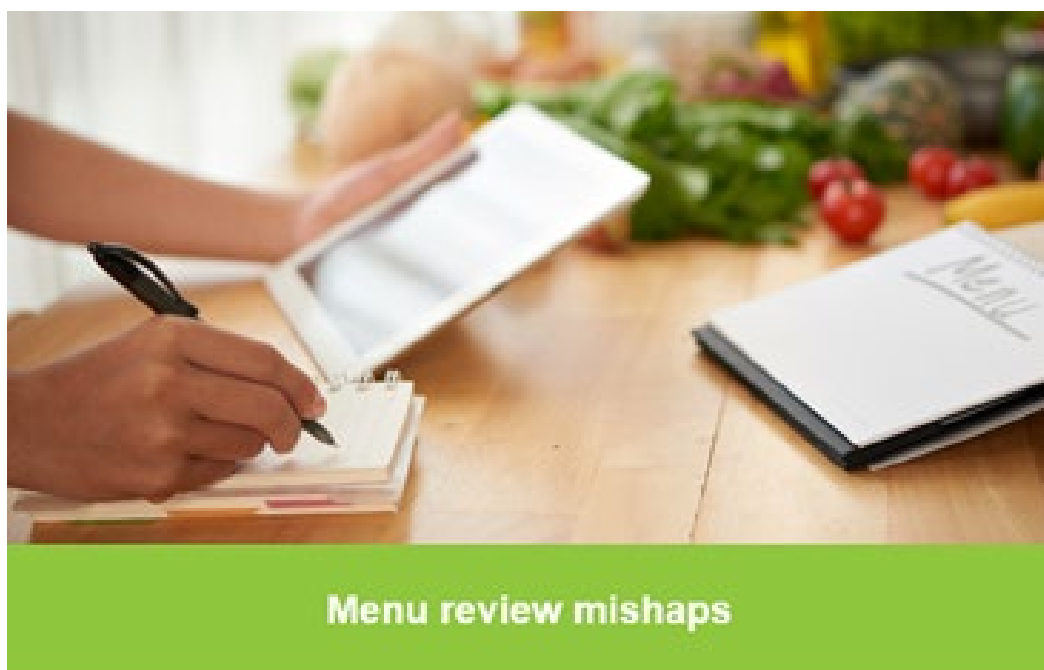
Project Title	Supporting Early Childcare Cooks: a needs assessment of Central Coast Early Childhood Education and Care cooks
Study Type	Quality Improvement
Investigators	Katharine Booth (Public Health Nutritionist); Lesley Marshall (Public Health Nutritionist); Cerys O'Grady Cousins (Student Dietitian); Alison Knapp (Student Dietitian)
Department	Nutrition Services
Reference Number	0822-067C

What was the problem?

The leading modifiable risk factors for obesity and non-communicable diseases throughout a child's life is poor nutritional intake including a low intake of wholegrains, fruits and vegetables. Infancy and early childhood is a critical life stage for focusing on nutrition and obesity prevention strategies, as food preferences and eating habits are established during this time and are often retained into adulthood. The Early Childhood Education and Care (ECEC) setting provides a useful opportunity to introduce children to a wide range of nourishing foods and to limit their intake of discretionary foods.

The National Quality Framework requires that ECEC centres that provide food must have a menu that is consistent with Australian Government dietary guidelines. Locally, NSW Health's Munch & Move® (M&M) program requires that services plan and assess their menu against the NSW Caring for Children guidelines.

However recent Australian studies have shown that many childcare menus are not meeting menu planning requirements. ECEC cooks are not currently required to have formal qualifications in commercial cookery, menu planning or early childhood nutrition which likely influences their ability to plan and provide menus that meet guidelines.



Menu review mishaps

What was done?

Following on from the disruption of COVID-19 and staff changes and with the expected release of updated nutrition guidelines, the Central Coast Public Health Community Nutrition (PHCN) team wanted to identify how best to support Central Coast ECEC cooks to provide meals and menus that meet the nutrition needs of the children in their care.

A survey was developed using REDCap, tested with a small number of end users and then distributed via letter and email to all Central Coast ECEC centres. The survey focused on awareness of current PHCN service provision (e.g. free menu review service) as well as perceived training and support needs. PHCN team occasions of service (OOS) data was also collated from 2018 to 2022 to determine past levels of engagement.

University of Newcastle dietetic students assisted with data analysis and developed project recommendations after discussing with ECEC cooks and the PHCN team.

What was found?

Central Coast ECEC centres tended to have high cook staff turnover with two-thirds having been employed at their current centre for less than 2 years and a quarter for less than 6 months. Cooks tended to be new to the role of early childcare cook and have limited training – a third had been an early childcare cook for less than 1 year and 19% had had no training in cooking and/or nutrition. Only a third had formal cooking qualifications (e.g. TAFE).

OOS data showed that between 2018 and 2022, 43% of centres had not submitted a menu for review and only 4% had submitted a menu for an annual review (M&M program best practice).

Survey respondents also provided feedback on the type of support and training they wanted, the topics they felt would be most useful and the preferred methods of receiving support and training.

What is the change/benefit?

Since the needs assessment was completed, the PHCN team has overhauled the menu review process to make it simpler for centres and quicker for the PHCN team. Quarterly Cooks Network meetings have been reintroduced with a focus on providing relevant education sessions that can be evaluated to measure learning changes. A monthly cooks eNewsletter is disseminated to keep cooks up to date with relevant changes in childcare food and nutrition, to provide menu and recipe hints, and to provide feedback on common menu issues and questions. Activities, including menu reviews, are promoted to cooks through eNewsletters, hardcopy flyers for use at M&M visits and at quarterly Cooks Network meetings.

In addition to this, a “new cooks training program” is in development. The program will use self-paced short online modules and will allow new cooks to learn the basics of ECEC menu planning quickly, conveniently and when needed.

Project Title	Decision-to-Delivery Interval for Category 1 caesarean sections: A comparison of anaesthetic techniques
Study Type	Quality Improvement
Investigators	Dr Deahne Levas; Dr Tony Chu
Department	Anaesthetic Department
Reference Number	QI-1022-090C

What was the problem?

Between 2020-2021 there was a push to consider neuraxial techniques in labouring patients more frequently, due to the time taken to safely anaesthetise a COVID positive patient and the risks of potential staff exposure.

Anecdotally it's estimated that only 50% of the time, direct communication is received from the Obstetrics & Gynaecology team to the Anaesthetics team regarding a patient in labour. This is often just a phone call to the nurse in-charge to activate the Category 1, but no further information is given regarding indication, nuances of urgency or whether the patient has an epidural in situ.

A Decision-to-Delivery Interval (DDI) of 30 minutes is often quoted but this is based on animal studies where the endpoints were gross histological changes resulting from fetal hypoxia. The maximum safe time to delivery in the presence of fetal distress is not known and varies greatly with the severity and nature of the disorder.

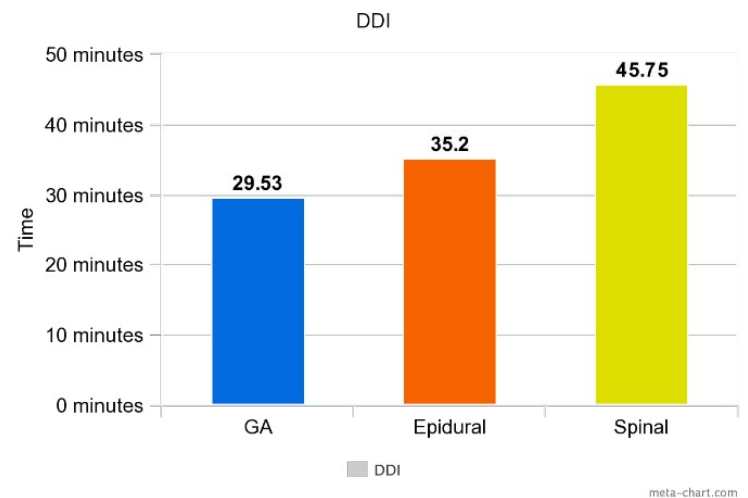
What was done?

After an increase in Category 1 caesarean sections in 2022, the modalities of the Anaesthetic Department were compared to see if this significantly altered the DDI and if the department was meeting the Australian and New Zealand College of Anaesthetists best practice guidelines. The guideline aims for regional anaesthesia to be performed for at least 50% of Category 1 caesarean sections, as it is reportedly safer and results in less maternal and neonatal morbidity than general anaesthesia.

An audit was performed at Gosford Hospital on all Category 1 caesarean sections between 1 January 2022 and 31 June 2022, as recorded on the eMaternity database. This captured thirty-six total Category 1 caesarean sections, with data points included from operation reports, anaesthetic forms and progress notes being examined for data collection.

What was found?

The results showed that the Anaesthetic Department fell just short of the "best practice goal" of using regional techniques 50% of the time. Of the records analysed, 22.9% of patients received a spinal anaesthesia, 22.9% received an epidural and 54.3% received a general anaesthesia.



From these results, it is determined that achieving the DDI goal of 30 minutes or less, can only be done using general anaesthesia. The fastest DDI was 12 minutes and the average DDI was 29.53 minutes using this technique. Comparatively, an epidural had an average time of 35.2 minutes, and a spinal had an average time of 45 minutes.

What is the change/benefit?

A compulsory phone call should be made from the Obstetrics & Gynaecology team to the Anaesthetics team so that an appropriate anaesthetic plan can be formulated. Of the occasions that this did occur, the epidural top-up was able to yield consistently quick DDIs. It is important that an anaesthetist or trainee with relevant experience should be able to make a judgement call based on the two key questions, 'what is the indication?' and 'is an epidural in SITU?'.

The study also highlighted the potential for the theatre in-charge nurse to identify key issues such as if a patient transfer has been booked. This will help minimise confusion as to who is to arrange the patient transfer amongst the treating team.

Project Title	Cardioversion Script Procedure
Study Type	Quality Improvement
Investigators	Rebecca Balmer (Cardiac CNE); Jacqueline Colgan (Cardiac CNC); Louise Allen (Critical Care CNE); Elhanah Vivian (Critical Care CNE)
Department	Cardiology
Reference Number	0922-082C

What was the problem?

Cardioversions are a high risk, low frequency procedure which have a history of complications due to the accidental delivery of an unsynchronised shock. This may cause the patient to deteriorate to a life threatening ventricular tachycardia or ventricular fibrillation rhythm (cardiac arrest). It is this high risk, which has prompted the need for a tool which ensures consistency and patient safety.

Due to the large exodus of senior nurses post pandemic, a large group of junior nurses were needed to upskill quickly. Educating many nurses in Cardioversion, has also prompted the need for educational tools to support this transition and ensure procedural safety. It was noted by Educators that when learning to use the defibrillator, the Junior Clinicians (Nurse and Junior Medical Officer) lacked confidence, consistency and frequently had to be reminded to re-synchronize post-delivery of shock.

What was done?


The SOCCER Script (see script below) is a tool which was developed by Clinical Nurse Educators in the Cardiology Department to ensure patient safety and consistency in procedure. It is also an aid to junior clinicians providing support and a clear structure for the safe use of the defibrillator during a cardioversion.

The tool was created to run in a similar way to the COACHED algorithm in order to maintain consistency with the use of the defibrillator. The main changes were the lack of compressions and therefore no need for “hands off and analyse” and the need to sync the shock. The script was arranged loosely into an algorithm for ease of remembering.

A survey was created in order to collect data and feedback on the tool to make changes, and ensure that the tool achieved what it was set out to, which was clear steps, increased confidence and that it followed a logical pattern.

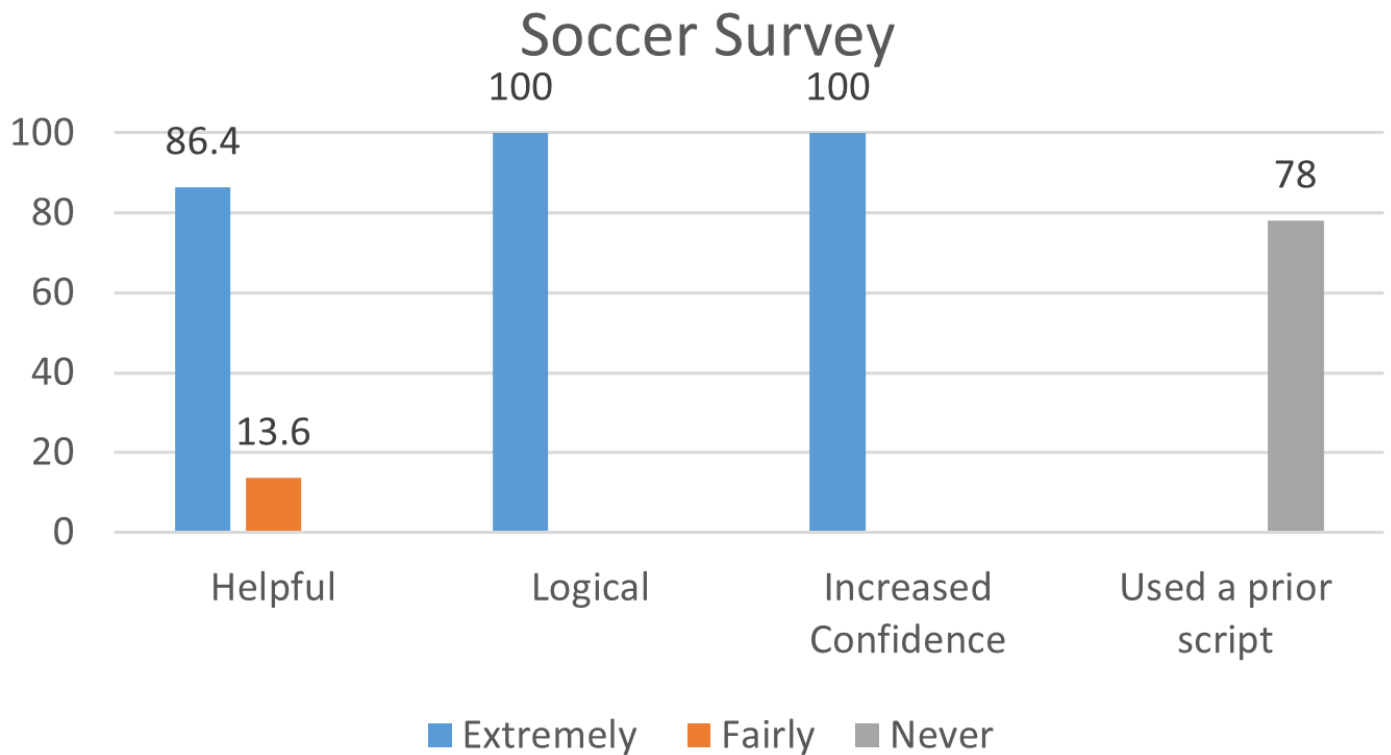
The survey was collected over 3 months from 22 respondents who used the tool whilst performing a cardioversion for the first time.



Cardioversion Script		
1	Sync on	Is the Sync button on?
2	Oxygen away	Or turned off? All others away
3	Charging Defibrillator	“Charging to....joules”
4	Check	Visual check all clear prior to defibrillating
5	Energy Delivered	Press and hold button to deliver the Synced Shock
6	Re sync	Press the sync button

What was found?

22 respondents (55% Registered Nurses, 45% Medical Officers) completed the survey. 78% of respondents had never previously followed a cardioversion script or verbal protocol. 86% had minimal or no confidence performing cardioversions. 85% of respondents found the SOCCER script to be logical and helpful. 100% of respondents believed the script increased their confidence in performing cardioversion. In the study period, the SOCCER script was used in 52 procedures with no unsafe cardioversion practices observed.



What is the change/ benefit?

Clinicians who employed the trialled SOCCER script found it beneficial, and logical. SOCCER script incorporation increased staff confidence when performing an elective cardioversion. We recommend the use of SOCCER script during cardioversion procedures to support clinician confidence and patient safety.



The SOCCER Script Team-Cardiology Gosford and Wyong Hospital CCLHD: Rebecca Balmer CNE, Elhanah Ellis Vivian CNE, Jacqueline Colgan CNC, Louise Allan CNE

Project Title	Evaluation of Home Enteral Nutrition Services (HEN)
Study Type	Quality Improvement
Investigators	Kimberly Mathews (Senior Dietitian)
Department	Nutrition Services
Reference Number	0222-014C

What was the problem?

Home Enteral Nutrition (HEN) refers to community based clients who receive or administer tube feeding to meet their nutrition and hydration needs, most commonly via a gastrostomy tube. HEN clients are a vulnerable population and are considered a high risk group with regards to overall medical needs and risk of hospital presentation. Within CCLHD, our HEN and Paediatric dietitians care for approximately 50 clients at one time; this is in addition to gastrostomy patients cared for by the Radiation Oncology and Community Allied Health Service. Over 80% of clients under our HEN service have been in our care for >12 months with an average duration of 3.3 years in our care; these clients require ongoing dietetic follow-up and support. The Agency for Clinical Innovation (ACI) released Guidelines for HEN Services in 2015, however CCLHD had not reviewed our processes or service since that time; further investigation was required to determine if we were meeting relevant recommendations. This patient group also had not been reviewed in relation to consumer experience or perceived need, which is essential in planning a holistic and acceptable patient-centred service.

What was done?

Between May and August 2022, a file audit was conducted for tube feed clients being cared for by the HEN and paediatric dietitians to review care provided in relation to ACI standards, including frequency of review, clear documentation and interdisciplinary communication. Semi-structured interviews were also conducted with a third of our existing clients to gather their feedback on the service being provided, including challenges, met and unmet expectations, level of understanding and support provided, areas for improvement and recommendations. The aim of this project was to identify areas for improvement to our care for HEN clients in relation to established standards as well as consumer expectations.

What was found?

The project identified that most patients were seen within 24 hours of initial referral and followed up every 6 months by telephone (85%), which are KPI's for ensuring safe management of tube feeds and a success for the Nutrition team to celebrate. It was identified through the file review that important details about enteral feeding tubes and devices were not being documented >50% of the time; clear documentation of tube parameters allows dietitians to monitor their patients more effectively, and manage risks or problems efficiently and safely. Patient feedback highlighted a number of challenges engaging with certain

providers, which limited their access to feeds and supplies in an acceptable timeframe. Many patients also wanted more information and written material to be provided to them early in their journey, as they felt overwhelmed and wanted resources to go back to and identify who to call if they needed assistance. Other challenges raised by patients included limitations on the District's approach to tube care, and challenges accessing tube changes when they are needed.

What is the change / benefit?

As a result of this review, patient education materials have been updated to include more advice for troubleshooting to support self-management among HEN clients, and we have broadened the range of products and manufacturers utilised to ensure patients can access appropriate products when they need them. In Nutrition Services, our Standard of Care and documentation structure has been updated to reflect national standards to support dietitians in achieving ACI recommendations with regards to communication, documentation and modality of review. Education and training was rolled out to our non-HEN-specialist dietitians to increase adherence and awareness to recommendations and standards and support learning among the wider team when providing care for this complex group. A larger scale project to review and optimise our approach to tube care and replacement is being undertaken to address gaps in follow-up tube management, which will hopefully reduce waiting time and support Emergency Department avoidance.



Jaclyn Lester, Home Enteral Nutrition Dietitian and Erin Gehrig, Paediatric Dietitian

Nursing and Midwifery Research Service

Nursing and Midwifery Research Operational Plan 2022-2026

The [Nursing and Midwifery Research Operational Plan 2022-2026](#) has been a significant undertaking that has spanned the past year. Its primary objective is to facilitate the Nursing and Midwifery professions' contribution to the District's Strategic Research Plan for the period of 2022-2026. This plan provides a platform for nurses and midwives throughout CCLHD to take the lead and actively participate in various research initiatives.

The Nursing and Midwifery Research Advisory Group has been instrumental in developing the Plan, ensuring its alignment with the goals and priorities of the nursing and midwifery community. In February 2023, the Nursing and Midwifery Leadership Committee provided their endorsement for the Plan, solidifying its importance and relevance.



NSW GOVERNMENT

Central Coast Local Health District

Nursing and Midwifery Research Operational Plan 2022-2026

Our Vision

For CCLHD nurses and midwives to lead and contribute to high quality research that improves patient outcomes and enhances the health and well-being of our community.

Purpose

To facilitate nursing and midwifery's contribution to the CCLHD Strategic Research Plan 2022-2026 and provide a platform for nurses and midwives across CCLHD to lead and be actively involved in research.

Strategic Priorities

- 1. LEADERSHIP: GROWING RESEARCH LEADERSHIP AND EXCELLENCE**
– Strengthen Nursing and Midwifery Research Leadership within CCLHD
- 2. CAPABILITIES: BUILDING RESEARCH LITERACY, CAPACITY AND CAPABILITIES**
– Build Nursing and Midwifery research literacy, capacity and capability and increase research activity
- 3. PARTNERSHIPS: DEVELOPING DYNAMIC PARTNERSHIPS AND COLLABORATIONS** – Foster key partnerships to support research integration and translation in Nursing and Midwifery
- 4. COMMUNITY: INVOLVING CONSUMERS AND THE COMMUNITY IN RESEARCH**
– Partner with consumers and the community in the co-design of nursing and midwifery research
- 5. IMPACT: DRIVING RESEARCH THAT HAS AN IMPACT**
– Lead nursing and midwifery research that has an impact

Research Projects

Nurses and midwives are actively engaged in practice-based research, ensuring that patient care is grounded in the best available evidence. In 2022-23, there was notable increase in the number of nurse-led research projects and partnership initiatives, providing support to 18 investigator-led projects that had obtained ethics approval. Over the course of the year, nine local projects advanced, including four newly initiated HREC-Exempt LNR projects, while two projects reached completion. Additionally, the District actively participates as a partner in seven collaborative projects.

New projects

1. **The experience of COVID in residential aged care facilities (RACF) and outbreak response**, led by Sally Freeman (CNC Outbreak Operational Lead), Dr Megan Whitley, Holly Ambrose, Dr Kathryn Taylor, Dr Richard Broome (Public Health Unit). The study examines the lived experience of a COVID outbreak for RACF staff, its impact on RACF residents, and how this experience influences preparedness and response to future outbreaks.
2. **Essential Nursing Care Prioritisation (ENCP) Framework: Ways of Working pilot**, led by Colleen Vandy (DONM Gosford) and Mary Kelly Nurse Practice Consultant. This project aims to explore the effectiveness of the ENCP Framework and a collaborative nursing care model in providing safe effective nursing care, reducing duplication, improving efficiency, and enhancing staff engagement and satisfaction.
3. **Factors influencing breastfeeding practices for women at discharge in Gosford Hospital**, led by Dr Penelope Fotherington, working with Susan Armitage (CMC), Julie Brittan (CMC), Dr Karen Myors (CNC CFH), and medical students Kave Sarangadasa, Robert Kibuuka, Jonathan Lam and Joshua Chu. This investigation explores the factors that influence breastfeeding rates among postpartum women.
4. **Non-Urgent Emergency Department Utilisation in Pre-School Aged Children and Infants**, led by Dr Karen Myors (CNC CFH), Dr Rebecca Richardson, Dr Richard McGee, and medical students Austin Truong, Ciaran Ramsay, Darvesh Singh Maan, Michelle Libreri and Dr Natasha Weaver (UON)

Ongoing projects:

5. **SLAM-B: Self-administration of Bortezomib for patients with myeloma: A new model of care**. Lead: Jacqui Jagger NP Haematology. Associate investigators: Michael Swab Pharmacy, Emma Parr CNS, Dr Jennie King NM.
 - Winner: Caring for the Coast Awards 2022
 - Awarded \$40,199 -NSW Regional Cancer Research Network grant
 - Awarded \$15,000 –Crestani Foundation Scholarship
6. **The Specialist Wound Centre: A new model of integrated wound management**. Lead: Jonathan Brinton A/NM Clinical Practice and Leadership and Dr Anne Purcell NP Wound Management, Co-investigators: Dr Jennie King NM Research, Alison Peck A/CNC, Assoc. Professor Penny Reeves HMRI.
 - Finalist: Caring for the Coast Awards 2022
7. **The Dino Op Program: An integrated approach to reducing anxiety and improving perioperative outcomes in paediatric patients**. Lead: Kate McGill RN Operating Theatres. Co-investigators: Justine Roberts CNS, Shuyan Lai CNE, Penny Owens CNC Paediatrics, Dr Jennie King NM Research.
8. **Analysis of five years of wound management in an Australian community setting**. Lead: Jonathan Brinton A/NM Clinical Practice and Leadership. Co-investigators: Dr Anne Purcell NP Wound Management, Dr Jennie King NM Research, Kerin Hibbard EHealth, Professor Nicky Cullum and Dr Luke Munford Manchester University UK.
9. **Development and evaluation of clinical procedure videos**. Lead: Jackie Colgan CNC Cardiac. Co-investigators: Kim Miles Education Consultant, Associate Professor Tom Buckley and Sarah Kourouche, Professor Geoff Tofler (University of Sydney).

Partnership projects

1. A randomised controlled trial investigating the effect of improving the cleaning and disinfection of shared medical equipment on healthcare-associated infections: The CLEANing and Enhanced disiNfection (CLEEN) study. Chief Investigator: Professor Brett Mitchell (Avondale university and CCLHD Honorary Conjoint Scholar)
2. Investigating the effect of improving the cleaning of shared medical equipment on multi-resistant organisms in an intensive care unit: A quasi-experimental study (I-CLEEN). Chief Investigator: Professor Brett Mitchell.
3. Review of physiological problems and nurse assessment and clinical decision making in determining clinical deterioration in children. Chief Investigator: Professor Marilyn Cruikshank, Sydney Children's Hospital Network.
4. ClinicalRCB project: Identifying how an academic health services partnership can support effective, sustainable and impactful research by Clinical Nurse and Midwife Consultants. Chief Investigator: Professor Kerry Inder, University of Newcastle.
5. Measurement properties of the Steroid Symptom Questionnaire Multiple Myeloma (SSQ-MM) in a multi-centre study with concurrent health related quality of life (HRQoL) measurement. Chief Investigator: Dr Tracy King, Sydney Local Health District
6. The effect of COVID-19 on healthcare associated infections in a multi-campus private health care facility. Chief Investigator: Professor Brett Mitchell.
7. Effect of antiseptic in reducing UTI in people who undertake self catheterisation. Chief Investigator: Professor Brett Mitchell.

Projects completed in 2022-23

1. The 'Volunteer Taster Program': Investigating the effects of hospital volunteering on empathy levels in nursing and medical students. Lead: Mary-Ellen Barker RN
2. Improving hypoglycaemia management to increase patient safety through a bundled hypoglycaemia care approach—a pilot study. Lead: Leah Snape CNC Diabetes Services.

The collective efforts of nursing professionals in these projects demonstrate their commitment to advancing knowledge and improving patient outcomes through research.



6th Australian Nursing and Midwifery Conference: Celebrating our Successes: Transforming Practice for the Future

In May 2023, the Central Coast Local Health District demonstrated its successful collaboration by co-hosting the 6th Australian Nursing and Midwifery Conference in partnership with Hunter New England and Mid North Coast Local Health Districts and the University of Newcastle. Held at the Newcastle Exhibition and Convention Centre, the conference offered an exceptional program showcasing nursing and midwifery-led innovations in clinical practice, research and education.

We are especially proud of our Central Coast nurses and midwives who delivered eight oral presentations and presented numerous posters, highlighting their dedication and expertise. The conference featured an exceptional Keynote Address by our Honorary Conjoint Scholar, Professor Brett Mitchell.

With over 250 delegates from across Australia in attendance, the conference provided a valuable forum and networking opportunity, fostering the exchange of knowledge and celebrating the collective achievements of clinicians, researchers, and educators.



Research higher degree candidates

Undertaking a research higher degree holds immense value in advancing healthcare practices and improving patient outcomes. It equips nurses and midwives with specialised knowledge, critical thinking skills, and research methodologies to address complex healthcare challenges. Through rigorous investigation, evidence-based interventions are developed, leading to enhanced patient care, policy advancements, and the overall growth of the nursing profession.

CCLHD nurses and midwives undertaking research higher degrees in 2022-23:

- Elsie Mari, PhD University of Sydney – *Realist evaluation of the Nurse-led Aged Care Response team service for Residential Aged Care Facility residents' transfer to hospital*
- Oliver Higgins PhD University of Newcastle - *Interpretations of Innovation: The intersection of technological advancement and psychosis*
- Carl Fiedler, PhD Bond University - *Leading the shift from burnout and overwhelm to engaged and thriving in Community Nursing*
- Jackie Colgan, MPhil University of Sydney - *Development and evaluation of clinical procedure videos*
- Nicola Morley, Master of Midwifery (Research) University of Technology Sydney - *Examining the career trajectory of early career midwives who aspire to work in midwifery continuity of care models*

Congratulations to Ms Mary-Ellen Barker for the award of BN Honours through the University of Newcastle. Supervisors: Dr Gary Crowfoot, Dr Jennie King.

Her research thesis, titled *The 'Volunteer Taster Program': Investigating the effects of hospital volunteering on empathy levels in nursing and medical students*, was conducted at Gosford Hospital in collaboration with Volunteer Services and the Nursing and Midwifery Directorate.

Central Coast Clinical School, University of Newcastle

Summary Statistics for the Central Coast Clinical School for 2022-23:

Total grant funding \$1,064,205
10 team and individual awards
2 education textbooks
2 national education policy frameworks
30 publications (3 publications in THE LANCET group)
20 presentations
100% of final year students participated as CCLHD AIMS in 2022
56% CCCS students returning as interns at CCLHD in 2023
Decrease clinical academic positions from 5 to 1 over 2022/23

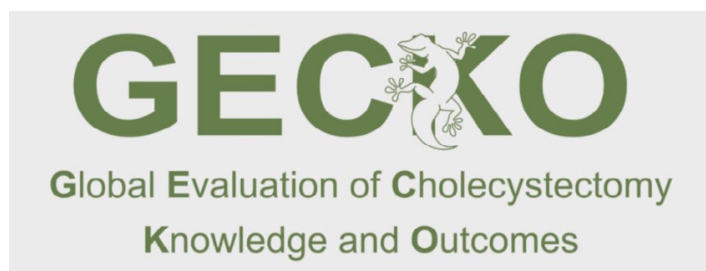
CCCS Clinical Dean:	
Associate Professor Amanda Dawson	Surgery Clinical Academic CHMW Board UON Academic Senate
NIHR Global Surgery Unit, University of Birmingham, United Kingdom	<ul style="list-style-type: none"> • Advisory Board (GECKO research project) • National Lead GECKO • National Lead HIPPO • National Lead APOLLO
Royal Australasian College of Surgeons	<ul style="list-style-type: none"> • Clinical Trials, Australia and New Zealand (CTANZ), Pre-vocational lead • Critical Literature Evaluation and Research Committee (CLEAR), past Chair
Trials and Audits in Surgery by Medical Students in Australia and New Zealand (TASMAN)	<ul style="list-style-type: none"> • Academic Surgery Lead • National Lead APOLLO • NSW Lead OPERAS • NSW Lead PostVentt

Examples of Current Research Studies

GECKO STUDY

Site investigators: A Dawson; R McGee

GECKO (Global Evaluation of Cholecystectomy Knowledge



and Outcomes) is a global, observational cohort study. The GlobalSurg Network collaborators will come together to collect contemporaneous data on the performance and outcomes of cholecystectomy.

Background

- Cholecystectomy is amongst the commonest surgical procedures performed, treating patients for biliary pathologies such as biliary cholic and gallstone pancreatitis, in emergencies and elective admissions
- Laparoscopy has evolved biliary surgery across the world. Despite mitigating the perioperative mortality burden of open surgery, laparoscopy imposes different burdens on the healthcare system, such as readmissions and operative complications.
- Hence, there is a focus to improve patient satisfaction and reduce hospital costs
- However, establishing universally safe cholecystectomy is a complex process, dependent on multiple factors such as adequate training, hospital infrastructure and enhanced peri-operative patient care
- The Global Evaluation of Cholecystectomy Knowledge and Outcomes (GECKO) Study, aims to fill the gap in evidence on the variations of safe provision of laparoscopic gallbladder surgery internationally, including low- and middle-income countries

Aims

The primary aim is to define the global variation in compliance to pre-, intra-, and post-operative audit standards.

The secondary aims are to:

- Determine quality of safe provision of cholecystectomy
- Assess adverse events following cholecystectomy and their management
- Analyse rates and outcomes of unsuspected gallbladder cancers
- Evaluate the availability of cholecystectomy services and training
- Assess sustainable practice in laparoscopic cholecystectomy

HIPPO STUDY

Site investigators: A Dawson; E Lun; Y De Silva; S Hariharan



HIPPO (Hernias, Pathway and Planetary Outcomes for Inguinal Hernia Surgery) is a global, prospective cohort study that aims to:

1. Characterise the global backlog for elective surgery
2. Technique, training and operating surgeon variation
3. Explore environmentally sustainable practices in operating theatres

APOLLO STUDY

Site investigators: A Dawson; R McGee; E Lun; G Qian



APOLLO is an international, multi-centre, prospective observational cohort study of acutely presenting colorectal cancer exploring the operative and non-operative management of emergency presentations of colon and rectal cancer globally. The study is being delivered by the European Students Research Collaborative (EuroSurg) and will be facilitated in Australia and Aotearoa New Zealand by TASMAN and other local collaborative networks.

Aims:

1. Describe the variation in the operative and non-operative management of emergency presentations of colon and rectal cancer in an international cohort.
2. Identify risk factors for mortality (intraoperatively, at 30-days and at 90-days) and ostomy rates (at 30- and 90-days) in patients deemed for active management (i.e., not for palliative management) to develop a risk prediction model.
3. Validate risk criteria of large bowel obstruction in patients with previously known colorectal cancer undergoing neoadjuvant chemotherapy or awaiting elective surgery.

Research Publications

CCLHD publications added to CARE and published between 1 July 2022 and 30 June 2023

- Ahmadzada, S., Ho, J. P. K., Vasan, K., & Kuo, T. S. (2022). Spindle cell lipoma of the epiglottis: a potential airway emergency. *New Zealand Medical Journal*, 135(1564), 77-80.
- Al-Dorzi, H. M., AlQahtani, S., Al-Dawood, A., Al-Hameed, F. M., Burns, K. E. A., Mehta, S., Jose, J., Alsolamy, S. J., Abdukahil, S. A. I., Afesh, L. Y., Alshahrani, M. S., Mandourah, Y., Almekhlafi, G. A., Almaani, M., Al Bshabshe, A., Finfer, S., Arshad, Z., Khalid, I., Mehta, Y., . . . Arabi, Y. M. (2023). Association of early mobility with the incidence of deep-vein thrombosis and mortality among critically ill patients: a post hoc analysis of PREVENT trial. *Critical Care (London, England)*, 27(1), 83. <https://doi.org/10.1186/s13054-023-04333-9>
- Aubin, A. M., McAuliffe, L., Williams, K., Issah, A., Diacci, R., McAuliffe, J. E., Sabdia, S., Phung, J., Wang, C. A., & Pennell, C. E. (2023). Combined vaginal progesterone and cervical cerclage in the prevention of preterm birth: a systematic review and meta-analysis. *Am J Obstet Gynecol MFM*, 5(8), 101024. <https://doi.org/10.1016/j.ajogmf.2023.101024>
- Ayesa, S. L., McEniery, J. C., Hill, L. S., McCloskey, C. E., & Lee, E. H. (2023). Navigating the glass labyrinth: Addressing gender diversity in Australian and New Zealand representative radiology leadership. *Journal of Medical Imaging and Radiation Oncology*, 67(2), 155-161. <https://doi.org/10.1111/1754-9485.13480>
- Ayesa, S. L., & Murphy, A. (2022). Positron emission tomography: Evolving modalities, radiopharmaceuticals and professional collaboration. *J Med Radiat Sci*, 69(4), 415-418. <https://doi.org/10.1002/jmrs.629>
- Baggio, D., Wellard, C., Chung, E., Talaulikar, D., Keane, C., Opat, S., Giri, P., Minson, A., Cheah, C. Y., Armytage, T., Lee, D., Chong, G., Johnston, A., Cochrane, T., Waters, N., Hamad, N., Wood, E. M., & Hawkes, E. A. (2023). Australian experience with ibrutinib in patients with relapsed/refractory mantle cell lymphoma: a study from the Lymphoma and Related Diseases Registry. *Leukemia and Lymphoma*, 64(3), 621-627. <https://doi.org/10.1080/10428194.2022.2157676>
- Bartman, H., Bauer, L., Kajons, N., Batchelor, S., & Juel, K. (2023). A monitoring and site visit intervention to reduce sales to minors at packaged liquor outlets. *Health Promotion Journal of Australia*. <https://doi.org/10.1002/hpja.744>
- Batchelor, S., Lunnay, B., Macdonald, S., & Ward, P. R. (2023). Extending the sociology of candidacy: Bourdieu's relational social class and mid-life women's perceptions of alcohol-related breast cancer risk. *Sociology of Health and Illness*.
- Black, E., Mammen, K., Deacon, R. M., Ezard, N., Mills, L., Dunlop, A. J., Montebello, M., Reid, D., Childs, S., Bruno, R., Shakeshaft, A., Siefried, K. J., Farrell, M., Holmes, J., & Lintzeris, N. (2022). Health and social characteristics of clients reporting amphetamine type substance use at entry to public alcohol and other drug services in New South Wales, Australia, 2016-2019. *Drug Alcohol Rev*. <https://doi.org/10.1111/dar.13588>
- Bland, A., Chuah, E., Meere, W., & Ford, T. J. (2023). Targeted Therapies for Microvascular Disease. *Interv Cardiol Clin*, 12(1), 131-139. <https://doi.org/10.1016/j.iccl.2022.09.011>
- Browne, K., White, N., Tehan, P., Russo, P. L., Amin, M., Stewardson, A. J., Cheng, A. C., Graham, K., O'Kane, G., King, J., Kiernan, M., Brain, D., & Mitchell, B. G. (2023). A randomised controlled trial investigating the effect of improving the cleaning and disinfection of shared medical equipment on healthcare-associated infections: the CLEANing and Enhanced disinfection (CLEEN) study. *Trials*, 24(1), 133. <https://doi.org/10.1186/s13063-023-07144-z>
- Browning, S., Davis, J. S., & Mitchell, B. G. (2023). Have gloves and gowns had their day? An Australian and New Zealand practice and attitudes survey about contact precautions for MRSA and VRE colonisation. *Infect Dis Health*. <https://doi.org/10.1016/j.idh.2023.03.006>
- Bryant, J., Waller, A., Bowman, A., Pickles, R., Hullick, C., Price, E., White, B., Willmott, L., Knight, A., Ryall, M. A., & Sanson-Fisher, R. (2022). Junior Medical Officers' knowledge of advance care directives and substitute decision making for people without decision making capacity: a cross sectional survey. *BMC Medical Ethics*, 23(1), 74. <https://doi.org/10.1186/s12910-022-00813-9>
- Carr, M. A., Gargett, M., Stanton, C., Zwan, B., Byrne, H. L., & Booth, J. T. (2023). A method for beam's eye view breath-hold monitoring during breast volumetric modulated arc therapy. *Phys Imaging Radiat Oncol*, 25, 100419. <https://doi.org/10.1016/j.phro.2023.100419>
- Casinader, S., Easey, K., Mikhail, P., Said, C., May, A., Scott, D., Boyle, A., & Ford, T. J. (2023). "Distal Radial First": Primary Access for Coronary Angiography and Interventions. *Heart, Lung & Circulation*, 32(3), e10-e11. <https://doi.org/10.1016/j.hlc.2022.10.015>
- Chaudhri, K., Caleres, G., Saunders, S., Michail, P., Di Tanna, G. L., Lung, T., Liu, H., & Joshi, R. (2023). Does Collaboration between General Practitioners and Pharmacists Improve Risk Factors for Cardiovascular Disease and Diabetes? A Systematic Review and Meta-Analysis. *Glob Heart*, 18(1), 7. <https://doi.org/10.5334/gh.1184>
- Chen, H. M. N., Anzela, A., Hetherington, E., Buddle, N., Vignarajah, D., Hogan, D., Fowler, A., Forstner, D., Chua, B., & Gowda, R. A proposed framework for the implementation of head and neck cancer treatment at a new cancer center from a radiation oncology perspective. *Asia-Pacific Journal of Clinical Oncology*.

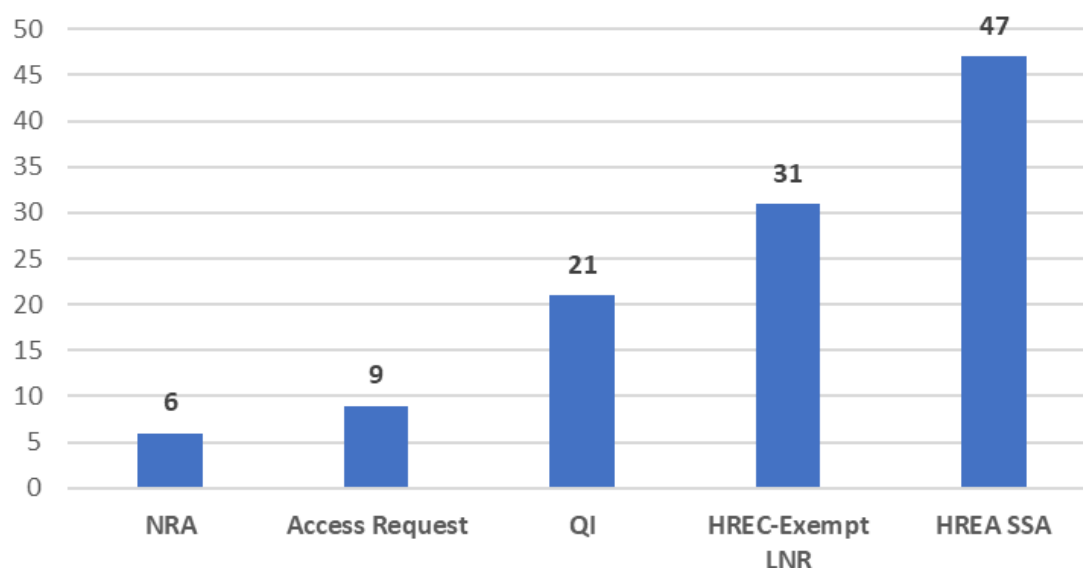
- Cibralic, S., Fay-Stammach, T., Tucker, D., Song, D., & Eapen, V. (2023). A mixed-methods evaluation of a state-wide outreach perinatal mental health service. *BMC Pregnancy and Childbirth*, 23(1), 74. <https://doi.org/10.1186/s12884-022-05229-2>
- Clifford, L. M., & Meere, W. (2023). Chronic Digoxin Toxicity: An Evaluation of Digoxin-Specific Antibodies and Other Management Options. *Cureus*, 15(5), e38692. <https://doi.org/10.7759/cureus.38692>
- Colgan, J., Kourouche, S., Tofler, G., & Buckley, T. (2022). Use of Videos by Health Care Professionals for Procedure Support in Acute Cardiac Care: A Scoping Review. *Heart, Lung and Circulation*.
- Di Ciaccio, P. R., Mills, G., Shipton, M. J., Campbell, B., Gregory, G., Langfield, J., Greenwood, M., McKeague, S., Shanavas, M., Eslick, R., Kidson-Gerber, G., Smallbone, P., Tang, C., Morris, K., Bilmon, I., Yannakou, C., Badoux, X., Berkahn, L., Farina, S., . . . Hamad, N. (2023). The clinical features, management and outcomes of lymphoma in pregnancy: A multicentre study by the Australasian Lymphoma Alliance. *British Journal of Haematology*. <https://doi.org/10.1111/bjh.18727>
- Fitzgeraldson, E., Fitzpatrick, S., Kay-Lambkin, F., Harding, N., McNaughton, K., Triandafilidis, Z., Heath, J., Lyford, B., & Charnley, J. (2022). Supports and Interventions for Carers of a Person with Depressive or Anxiety Symptomology: A Systematic Review. *Europe's Journal of Psychology*.
- Fitzgeraldson, E., Triandafilidis, Z., Franklin, Y., Palazzi, K., Kay-Lambkin, F., & Fitzpatrick, S. (2023). Feasibility and Acceptability of a Novel Online Program for Mental Health Carers. *International Journal of Psychological Research*, 16(1), 41-55. <https://doi.org/https://doi.org/10.21500/20112084.5733>
- Foran, A., Tremonti, C., Balgobind, V., Sakr, H., & Murnion, B. (2022). Transferring patients from high-dose methadone to buprenorphine: A retrospective case series. *J Opioid Manag*, 18(6), 557-566. <https://doi.org/10.5055/jom.2022.0752>
- Ford, T. J., Adamson, C., Morrow, A. J., Rocchiccioli, P., Collison, D., McCartney, P. J., Shaikat, A., Lindsay, M., Good, R., Watkins, S., Eteiba, H., Robertson, K., Berry, C., Oldroyd, K. G., & McEntegart, M. (2022). Coronary Artery Perforations: Glasgow Natural History Study of Covered Stent Coronary Interventions (GNOCCI) Study. *J Am Heart Assoc*, 11(19), e024492. <https://doi.org/10.1161/jaha.121.024492>
- Glanville, A. R., & Mitchell, A. B. (2022). New Tools for Old Problems: Gastroesophageal Reflux Disease and the Lung Allograft Microbiome. *American Journal of Respiratory and Critical Care Medicine*. <https://doi.org/10.1164/rccm.202207-1446ED>
- Gottimukkala, S. B., Lobo, L., Gautham, K. S., Bolisetty, S., Fiander, M., & Schindler, T. (2023). Intermittent phototherapy versus continuous phototherapy for neonatal jaundice. *Cochrane Database Syst Rev*, 3(3), Cd008168. <https://doi.org/10.1002/14651858.CD008168.pub2>
- Greer, P. B., Standen, T., David, R., Miri, N., Bobrowski, K., Lehmann, J., Zwan, B., & Moore, A. (2022). Remote EPID-based dosimetric auditing using DVH patient dose analysis. *Physics in Medicine and Biology*. <https://doi.org/10.1088/1361-6560/aca953>
- Hayter, C. L., & Ayesa, S. L. (2023). Female representation in radiology subspecialty interest groups in Australia and New Zealand. *Journal of Medical Imaging and Radiation Oncology*, 67(2), 162-169. <https://doi.org/10.1111/1754-9485.13484>
- Higgins, O., Short, B. L., Chalup, S. K., & Wilson, R. L. (2023). Artificial intelligence (AI) and machine learning (ML) based decision support systems in mental health: An integrative review. *International Journal of Mental Health Nursing*. <https://doi.org/10.1111/inm.13114>
- Higgins, O., Short, B. L., Chalup, S. K., & Wilson, R. L. (2023). Interpretations of innovation: The role of technology in explanation seeking related to psychosis. *Perspectives in Psychiatric Care*, 2023.
- Huber, J., Ryan, C. J., Gupta, R., Rosen, A., Tietze, T., Drew, K., Ahmed, T., & Skopek, M. (2022). The NSW Emergency Psychiatry Network. *Australian and New Zealand Journal of Psychiatry*, 48674221137820. <https://doi.org/10.1177/00048674221137820>
- Ilievski, V., Barrett, T., Lawson, W., Hoyland, S., & Tran, K. (2023). Cognitive impairment and behavioural emergencies within the acute hospital setting. *BMJ Open Qual*, 12(1). <https://doi.org/10.1136/bmjopen-2022-002034>
- Kennedy, M., Barrett, E., Heris, C., Mersha, A., Chamberlain, C., Hussein, P., Longbottom, H., Bacon, S., & Maddox, R. (2022). Smoking and quitting characteristics of Aboriginal and Torres Strait Islander women of reproductive age: findings from the Which Way? study. *Medical Journal of Australia*, 217 Suppl 2, S6-s18. <https://doi.org/10.5694/mja2.51630>
- Kennedy, M., Heris, C., Barrett, E., Bennett, J., Maidment, S., Chamberlain, C., Hussein, P., Longbottom, H., Bacon, S., Field, B. G., Field, B., Ralph, F., & Maddox, R. (2022). Smoking cessation support strategies for Aboriginal and Torres Strait Islander women of reproductive age: findings from the Which Way? study. *Medical Journal of Australia*, 217 Suppl 2, S19-s26. <https://doi.org/10.5694/mja2.51631>
- Kim, S. K., Wing-Lun, E., Chandrasekhar, J., Puri, A., Burgess, S., Ford, T. J., Kovacic, J., Graham, R. M., Psaltis, P. J., & Zaman, S. (2022). The Australian New Zealand Spontaneous Coronary Artery Dissection (ANZ-SCAD) Registry - A Multi-Centre Cohort Study: Protocol, Background and Significance. *Heart, Lung & Circulation*. <https://doi.org/10.1016/j.hlc.2022.08.018>
- King, O., Coleman, E., Evans, A., Richards, J., Hughes, E., Acquah, L., Parsons, H., & Morrison, J. (2022). Improving the visibility and communication of treatment escalation plans in Somerset NHS foundation trust. *International Journal of Risk & Safety in Medicine*. <https://doi.org/10.3233/jrs-227027>
- Knight, A., Horsley, P., Yuile, A., Yim, J., Suh, M., Venketesha, V., Kastelan, M., Wheeler, H., & Back, M. (2023). Volumetric response and pattern of failure of histone altered high grade glioma in adults following management with radiation therapy. *Journal of Neuro-Oncology*. <https://doi.org/10.1007/s11060-023-04332-4>
- Kovacic, J., & Louie-Johnsun, M. (2023). A rare case of co-secreting adrenocortical oncocytoma. *Urol Case Rep*, 46, 102285. <https://doi.org/10.1016/j.eucr.2022.102285>

- Lah, S., Wahab, A., & Wakil, A. (2022). Case report: Primary empty Sella causing secondary adrenal insufficiency and severe yet asymptomatic hyponatremia. *Clin Case Rep*, 10(8), e6125. <https://doi.org/10.1002/ccr3.6125>
- Law, S. J., Seal, S. T., & Cheepvasarach, C. (2022). Improving the Medical and Surgical Out-of-Hours Handover at a Hospital in Regional New South Wales, Australia. *Cureus*, 14(8), e27613. <https://doi.org/10.7759/cureus.27613>
- Lee, N., Leiser, B., Halter-Wehrli, Y., Mårtensson, L. B., Gao, Y., & Kildea, S. (2022). A comparison of two versus four sterile water injections for the relief of back pain in labour: A multicentre randomised equivalence trial. *Women Birth*, 35(6), e556-e562. <https://doi.org/10.1016/j.wombi.2022.02.002>
- Lewis, S., Triandafilidis, Z., Curryer, C., Jeong, S. Y., Goodwin, N., Carr, S., & Davis, D. (2023). Models of care for people with dementia approaching end of life: A rapid review. *Palliative Medicine*, 2692163231171181. <https://doi.org/10.1177/02692163231171181>
- Louie, E., Giannopoulos, V., Uribe, G., Wood, K., Teesson, M., Childs, S., Baillie, A., Haber, P. S., & Morley, K. C. (2022). Geographical variation in implementation of the Pathways to Comorbidity Care program in Australian drug and alcohol services. *JBI Evid Implement*. <https://doi.org/10.1097/xe.0000000000000344>
- Macneil, J., Liu, S., Iqbal, R., & Macneil, F. (2023). Selective parenchymal clamping in open partial nephrectomy: Early experience with a low cost, reusable novel parenchymal clamp. *BJU Compass*, 4(1), 88-95. <https://doi.org/10.1002/bco2.171>
- Mak, J., Eathorne, A., Leonardi, M., Espada, M., Reid, S., Zanardi, J. V., Uzuner, C., Rocha, R., Armour, M., & Condous, G. (2023). External Validation of the "2021 AAGL Endometriosis Classification": A Retrospective Cohort Study. *Journal of Minimally Invasive Gynecology*. <https://doi.org/10.1016/j.jmig.2022.12.012>
- May, A. N., Kull, A., Gunalingam, B., Francis, J. L., & Lau, G. T. (2016). The uptake of coronary fractional flow reserve in Australia in the past decade. *Medical Journal of Australia*, 205(3), 127. <https://doi.org/10.5694/mja15.01225>
- McGee, R. G., Graves, L. E., & Barnett, A. (2023). Timing of submissions to The Journal of Paediatrics and Child Health: Associations with the COVID-19 pandemic and editorial decisions. *Journal of Paediatrics and Child Health*, 59(1), 89-94. <https://doi.org/10.1111/jpc.16242>
- McGee, R. G., Webster, A. C., Lewis, S. R., & Welsford, M. (2023). Interventions for the symptoms and signs resulting from jellyfish stings. *Cochrane Database Syst Rev*, 6(6), Cd009688. <https://doi.org/10.1002/14651858.CD009688.pub3>
- McGee, R. G., Zhang, E. Y. B., Tan, J. J. G., Cheung, A. C. K., & Garvey, M. P. (2022). A systematic review of patient-reported outcome measures in paediatric endocrinology. *BMC Endocrine Disorders*, 22(1), 177. <https://doi.org/10.1186/s12902-022-01099-z>
- Mikhail, P., Howden, N., Monjur, M., Jeyaprakash, P., Said, C., Bland, A., Collison, D., McCartney, P., Adamson, C., Morrow, A., Carrick, D., McEntegart, M., & Ford, T. J. (2022). Coronary perforation incidence, outcomes and temporal trends (COPIT): a systematic review and meta-analysis. *Open Heart*, 9(2). <https://doi.org/10.1136/openhrt-2022-002076>
- Mikhail, P., & Spina, R. (2023). Challenges in the management of post-pericardiotomy syndromes. *Eur Heart J Case Rep*, 7(1), ytac485. <https://doi.org/10.1093/ehjcr/ytac485>
- Mills, G. S., Chadwick, V., Tang, C., Perram, J., Anderson, M. A., Anazodo, A., Kidson-Gerber, G., Shand, A., Lavee, O., Withers, B., Milliken, S., Di Ciaccio, P. R., & Hamad, N. (2023). Immunochemotherapy for life-threatening haematological malignancies in pregnancy: a systematic review of the literature and cross-sectional analysis of clinical trial eligibility. *The Lancet Haematology*, 10(6), e458-e467. [https://doi.org/10.1016/s2352-3026\(23\)00059-5](https://doi.org/10.1016/s2352-3026(23)00059-5)
- Mills, G. S., Di Ciaccio, P. R., Tang, C., Chadwick, V., Mason, K. D., Campbell, B. A., Shipton, M. J., Shanavas, M., Morris, K. L., Greenwood, M., Langfield, J., Kidson-Gerber, G., Eslick, R., Badoux, X., Yannakou, C. K., Gangatharan, S. A., Bilmon, I., & Hamad, N. (2022). Capturing the lived experiences of women with lymphoma in pregnancy: a qualitative study. *Leukemia and Lymphoma*, 1-10. <https://doi.org/10.1080/10428194.2022.2148376>
- Mitchell, B. G., Northcote, M., Rickett, C., Russo, P. L., Amin, M., De Sousa, F., Pearce, K., Sim, J., & Curryer, C. (2022). Patients' perspectives of healthcare-associated infection: 'you don't know what impacts it will have on your life'. *Journal of Hospital Infection*, 126, 93-102. <https://doi.org/10.1016/j.jhin.2022.04.014>
- Murfet, G., Ng, A. H., Hagger, V., Davidson, S., Ward, G., Fenton, B., & Rasmussen, B. (2022). Enhancing the capacity of the health workforce to deliver best practice diabetes care. *Australian Health Review*, 46(4), 496-500. <https://doi.org/10.1071/ah22040>
- Nagaratnam, S., Edwards, L., Blair, C., Evans, J., & O'Brien, W. (2023). Functional outcomes of ischaemic stroke patients with known Atrial Fibrillation not on therapeutic anticoagulation. *Internal Medicine Journal*. <https://doi.org/10.1111/imj.16044>
- Nagaratnam, S., Harinesan, N., Wijesinghe, R., Wong-Doo, N., Lyons, A., Morris, K., & Triplett, J. (2023). Painless progressive mononeuritis multiplex secondary to AML associated neuroleukemiosis. *Journal of Neuroimmunology*, 377, 578061. <https://doi.org/10.1016/j.jneuroim.2023.578061>
- Nath, C. E., Grigg, A., Rosser, S. P. A., Estell, J., Newman, E., Tiley, C., Ramanathan, S., Ho, S. J., Larsen, S., Gibson, J., Presgrave, P., Shaw, P. J., & Trotman, J. (2022). Challenges associated with test dose pharmacokinetic predictions of high dose melphalan exposure in patients with multiple myeloma. *European Journal of Clinical Pharmacology*, 78(12), 1911-1921. <https://doi.org/10.1007/s00228-022-03396-x>
- Neely, P., Patel, H., McTaggart, J., Bright, S., & Wellings, T. (2022). EVESTA: Emergency VESTibular Algorithm and its impact on the acute management of benign paroxysmal positional vertigo. *Emergency Medicine Australasia*. <https://doi.org/10.1111/1742-6723.14124>
- Nguyen, J., Wellard, C., Chung, E., Cheah, C. Y., Dickinson, M., Doo, N. W., Keane, C., Talaulikar, D., Berkahn, L., Morgan, S., Hamad, N., Cochrane, T., Johnston, A. M., Forsyth, C., Opat, S., Barraclough, A., Mutsando, H., Ratnasingam, S., Giri, P., . . . Hawkes, E. A. (2022). Clinical characteristics of Australian treatment-naïve patients with classical Hodgkin lymphoma from the lymphoma and related diseases registry. *European Journal of Haematology*. <https://doi.org/10.1111/ejh.13915>

- Noor, A., & Thomson, N. (2023). Reconstruction of partial auricular skin cancer defects: a review of current techniques. *Current Opinion in Otolaryngology & Head and Neck Surgery*. <https://doi.org/10.1097/moo.0000000000000894>
- Odutola, M. K., van Leeuwen, M. T., Bassett, J. K., Bruinsma, F., Turner, J., Seymour, J. F., Prince, H. M., Milliken, S. T., Hertzberg, M., Roncolato, F., Opat, S. S., Lindeman, R., Tiley, C., Trotman, J., Verner, E., Harvey, M., Underhill, C. R., Benke, G., Giles, G. G., & Vajdic, C. M. (2023). Dietary intake of animal-based products and likelihood of follicular lymphoma and survival: A population-based family case-control study. *Front Nutr*, 9, 1048301. <https://doi.org/10.3389/fnut.2022.1048301>
- Odutola, M. K., van Leeuwen, M. T., Turner, J., Bruinsma, F., Seymour, J. F., Prince, H. M., Milliken, S. T., Hertzberg, M., Trotman, J., Opat, S. S., Lindeman, R., Roncolato, F., Verner, E., Harvey, M., Tiley, C., Underhill, C. R., Benke, G., Giles, G. G., & Vajdic, C. M. (2022). Associations between early-life growth pattern and body size and follicular lymphoma risk and survival: a family-based case-control study. *Cancer Epidemiology*, 80, 102241. <https://doi.org/10.1016/j.canep.2022.102241>
- Odutola, M. K., van Leeuwen, M. T., Turner, J., Bruinsma, F., Seymour, J. F., Prince, H. M., Milliken, S. T., Hertzberg, M., Trotman, J., Opat, S. S., Lindeman, R., Roncolato, F., Verner, E., Harvey, M., Tiley, C., Underhill, C. R., Benke, G., Giles, G. G., & Vajdic, C. M. (2022). Associations between early-life growth pattern and body size and follicular lymphoma risk and survival: a family-based case-control study. *Cancer Epidemiology*, 80, 102241. <https://doi.org/10.1016/j.canep.2022.102241>
- O'Malley, G., Arumugam, D., Ogyaadu, S., Levister, C., Nosova, E., Vieira, L., & Levy, C. J. (2022). Pilot Study for Use of Intermittently Scanned Continuous Glucose Monitoring in Women With Gestational Diabetes. *Journal of Diabetes Science and Technology*, 19322968221134544. <https://doi.org/10.1177/19322968221134544>
- Phonlakrai, M., Ramadan, S., Simson, J., Golizda, N., Arm, J., Skehan, K., Goodwin, J., Trada, Y., Martin, J., Sridharan, S., Lamichhane, B., Bollipo, S., & Greer, P. (2022). Determination of hepatic extraction fraction with gadoxetate low-temporal resolution DCE-MRI-based deconvolution analysis: validation with ALBI score and Child-Pugh class. *J Med Radiat Sci*. <https://doi.org/10.1002/jmrs.617>
- Saunders, S. L., Sutcliffe, K. L., McOrist, N. S., & Levett, K. M. (2022). The associations between women who are immigrants, refugees, or asylum seekers, access to universal healthcare, and the timely uptake of antenatal care: A systematic review. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. <https://doi.org/10.1111/ajo.13632>
- Small, K. A., Sidebotham, M., Fenwick, J., & Gamble, J. (2022). The social organisation of decision-making about intrapartum fetal monitoring: An Institutional Ethnography. *Women Birth*. <https://doi.org/10.1016/j.wombi.2022.09.004>
- Stacey, N. M., & Feddersen, M. (2022). Microangiopathic haemolytic anaemia: a rare first presentation of lung cancer. *Medical Journal of Australia*, 217(4), 183-185. <https://doi.org/10.5694/mja2.51659>
- Thorpe, A., Hsu, J., Carter, E. F., Ullah, M., & Cox, S. C. (2023). Dental student oral surgery training-Comparing the impact of COVID-19 and cohort sizes. *European Journal of Dental Education*, 27(1), 63-68. <https://doi.org/10.1111/eje.12777>
- Watfern, C., Triandafilidis, Z., Vaughan, P., Doran, B., Dadich, A., Disher-Quill, K., Maple, P., Hickman, L., Elliot, M., & Boydell, K. M. (2023). Coalescing, Cross-Pollinating, Crystallising: Developing and Evaluating an Art Installation About Health Knowledge. *Qualitative Health Research*, 33(1-2), 127-140. <https://doi.org/10.1177/10497323221145120>
- Wilson, R. L., Higgins, O., Atem, J., Donaldson, A. E., Gildberg, F. A., Hooper, M., Hopwood, M., Rosado, S., Solomon, B., Ward, K., & Welsh, B. (2023). Artificial intelligence: An eye cast towards the mental health nursing horizon. *International Journal of Mental Health Nursing*, 32(3), 938-944. <https://doi.org/10.1111/inm.13121>
- Yuile, A., Satgunaseelan, L., Wei, J., Kastelan, M., Back, M. F., Lee, M., Wei, H., Buckland, M. E., Lee, A., & Wheeler, H. R. (2022). Implications of Concurrent IDH1 and IDH2 Mutations on Survival in Glioma-A Case Report and Systematic Review. *Current Issues in Molecular Biology*, 44(10), 5117-5125. <https://doi.org/10.3390/cimb44100348>
- Zarghami, A., van der Mei, I., Hussain, M. A., Claflin, S. B., Bessing, B., Simpson-Yap, S., Ponsonby, A. L., Lechner-Scott, J., Broadley, S., Blizzard, L., & Taylor, B. V. (2022). Long-term trajectories of employment status, workhours and disability support pension status, after a first episode of CNS demyelination. *Multiple Sclerosis*, 28(11), 1793-1807. <https://doi.org/10.1177/13524585221089900>
- Zhang, L., Champion, V., Dickson, M., & Tang, C. (2022). Acute myeloid leukaemia with NPM1 mutation: no longer having an absolute blast (count). *Pathology*. <https://doi.org/10.1016/j.pathol.2022.10.009>
- Ziazaris, W. A., Mumme, A., Sulaiman, B., Ashton, K., & Lefter, M. (2023). Atypical presentation of cerebriform intradermal naevus causing cutis verticis gyrata. *ANZ Journal of Surgery*. <https://doi.org/10.1111/ans.18382>

New Projects Authorised at CCLHD 2022-2023

CCLHD Authorised Applications 2022-2023



Health Technology Assessment
 Authorised from 01/07/2022 to 30/06/2023; Total: 0

Non-Research Activity
 Authorised from 01/07/2022 to 30/06/2023; Total: 6

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
26/09/2022	0822-068C	Orthopaedics	Case Study: Synovial Chondromatosis managed with subtalar fusion	CCLHD	Ramanathan Palaniappan	R Palaniappan; M Hunter; R Cooper
29/08/2022	0822-071C	Medical Imaging	Gemcitabine-induced radiation recall myositis-rare cause for acute focal sartorius muscle inflammation	CCLHD	Andrew Cha	A Cha; J Hanson
26/09/2022	0922-084C	Orthopaedics	Case Study: Synovial Chondromatosis with worrying features on histopathology	CCLHD	Ramanathan Palaniappan	R Palaniappan; M Hunter; R Cooper
23/02/2023	1122-105C	Rehabilitation Medicine	Case Report -Gerstmann's Syndrome	Gosford Hospital; Wyong Hospital	Taranpreet Bains	T Bains
1/03/2023	0223-015C	Renal Services	Case Report: cryoglobulinaemic vasculitis	Gosford Hospital	Craig Coorey	C Coorey
27/03/2023	0223-017C	Public Health	Case Report -Public Health response to toxigenic Corynebacterium ulcerans following a dog bite NSW	CCLHD	Tove-Lysa Fitzgerald	T Fitzgerald

Access Requests

Authorised from 01/07/2022 to 30/06/2023; Total: 9

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
23/09/2022	0922-081C	Endocrinology	The feasibility, safety, and efficacy of GrouP Exercise for people with type 2 diAbetes using Telehealth (The GREAT Study)	CCLHD	Emily Cox	E Cox
6/10/2022	0922-089C	Women, Children and Families	Evidence to inform policy and practice that promotes child health, development and wellbeing: the NSW Child E-Cohort Project.	CCLHD	Kathleen Falster	K Falster; R Pilkington; J Lynch; R Lingam; T Dobbins; T Ahmed
11/11/2022	1022-096C	Nursing & Midwifery	Evaluation of health worker acceptance and tolerance of respirators in clinical practice	CCLHD	Susan Jain	S Jain; K Dempsey
21/12/2022	1222-114C	Clinical Safety, Quality & Governance	The multifaceted health impacts of living in a rural community on transgender and gender diverse individuals	CCLHD	Bridget Haire	B Haire; A Del Tufo; R Foster; C Newman
09/02/2023	0123-005C	Operating Theatres	Maths in Industry Study Group (MISG) -NSW Health Operating Theatre Schedules	CCLHD	Michael Lydamore	M Lydeamore; A Ernst
20/03/2023	0223-013C	Cancer Services	Regional and Rural Cancer Services. Workforce, Research Capacity and Research Priorities.	CCLHD	Nikola Bowden	N Bowden; C Kukard
23/03/2023	0323-024C	Medical Workforce	Lived experiences of International Medical Graduates (IMGs) in Australia	CCLHD; Wyong Hospital	Kichu Nair	K Nair; R Healey; K Fakes
14/06/2023	0423-035C	Intensive Care	PAIN in Survivors of Intensive Care Units- Analgesia and Sedation Outcome Study	Gosford Hospital	Ben Moran	B Moran
2/06/2023	0523-056C	Geriatrics	The prevalence and impact of frailty on anticoagulant prescription in older hospitalised patients with atrial fibrillation in Northern Sydney Local Health District and Central Coast Local Health District -Application of a Frailty Index based on routinely collected hospital data	Gosford Hospital; Wyong Hospital; Woy Woy Hospital	Sarah Hilmer	T Nguyen; S Lo; K Fujita

Human Research Ethics Application (HREA) Site Specific Assessment (SSA)

Authorised from 01/07/2022 to 30/06/2023; Total: 47

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
7/07/2022	0722-056C	Medical Oncology	OXTOX: Can Oxaliplatin neurotoxicity be reduced with ibudilast in people with metastatic colorectal cancer – a phase II randomised study	CCLHD	Matthew Wong	M Chan; S Tiley; M Arasaratnam; M Bagia; C Kukard; C Teng; P Shrestha
9/08/2022	0822-065C	Medical Oncology	A Phase III, double-blind, placebo-controlled, Randomised, Multicentre, International Study of Durvalumab Plus Oleclumab and Durvalumab Plus Monalizumab in Patients with Locally Advanced (Stage III), Unresectable Non-small Cell Lung Cancer (NSCLC) Who Have Not Progressed Following Definitive, Platinum-Based Concurrent Chemoradiation Therapy (PACIFIC-9)	CCLHD	Matthew Chan	M Chan; M Wong; S Tiley; M Arasaratnam; M Bagia; C Kukard; C Teng; P Shrestha
15/09/2022	0822-066C	Neurology	Central Coast & Northern Sydney Multiple Sclerosis (& Related Disorders) Research Database: EXPLORE MS (& Related Disorders) Database	Gosford Hospital	Dayna Griffiths	D Griffiths; J Sturm; R Heard; B O'Brien; K Ercan
30/08/2022	0822-069C	Drug & Alcohol	A multi-centre, practice-level, stepped wedge cluster randomized controlled trial to compare point-of-care HCV RNA testing, dried blood spot testing, and standard of care to enhance treatment uptake among people with HCV who have recently injected drugs attending needle and syringe programs: the TEMPO study	Gosford Hospital	Amanda Burfitt	A Burfitt; S de Vries
30/08/2022	0822-070C	Drug & Alcohol	An observational cohort study to evaluate the use of finger-stick point-of-care hepatitis C RNA testing to enhance diagnosis and treatment of hepatitis C virus infection among people at risk of HCV infection: The National Australian HCV Point-of-Care Testing Program.	CCLHD	Amanda Burfitt	A Burfitt; S de Vries
25/08/2022	0822-074C	Intensive Care	Prevalence and impact of cardiac dysfunction on outcome of COVID-19 critically ill patients – retrospective observational cohort study	Gosford Hospital	David Bowen	D Bowen

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
26/10/2022	0822-075C	Paediatrics	Burns in Paediatric Patients presenting to Emergency and Outpatient Clinics	Wyong Hospital	Penelope Owens	P Owens
24/11/2022	0822-080C	Haematology	Arsenic Neurotoxicity in patients with Acute Promyelocytic Leukemia	Gosford Hospital	Yao Yao	Y Yao
9/09/2022	0922-083C	Anaesthetics	Effectiveness of a Ward-Based Pain Management Bundle in Reducing Pain-Related Clinical Reviews and Rapid Responses: A Pilot Trial	CCLHD	Vidya Shirumalla	V Shirumalla; B Moran
13/09/2022	0922-087C	Cardiology	Enhancing Guidewire Efficacy for trans radial access: The EAGER Randomised Controlled Trial	Gosford Hospital	Tom Ford	T Ford; A Bland; E Chuah
27/10/2022	0922-088C	Aboriginal Health	Marri gudjaga study	Central Coast Community Health Centres	Susan Mallinson	S Mallinson
10/11/2022	1022-093C	Intensive Care	Evaluation of the electronic transfer of care (eTOC) solution	Gosford Hospital	Atul Gaur	B Dort; A Ayodele; K Stanceski; D Deidun; L Pham; D Mackay
7/11/2022	1022-094C	Environmental Service	A randomised control trial investigating the effect of improving the cleaning of shared medical equipment on healthcare associated infections	Gosford Hospital	Brett Mitchell	M Amin; P Tehan; K Browne; K Graham; G Matterson
9/11/2022	1122-097C	Cardiology	Safety and Care OF no FASTing prior to catheter laboratory procedures: a non-inferiority randomised control trial (SCOF FAST Trial)	Gosford Hospital	Tom Ford	T Ford
11/11/2022 (Gosford Hospital)	1122-099C	Surgery	Sprint National Anaesthesia Project 3: An Observational Study and Audit of Frailty, Multimorbidity and Delirium in Older People in the Perioperative Period (SNAP 3)	Gosford Hospital & Wyong Hospital	Amanda Dawson; Richard McGee	A Dawson (PI: Gosford Hospital); R McGee (PI: Wyong Hospital)
22/11/2022 (Wyong Hospital)						
16/11/2022	1122-102C	Research Office	Enabling more clinical trials: workforce capability and capacity mapping	CCLHD	Katherine Bolton	K Bolton; M Lacey
22/12/2022	1122-103C	Paediatrics	Assessing the Reduction of Recurrent admissions using OM-85 for the treatment of preschool Wheeze (ARROW): a multi-centre, randomised, double-blind, placebo-controlled trial.	CCLHD	Stewart Birt	S Birt; E Pascoe; C Hollis; A Dang; J C-Pinto; M Lardelli

CCLHD Authorisation Date	CCLHD Reference Number	Department/ Service	Study Title	Study Site	PI Name	Site Investigators
14/12/2022	1122-106C	Mental Health	Using Machine Learning to Assist Decision Making in the Assessment of Mental Health Consumers Presenting to Emergency Departments	CCLHD	Rhonda Wilson	R Wilson; O Higgins; S Chalup
6/03/2023	1122-107C	Mental Health	Examining the COVID-19 mental health response in the Central Coast quarantine hotels	CCLHD	Milena Heinsch	C Tickner; H Cootes; P Buykx; P Pallas; D Betts; G Sultani
9/12/2022	1222-109C	Medical Oncology	PM1183-C-008-21-A Randomized, Multicenter, Open-label, Phase III Study of Lurbinectedin Single-Agent or Lurbinectedin in Combination with Irinotecan versus Investigator's Choice (Topotecan or Irinotecan) in Relapsed Small Cell Lung Cancer (SCLC) Patients (LAGOON Trial)	CCLHD	Matthew Wong	M Chan; C Kukard; S Tiley; M Bagia; M Arasaratnam; P Shrestha
14/12/2022	1222-110C	Cardiology	Distal Evaluation of Functional performance with Intravascular sensors to assess the Narrowing Effect: Guided Physiologic Stenting (DEFINE GPS)	Gosford Hospital	Roberto Spina	R Spina; T Ford; K Sarathy; A May
9/12/2022	1222-112C	Haematology	A Phase 3, Two-stage, Randomized, Multicenter, Open-label Study Comparing CC-92480 (BMS-986348), Carfilzomib, and Dexamethasone (480Kd) Versus Carfilzomib and Dexamethasone (Kd) in Participants with Relapsed or Refractory Multiple Myeloma (RRMM)	CCLHD	Cecily Forsyth	T Armytage; C Tiley; R Blennerhassett; M Dean; J Langfield; A Lyons; A Nelson; B Wylie, Y Yao; J Jagger
21/12/2022	1222-116C	Medical Oncology	The LARK clinical trial –Liver Ablative Radiotherapy utilising Kilovoltage intrafraction monitoring (KIM)	Gosford Hospital	Simon Tang	Dr A Kneebone; Dr A Windsor
21/12/2022	1222-117C	Medical Oncology	HLX10-020-SCLC302	CCLHD	Matthew Chan	C Kukard; S Tiley; M Wong; M Arasaratnam; P Shrestha; M Bagia
29/03/2023	0123-002C	Endocrinology	The risk of hypothyroidism following radioiodine therapy in the management of toxic adenoma and toxic multinodular goitre	CCLHD	Flavian Joseph	F Joseph

CCLHD Authorisation Date	CCLHD Reference Number	Department/ Service	Study Title	Study Site	PI Name	Site Investigators
2/02/2023	0123-003C	Anaesthetics	A comparison of lignocaine plasma levels and efficacy of two preparations of 2% lignocaine for airway topicalisation.	Gosford Hospital	Frances Page	C H-Bradley; M Miller
22/03/2023	0123-006C	Paediatrics	Review of practice of physiological observations and nurse clinical decision-making in determining early recognition of clinical deterioration in children	Gosford Hospital	Penelope Owens	P Owens; L Mimmo; C Hawken
2/02/2023 (Gosford Hospital)	0223-007C	General Surgery	Acute PresentatiOn of CoLorectal Cancer: an internatiOnal snapshot (APOLLO)	Gosford Hospital	Amanda Dawson; Richard McGee	R McGee; E Lun; G Qian
15/02/2023 (Wyong Hospital)						
10/02/2023	0223-008C	Aboriginal Health	Addressing asthma inequities among Aboriginal and Torres Strait islander adults of New South Wales.	CCLHD	Vanessa McDonald	D Palakiko; D Hartz; S Colliss
16/02/2023	0223-009C	General Surgery	Global Cohort Study: Hernias, Pathway and Planetary Outcomes for Inguinal Hernia Surgery (HIPPO)	Gosford Hospital & Wyong Hospital	Amanda Dawson	A Dawson; E Lun; Y De Silva; S Hariharan
28/02/2023	0223-011C	Environmental Services	Investigating the effect of improving the cleaning of shared medical equipment on multi-resistant organisms in an intensive care unit: A quasi-experimental study (iCLEEN)	Gosford Hospital	Brett Mitchell	M Amin; P Tehan; K Browne; K Graham; G Matterson
23/03/2023	0223-016C	Cardiology	Multivessel compared to Single Vessel Functional Angiography to Diagnose Patients with No Obstructive Coronary Artery Disease: The MAD-NOCA trial	Gosford Hospital	Tom Ford	T Ford; R Rehan
19/06/2023	0323-021C	Obstetrics & Gynaecology	Pregnancy Intention, Contraception and Obstetric Outcomes in Women Who Use Alcohol and Other Drugs in Pregnancy (Part 3): A qualitative study of health care workers.	CCLHD	Penelope Fotheringham	P Fotheringham; K McNamara
6/04/2023	0323-029C	Medical Oncology	EMBER-4: A Randomized, Open-Label, Phase 3 Study of Adjuvant Imlunestrant vs Standard Adjuvant Endocrine Therapy in Patients who have Previously Received 2 to 5 years of Adjuvant Endocrine Therapy for ER+, HER2-Early Breast Cancer with an Increased Risk of Recurrence	CCLHD	Susan Tiley	C Kukard; M Bagia; M Chan; M Wong; M Arasaratnam

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
17/04/2023	0423-034C	Medical Oncology	A Randomized, Open-Label, Multicenter Phase 3 Trial of Domvanalimab, Zimberelimab, and Chemotherapy Versus Nivolumab and Chemotherapy in Participants with Previously Untreated Locally Advanced Unresectable or Metastatic Gastric, Gastroesophageal Junction, and Esophageal Adenocarcinoma	CCLHD	Craig Kukard	M Wong; S Tiley; M Bagia; M Arasaratnam; M Chan; A Flynn
11/05/2023	0423-038C	Radiation Oncology	Achieving Prostate Cancer treatment equity: A comparison of treatment outcomes between regional and metropolitan prostate cancer patients undergoing definitive radiotherapy	Gosford Hospital	Andrew Kneebone	A Kneebone; H Lieng
1/06/2023	0423-043C	General Surgery	Should intermittent pneumatic compression devices be standard therapy for the prevention of venous thrombo-embolic events: a randomised clinical trial in patients undergoing surgery.	Gosford Hospital	Amanda Dawson	R McGee; M Keehan; N Lott
28/04/2023	0423-046C	Haematology	A Phase 3 Randomized, Open-Label, Multicenter Study of Zanubrutinib (BGB-3111) Plus Anti-CD20 Antibodies Versus Lenalidomide Plus Rituximab in Patients with Relapsed/Refractory Follicular or Marginal Zone Lymphoma	Gosford Hospital & Wyong Hospital	Catherine Tang	C Tiley; C Forsyth; M Dean; B Wylie; A Lyons; T Armytage; A Nelson; J Langfield; R Blennerhassett; Y Yao
8/05/2023	0523-049C	Cardiology	Improving microvascular circulation in acute ST-elevation myocardial infarction using diagnostic ultrasound with contrast agent: A randomized trial to evaluate the efficacy and safety of Sono thrombolysis to primary percutaneous coronary Intervention	Gosford Hospital	Tom Ford	A Bland; W Meere; E Chuah
1/06/2023	0523-052C	Intensive Care	Point Prevalence Program	Gosford Hospital	Atul Gaur	A Gaur
23/06/2023	0523-054C	Podiatry	The reliability of lower limb vascular measures and their role in predicting diabetes-related foot ulcer healing outcomes -Central Coast Local Health District -Site	CCLHD	Sean Sadler	S Lanting; C Linton; A McIlhatton; A Chan; T Maclean; V Chuter
22/06/2023	0523-055C	Community, Chronic and Complex Care	Preventing catheter associated urinary tract infections: A randomised double-blind crossover study	Central Coast Community Health Centres	Brett Mitchell	K Browne; J Swindells

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
16/06/2023	0623-058C	Radiology	Multicentre registry of individuals undertaking bone scans to assess for suspected transthyretin (ATTR) cardiac amyloidosis	Gosford Hospital	Shankar Vamadevan	D Shetty; Dr S Khan; J Duggan; E Hemingway
9/06/2023	0623-059C	Mental Health	Exploring the Attitudes and Perspectives of Mental Health Professionals Towards Using e-Mental Health for Suicide Prevention	CCLHD	Jenny Bowman	C Hood; R Sheather-Reid; S Hunt
16/06/2023	0623-060C	General Surgery	Global Evaluation of Cholecystectomy Knowledge and Outcomes (GECKO)	Gosford Hospital & Wyong Hospital	Amanda Dawson	R McGee
26/06/2023	0623-062C	Medical Oncology	iTTACc - A Phase II Trial of Tislelizumab in combination with Sitravatinib for Recurrent / Metastatic Cervical Cancer after Platinum-Based Chemotherapy	Gosford Hospital & Wyong Hospital	Susan Tiley	M Bagia; C Kukard; M Arasaratnam; A Flynn
29/06/2023	0623-064C	Haematology	An ALLG Phase II study of pembrolizumab checkpoint blockade following chemoimmunotherapy for primary central nervous system lymphoma (PCNSL)	Gosford Hospital	Tasman Armytage	C Forsyth; A Lyons; M Dean; A Nelson; R Blennerhassett; C Tang

**Human Research Ethics Committees (HREC) Exempt Low or Negligible Risk (LNR) Research
Authorised from 01/07/2022 to 30/06/2023; Total: 31**

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
5/10/2022	0722-059C	Women, Children and Families	Non-urgent and preventable Emergency Department presentations (Category 4 & 5) in pre-school aged children (0-6) that could be managed by a child and family health practitioner in the community.	CCLHD	Richard McGee	R McGee; R Richardson; K Myers; M Libreri; C Ramsay; D Maan; A Truong
3/08/2022	0722-060C	Pharmacy	Survey to explore Factors Influencing the Reporting of Medication-related Errors and Concerns in an Australian tertiary hospital setting	CCLHD	Claire McCormack	C McCormack; M Morrison
29/08/2022	0822-063C	Central Coast Clinical School	Near Peer Medical Teaching (NPMT) Program Tutor Survey	CCLHD	David Medveczky	D Medveczky; A Mitchell; E Leopardi; A Dawson
5/10/2022	0822-064C	General Medicine	Pathology Utilisation Medical Project 2022 - Junior Medical Officer Survey	CCLHD	Georgina Elton	G Elton; V Premkumar; B Spann; E Hartley; S Vohra

CCLHD Authorisation Date	CCLHD Reference Number	Department/ Service	Study Title	Study Site	PI Name	Site Investigators
5/09/2022	0822-076C	Respiratory	Treatment Outcomes for Patients with Non-tuberculous Mycobacterium Pulmonary Disease at Gosford Hospital	Gosford Hospital	Phillip Nguyen	P Nguyen; P Roach
8/09/2022	0822-077C	General Medicine	An audit of the compliance to the diabetic ketoacidosis treatment algorithm at Wyong Hospital	Wyong Hospital	Liam Clifford	L Clifford; A Wakil; K Davies
6/09/2022	0822-079C	Medical Imaging	A comparison of the axial 2D FLAIR and 3D FLAIR sequences on the 3 Tesla MRI scanner in the detection of plaque lesions in multiple sclerosis (MS) patients.	Gosford Hospital	Emma Inskip	E Inskip
20/09/2022	0922-086C	Pharmacy	Determining the role of the pharmacist in ensuring appropriateness of oral anticoagulant therapy in an Australian general hospital population	Gosford Hospital	Claire McCormack	C McCormack; A Ganea; K Ezenwa; M Edgeworth
7/12/2022	1022-092C	Medical Oncology	The prevalence and effects of sarcopenia in prostate cancer patients undergoing chemotherapy	CCLHD	Mal Arasaratnam	M Arasaratnam; M Chan; J Lin; J Linker; D Shen; N Ho
10/11/2022	1022-095C	ENT	Surveying general practitioners' knowledge around the assessment and management of hearing loss	CCLHD	Shashinder Singh	S Singh; M Zhang; K Chandiok; Y De Silva; Y Gunewardhane; D Helmers
9/12/2022	1122-101C	Oral Health	An evaluation of obesity stigma amongst dental professionals (Obesity STIGMA-DENT study)	CCLHD	Zanab Malik	Z Malik; C Collins; D Cockrell; K Williams
8/12/2022	1222-111C	General Surgery	Serum lipase as a prognostic indicator in patients with small bowel obstruction	CCLHD	Shawn Ng	S Ng; S Chia
18/01/2023	0123-001C	Nursing Administration	Essential Nursing Care Prioritisation (ENCP) Framework: Ways of Working pilot	Gosford Hospital	Colleen Vandy	M Kelly
5/04/2023	0223-012C	Women, Children and Families	Factors influencing breastfeeding practices for women at discharge in Gosford Hospital	CCLHD	Penelope Fotheringham	P Fotheringham; S Armitage; J Brittan; K Myers; N Weaver; J Chu; D Hii; J Lam; R Kibuuka
2/03/2023	0223-014C	Public Health	The experience of COVID in residential aged care (RACF) and outbreak response	CCLHD	Sally Freeman	S Freeman; M Whitley; H Ambrose; K Taylor; R Broome

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
6/04/2023	0323-018C	Cardiology	Outcomes and feasibility of rotational atherectomy in centres without onsite cardiac surgery	Gosford Hospital	Samantha Saunders	S Saunders; E Chuah; R Spina; W Meere; A Bland; K Easey; E Redwood; K Gardiner; T Ford
28/06/2023	0323-019C	Cardiology	Evaluation of early patient discharge protocol	Gosford Hospital	Kellie Andrews	K Andrews; M Huntley
6/04/2023	0323-022C	Pharmacy	Side effects vs smoking vs capecitabine therapy	CCLHD	Mikie Hughes	M Hughes; LJ Robson; C Inman;
6/04/2023	0323-023C	Nutrition Services	Food and Nutrition Training and Resource Needs of Staff from Central Coast Community Service Organisations that Support Residents Experiencing Food Insecurity	CCLHD	Lesley Marshall	L Marshall; K Booth; S Roberts; J Herd; E Waterhouse
4/05/2023	0323-026C	Intensive Care	Preferred music listening versus prescribed music listening to reduce burnout and improve healthcare worker wellbeing	Gosford Hospital	Aimee Corderoy	A Corderoy
10/05/2023	0323-028C	Anaesthetics	Audit of perioperative blood sugar level monitoring at Gosford and Wyong Hospitals	CCLHD	Eric Xie	E Xie; T Chu
6/04/2023	0323-030C	Cardiology	Feasibility and safety of SYNERGY Megatron drug eluting stent (DES) undergoing left main percutaneous coronary intervention (PCI)	CCLHD	Tom Ford	T Ford; S Saunders; E Chuah; R Spina; W Meere; A Bland; K Easey; E Redwood
26/04/2023	0323-031C	General Surgery	Predictive imaging factors to correlate with true closed-loop small bowel obstruction	Gosford Hospital	Shirley Cai	S Cai
8/06/2023	0423-033C	Quality, Strategy and Improvement	ALICE Project - Assessing the effectiveness of the co-design process	CCLHD	Nicholas Goodwin	N Goodwin; C Dinglestad; N Hodyl; R Wyse; N Kajons; B Sinderberry
16/05/2023	0423-036C	Public Health	Opportunistic patient vaccination for influenza and COVID-19	CCLHD	Sarah Davies	S Davies; D Moore; B Goulter
18/05/2023	0423-037C	Paediatrics	Mental health presentations to the emergency setting amongst 15-17 year olds: a retrospective study	Gosford Hospital & Wyong Hospital	Alina Alikhan	A Alikhan; M Rattan
4/05/2023	0423-042C	Anaesthetics	AirQ3G LMA audit	Gosford Hospital	Dani Brewster-O'Brien	T York

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
28/06/2023	0423-044C	Pharmacy	CNC Referral Pathway for medication review by ward clinical pharmacist	Gosford Hospital, Wyong Hospital & Woy Woy Hospital	Gauri Godbole	G Godbole; J Gills; K Woods
18/05/2023	0523-051C	Anaesthetics	Audit of trauma list efficiency during weekdays and weekends	Gosford Hospital	Thomas York	D Brewster-O'Brien
28/06/2023	0623-061C	Medical Workforce	Evaluating the impact of Assistants in Medicine (AiMs) in CCLHD	CCLHD	Hemal Patel	H Patel; A Mitchell; H Parsons
5/07/2023	0623-063C	Pharmacy	Retrospective data analysis to investigate the trend in Ozempic (Semaglutide)-induced gall bladder adverse events associated acute admissions in Gosford and Wyong hospitals	Gosford Hospital & Wyong Hospital	Geetha Mathew	G Mathew; G Godbole

Quality Improvement (QI)

Authorised from 01/07/2022 to 30/06/2023; Total: 21

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
13/07/2022	0722-057C	Cardiology	Distal Radial First: Primary Access for Coronary Angiography and Interventions	CCLHD	Tom Ford	S Saunders; K Easey; P Mikhail; D Scott; T Ford
30/09/2022	0722-058C	Palliative Care	Are patients who identify as Aboriginal or Torres Strait Islander more likely to depart CCLHD Emergency Departments before their treatment is completed?	CCLHD	Thomas Osborne	T Osborne; J Milson
23/09/2022	0722-061C	Surgery	Criteria-led Discharge Pilot project in general surgery, urology and orthopaedic surgery	Gosford Hospital	Ian Incoll	I Incoll; E Watson; K Wong; E Bateman
25/07/2022	0722-062C	Speech Pathology	The impact of targeted nursing education on compliance with the CCLHD diet flip chart system	Gosford Hospital	Linda White	L White; R O'Neil; M Fletcher
25/08/2022	0822-072C	Nutrition Services	Nutrition risk and malnutrition prevalence in adult patients admitted to hospital: The CCLHD malnutrition point prevalence study (MAPPS).	CCLHD	Kirrilee Blackwood	S Noble; C Martin; K Fitzpatrick; K Mathews; K Blackwood; A Tomsett

CCLHD Authorisation Date	CCLHD Reference Number	Department/Service	Study Title	Study Site	PI Name	Site Investigators
31/08/2022	0822-078C	General Medicine	An audit of the diagnosis of hyperglycaemia in type two diabetics in the acute care setting at Wyong Hospital with respect to the hyperosmolar hyperglycaemia syndrome (HHS).	Wyong Hospital	Liam Clifford	L Clifford; A Wakil; K Davies
24/11/2022	1022-091C	Radiology	Patient factors predicting a positive CT neck angiogram when investigating for cervical artery dissection in the emergency department setting.	Gosford Hospital	Peter James	P James; S Ayesa
13/12/2022	1122-098C	Podiatry	Lean Six Sigma Green Belt. To redefine and streamline the patient cohort serviced by CCLHD Podiatry Department High Risk Foot Service	CCLHD	Kate Norbury	K Norbury; T Maclean; C Linton; M Byrne; S Casey; G Rosee
8/12/2022	1122-100C	Endocrinology	An Audit of the Adverse Effects of IV Zoledronic Acid Infusion in Patients with Osteoporosis	CCLHD	Flavian Joseph	F Joseph; T Joshi; S Giang; M Layton
25/01/2023	1122-108C	General Medicine	The clinical value of streptococcus pneumonie Ag urine test	Wyong Hospital	Nouras Hassan	N Hassan
8/02/2023	0123-004C	Nutrition Services	Protocolised Nutrition Care for Elderly Hip Fracture Patients	Gosford Hospital	Annabelle Cook	A Cook; S Noble; E Lun
22/02/2023	0223-010C	Mental Health	Utilization of ECT in a metropolitan hospital -review of practice	Gosford Hospital	Abirami Ratnagopal	A Ratnagopal
13/06/2023	0323-027C	Intensive Care	True Incidence of delirium in ICU as a Hospital acquired complication and potential risk factors	Gosford Hospital	Muhammad Habibullah Rana	M Rana; K McArdle; S Bright; D Brewster; E Dehn
10/05/2023	0423-032C	Women, Children and Families	Child and Family Health Medical Development Team Patient Reported Experience	CCLHD	Mark Booth	M Booth; K Myers
1/06/2023	0423-039C	Endocrinology	An audit of the diagnosis of hyperglycaemia in patients with diabetes or new onset of diabetes in the acute care setting at Gosford Hospital with respect to the diabetic ketoacidosis (DKA) and an audit of compliance to the DKA treatment algorithm.	Gosford Hospital	Liam Clifford	L Clifford; D Medveczky; D Heidegger; L Snape; M Layton; B Fenton; K Davies; A Kim
1/06/2023	0423-040C	Endocrinology	An audit of the diagnosis of ketosis without diabetes in patients presenting acutely unwell to Gosford Hospital	Gosford Hospital	Liam Clifford	L Clifford; D Medveczky; D Heidegger; L Snape; M Layton; B Fenton; K Davies; A Kim

CCLHD Authorisation Date	CCLHD Reference Number	Department/ Service	Study Title	Study Site	PI Name	Site Investigators
1/06/2023	0423-041C	Endocrinology	An audit of the diagnosis of hyperglycaemia in patients with diabetes or new onset of diabetes in the acute care setting at Gosford Hospital with respect to the hyperosmolar hyperglycaemia syndrome (HHS).	Gosford Hospital	Liam Clifford	L Clifford; D Medveczky; D Heidegger; L Snape; M Layton; B Fenton; K Davies; A Kim
17/05/2023	0423-045C	Emergency	Odontogenic Presentations in CCLHD: Demographics, Management & Outcomes	CCLHD	Vanessa Ng	V Ng; S Kok
21/06/2023	0523-047C	Orthopaedics	A Comparative Review of the Outcome of Hemiarthroplasty via the Direct Anterior Approach to the Direct Lateral Approach for Acute Neck of Femur Fractures.	Gosford Hospital	Islam Nassar	I Nassar, S Brooks, P Moore, D Chia
21/06/2023	0523-048C	Orthopaedics	A Comparative Review of the Outcome of Total Hip Arthroplasty via the Anterior Approach to Alternative Approaches for Neck of Femur Fractures	Gosford Hospital	Islam Nassar	I Nassar, S Brooks, P Moore, C Lee
25/05/2023	0523-050C	Pharmacy	Meningitis/Encephalitis De-escalation from Lumbar Puncture (LP)	Gosford Hospital & Wyong Hospital	Semun Galimam	S Galimam

