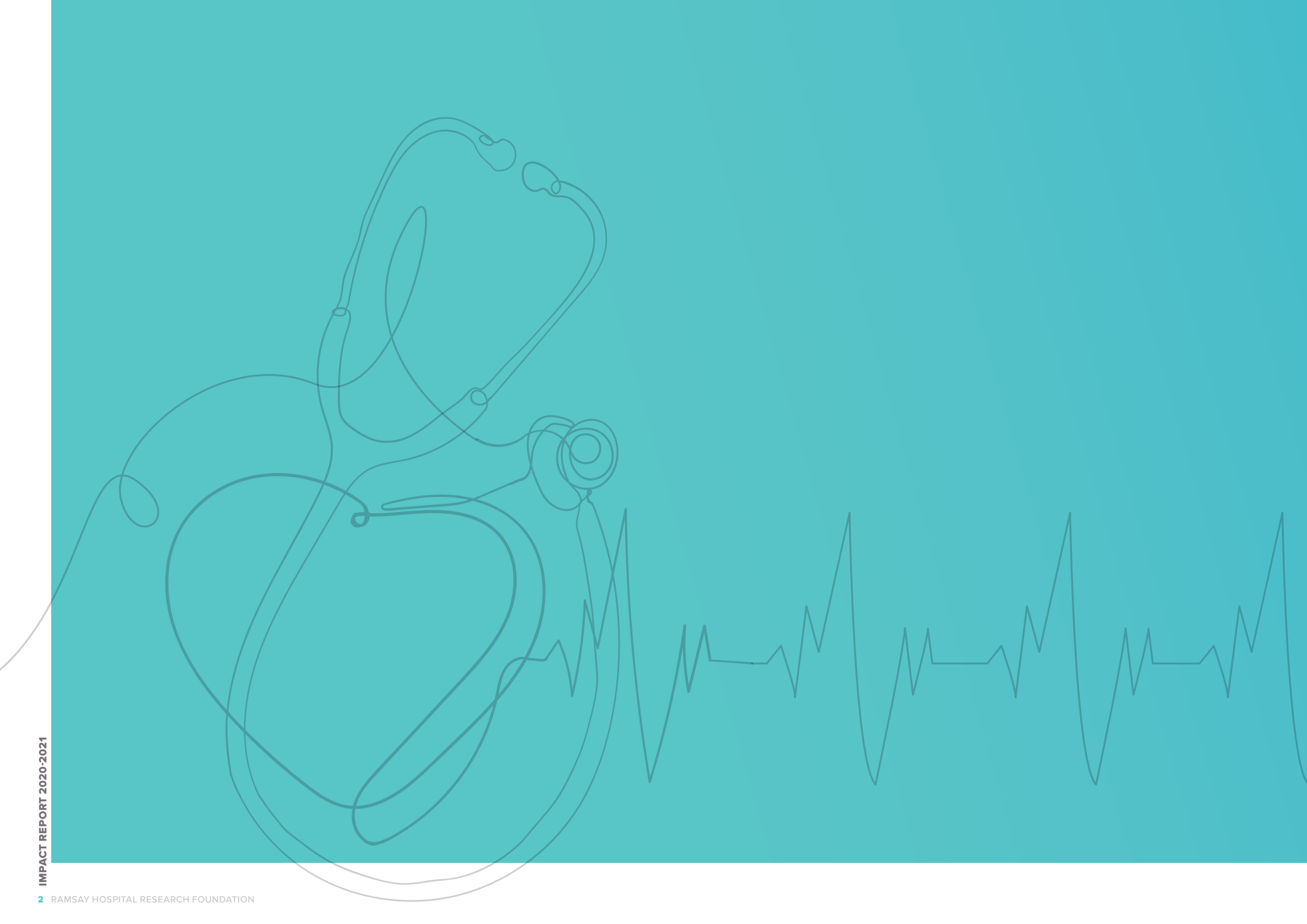




# Impact Report 2020-2021

| Supporting Research to  
| Improve Patient Outcomes

 Ramsay Hospital  
Research Foundation



# Contents

<b>Welcome from the Chair</b> .....	<b>4</b>
– Professor Sir Edward Byrne AC	
<b>Welcome from the CEO</b> .....	<b>5</b>
– Ms Nicola Ware	
<b>Ramsay Hospital Research Foundation Overview</b> .....	<b>6</b>
– 2020-2021	
<b>PROJECTS</b> .....	<b>7</b>
<b>National Clinical Trial Network Overview</b> .....	<b>50</b>
<b>Clinical Trial Units Site Summary</b> .....	<b>52</b>
<b>PROMS and PREMS</b> .....	<b>53</b>
<b>Future Statement</b> .....	<b>55</b>
<b>About RHRF</b> .....	<b>56</b>
<b>Acknowledgments</b> .....	<b>58</b>
<b>Thank You to the Paul Ramsay Foundation</b> .....	<b>59</b>

## Introduction to the Projects ..... 7

### COMPLETED PROJECTS

Measuring Patient Change During Rehabilitation .....	8
--	---

### IN PROGRESS PROJECTS

Feasibility, Acceptability and initial Outcomes of a Psychological Adjustment and Reintegration Training Program for Ex-Service Personnel .....	10
The PATHway trial .....	12
SuPeR Knee .....	14
GLAD study: Genes, Clinical Assessment and Depression .....	16
Evaluation the Implementation of a Delirium Education Intervention using Clinical Simulation in a Private Healthcare Setting .....	18
Pharmacogenetics for Severe Mood Disorders: A Randomised Controlled Trial .....	20
Using practice analytics to understand variation and support reflective practice .....	22
Investigation of the rate of psychotropic polypharmacy in Australian patients with post-traumatic stress disorder upon admission to an in-patient mental health facility .....	24
Optimising outcomes for frail hospitalised older adults - volunteer support and pain assessment interventions: A cluster randomised control trial .....	26
ADAPTS: Antibiotic Dysbiosis and Probiotics Trail in Infants .....	28
Early Parenting Centre: Study to identify indicators of immediate- and medium-term program impact .....	30

Robotic-Assisted Surgery and Kinematic ALignment in total knee arthroplasty (RASKAL) .....	32
M-HELP: Mental Health and the Early Loss of a Pregnancy .....	34
Penicillin Allergy De-Labeling in Paediatric OutPatients (PADLPOP) study .....	36
Australian Cardiovascular COVID-19 Registry (AUS-COVID) .....	38

### RECENTLY FUNDED PROJECTS (FUNDED JUNE 2021)

Randomised Controlled Trial of Neurostimulation for Anorexia Nervosa .....	40
Ramsay ADAPT: Implementation and pilot evaluation of sustainable and supported clinical pathway for managing anxiety and depression in cancer patients .....	42

### IN PROGRESS PROJECTS – ENABLING RESEARCH GRANTS SCHEME

Nurse led volunteer support interventions and a technology driven pain assessment for older adults with cognitive impairment in hospital .....	44
Exploring the experiences, perceptions and attitudes of therapists delivering rehabilitation in a group format: A qualitative study .....	46

### IN PROGRESS PROJECTS – NHMRC PARTNERSHIP GRANT

Australasian Partnership for Improving Outcomes in Severe Depression .....	48
--	----



# Welcome from the Chair – Professor Sir Edward Byrne AC

Australia truly is the lucky country when it comes to the availability of healthcare expertise and infrastructure. But the circumstances in which we grow, live, work and age can influence how we access this care, as well as our overall health and wellbeing. I believe every Australian should have an equal opportunity to live a healthy life. That's why I'm proud to chair the Ramsay Hospital Research Foundation as we strive to achieve better health outcomes and more equitable healthcare through high-quality and innovative research with a focus on social determinants of health.

The 2020-2021 period has been both turbulent and productive for RHRF. Our mission to improve patient outcomes is now more important than ever as we face so many challenges due to the pandemic and the disruption over the past few years. Though it has been a challenging time, it is my great pleasure to be able to share our third Impact Report with you showcasing the progress of RHRF from 1 January 2020 – 31 December 2021.

During this time, the RHRF Board has been privileged to review many research applications and to support the establishment of 14 different research projects. It is rewarding to see the level of interest and scope for the development of the research in Ramsay Hospitals and collaboration with so many different research organisations beyond Ramsay.

I would like to thank my fellow Directors for their support as we continue to develop the activities of RHRF. I would like to thank and acknowledge Mr Danny Sims, the inaugural Chair of the Ramsay Hospital Research Foundation.

Mr Sims was integral to RHRF's establishment and ongoing success. His contributions were immeasurable, and his leadership was greatly valued.

It is also my pleasure to welcome new Directors to the RHRF Board. Firstly, Professor Sally Redman, the Chief Executive Officer of the Sax Institute, and a foundation member of the Prevention Centre's Leadership Executive. We welcome Prof Redman's expertise in social determinants of health and look forward to working with her as we develop RHRF initiatives in this area.

Secondly, welcome to Professor Helen Christensen (AO), who is Scientia Professor of Mental Health at UNSW Sydney and Board Director of the Black Dog Institute. Helen joins the RHRF Board bringing a wealth of experience in mental health research, an area that has had significant investment from RHRF and one that we expect to see continued growth in. We welcome their expertise and invaluable knowledge to the RHRF Board.

I would also like to acknowledge the leadership and efforts of our CEO, Nicola Ware. RHRF has continued to prosper under her leadership and the successes of the past two years are due to her hard work and that of a dedicated and exceptional team.

Finally, I would like to extend my thanks to the Paul Ramsay Foundation for its continued support of the Ramsay Hospital Research Foundation. Thanks to their contribution, we are able to deliver an extensive research program to benefit patients.

# Welcome from the CEO – Ms Nicola Ware



Ramsay Hospital Research Foundation seeks to fund research that will improve patient outcomes. Our mission is one that resonates strongly with Ramsay Health Care Staff and Doctors, and it has been pleasing to see the continued growth and development of RHRF over the past two years.

The past 24 months has been an intense period as we faced uncharted territory and significant disruption due to COVID-19. Our research projects were severely disrupted, with limited access to patients and to hospitals during these turbulent times. However, due to the hard work and persistence of our team, the support of Ramsay Health Care staff and doctors, and the continued dedication of our research grant recipients, most of our research projects have remained on track and are working towards completion over the next few years.

Despite these disruptions, RHRF was proud to award almost \$6.3M in funding over the past two years, supporting 14 new research projects. We have also seen the continued development of the Ramsay Clinical Trials Network with more than 300 trials established and more than 700 patients enrolled in the various trials within the network.

We continue to maintain and develop strong connections with a variety of Medical Research Institutes, Universities, independent clinician researchers and Ramsay VMOs to cultivate research projects that will see the continued growth of RHRF in coming years.

RHRF is very fortunate to have the support of the Paul Ramsay Foundation (PRF). Thanks to the funding that they have provided, we have been able to support 34 projects since our inception in 2017. We continue to enjoy working with PRF and supporting their mission to break the cycles of disadvantage. We were also pleased to be able to renew our funding agreement with them for a further five years, with a new cycle of funding commencing in June 2021.

With your continued support, and that of PRF, RHRF will be able to continue our investment in high quality research that is designed to improve patient outcomes and increase research productivity, within Ramsay Health Care and beyond.

I look forward to seeing how research conducted by our clinicians, allied health and nursing staff can help to shape the future of health care in Australia and how we can continue contributing to improving the lives of patients.



# Ramsay Hospital Research Foundation Overview

**JAN  
2020  
-DEC  
2021**

FUNDING AWARDED 2020-2021

**\$6,259,327**

**14** NUMBER OF  
GRANTS AWARDED

**16** PUBLICATIONS

STATES SUPPORTED  
**NEW SOUTH WALES  
WESTERN AUSTRALIA  
QUEENSLAND  
VICTORIA**

CLINICAL AREAS

**5** MENTAL HEALTH

**3** MOTHERS, BABIES  
AND CHILDREN

**2** FRAILTY

**2** ORTHOPAEDIC /  
MUSCULOSKELETAL /  
REHABILITATION

**1** CANCER /  
MENTAL HEALTH

**1** CARDIOVASCULAR /  
COVID-19



COMPLETED

IN PROGRESS

RECENTLY FUNDED

# Research Projects

## An introduction

**During the period 1 January 2020 to 31 December 2021, the Foundation funded 21 unique research projects – with 14 commencing and 1 completed during this time.**

The Ramsay Hospital Research Foundation funds high-quality and innovative research that aims to improve patient outcomes and the delivery of healthcare in Australia. We have funded a diverse range of projects that span from pregnancy, mothers and babies to frailty in older patients. RHRF has supported a variety of projects investigating different aspects of mental health, plus orthopaedic, musculoskeletal and rehabilitation projects.

The impact of SARS-CoV-2 or COVID-19 has been significant for many of the projects, with the ability to recruit patients severely impacted.

Additionally, during the various lockdowns research staff were unable to access hospitals as they were not considered essential staff. These, and other complications, resulted in substantial delays for many of our hospital-based projects.

The challenges of COVID-19 are ongoing, but we acknowledge the dedication of the research teams and their ability to be agile and pivot the projects where possible to ensure they have continued.





COMPLETED

## STUDY

# Measuring patient change during rehabilitation

### CHIEF INVESTIGATORS

Dr Margie Schache (Donvale Rehabilitation Hospital),  
Dr Amanda Timmer (Donvale Rehabilitation Hospital),  
Professor Carolyn Unsworth (Federation University)

### CLINICAL AREA

Orthopaedic / Musculoskeletal / Rehabilitation

### SITE

Donvale Rehabilitation Hospital

### FUNDING AWARDED

\$62,141

### DATE PROJECT COMPLETED

January 2020

### UNMET NEED

In rehabilitation (inpatient, day rehabilitation and outpatient) there is currently no systematic collection of consistent, psychometrically sound and clinically useful outcome measure data for all patients admitted to Ramsay Health Care. This limits staff ability to measure treatment effectiveness and identify areas for quality improvement and research.

### THE PROJECT

The aim of this research was to (i) examine the responsiveness of a standard set of outcome measures for use in both inpatient and day rehabilitation patients, to measure patient change during rehabilitation and, (ii) confirm the inclusion of outcome measures in the outcome measure data set to be used in Ramsay Health Care rehabilitation throughout Australia.

Over a 6-month period, data were collected with 1373 inpatients and 919 day rehabilitation patients across eight clinical programs – orthopaedic joint (hip), orthopaedic joint (knee), orthopaedic lower limb, orthopaedic spinal, orthopaedic upper limb, neurological, reconditioning and cardiac – on a range of 18 outcome measures.

The results indicated that 13 of these outcome measures demonstrated acceptable to good responsiveness and clinical utility and are suitable for ongoing use in Ramsay Health Care rehabilitation settings nationally. The remaining five measures require further data collection and testing but may be suitable to use in the future with specific rehabilitation populations.

This research has confirmed that a small range of outcome measures can be used to collect patient-reported and clinician-reported outcome data to demonstrate change as a result of participation in rehabilitation. These measures capture outcomes across health domains that matter to patients and their family such as level of impairment, independence, and participation in activities they need and want to do.

### HOW DID THIS PROJECT CHANGE HEALTHCARE DELIVERY?

The outcomes of this research project have successfully been translated into Ramsay Health Care’s standard model of care for rehabilitation patients, with the collection of outcome measures implemented at all 32 different Ramsay Health Care rehabilitation sites across Australia.

The roll out was supported by partnering with VisionTree Software, Inc., to use their VisionTree Optimal Care™ (VTOC™) software to capture the standard set of outcome measures electronically and store the data in a secure electronic platform.

**“The exciting development of a standard set of outcome measures will have a significant effect on the quality of Ramsay Health Care rehabilitation services across Australia”**

- Jenny Haig, National Rehabilitation Program Director



**STUDY**

Measuring patient change during rehabilitation

**WHAT DIFFERENCE HAS THIS PROJECT MADE?**

The use of outcome measures in routine clinical care is considered best practice. Outcome measure data is now collected in a central, accessible place. This data can now be used with confidence to monitor patient outcomes as a result of participation in rehabilitation and promote continuous quality improvement and research in the delivery of rehabilitation services.

**FUTURE PLANS?**

The project is now embedded in the Ramsay Health Care's standard model of care and has been expanded to include more outcome measure specific to day rehabilitation groups and different diagnostic groups. Tableau dashboards are being developed to communicate the outcome measure data back to clinicians and hospitals delivering rehabilitation services.

**6** MONTHS

**8** CLINICAL PROGRAMS

**18** OUTCOME MEASURES

**919** REHABILITATION PATIENTS

**1,373** INPATIENTS

## STUDY

# Feasibility, acceptability and initial outcomes of a psychological adjustment and reintegration training program for ex-service personnel

### CHIEF INVESTIGATOR

Dr Madeline Romaniuk  
(Gallipoli Medical Research  
Foundation)

### CLINICAL AREA

Mental Health and Wellbeing

### SITE

Greenslopes Private Hospital

### FUNDING AWARDED

\$559,392

### DATE PROJECT COMMENCED

August 2020

### UNMET NEED

An estimated 46% of Australian Defence Force personnel experience a mental health difficulty within the first 5 years of leaving the military. Despite a large body of evidence underpinning the need for further support of transitioning veterans, currently there are no evidence-based programs designed to target reintegration and psychological adjustment to civilian life.

In veteran health literature, reintegration refers to both the dynamic process of resuming a civilian life after separating from the military, and the outcome of that process. Reintegrating successfully to civilian life is vital for veterans' psychosocial functioning post-service. Difficulties with reintegration are associated with poorer outcomes including in social and family relationships, as well as mental and physical health.

### THE PROJECT

In order to address this crucial gap in services and supports we developed an evidence-informed 8-week group reintegration training program for service veterans. With the support of the RHRF, we are now piloting the developed reintegration program at Greenslopes Private Hospital in collaboration with the clinical team at the Keith Payne Unit, which is a specialised mental health facility for veterans.

The program is delivered once a week in a face-to-face group setting by a multidisciplinary team including psychologists, social workers, occupational therapists, and mental health nurses.

By utilising a strengths-based recovery framework, the program honours the lived-experience of participants through person-centred content that focuses on skills building and promotes hope, autonomy, and self-determination.

The program delivers education by highlighting psychological and cultural aspects that might be hindering participants' adjustment to civilian life and aims to build insight into personal challenges while providing practical first steps to facilitate healthier adjustment.

Data collection and program delivery are ongoing, so final results are not available. Interim results however indicate an improvement in adjustment and reintegration to civilian life at the conclusion of the program. In addition, 100% of participants who have completed the program would recommend it to a fellow veteran.

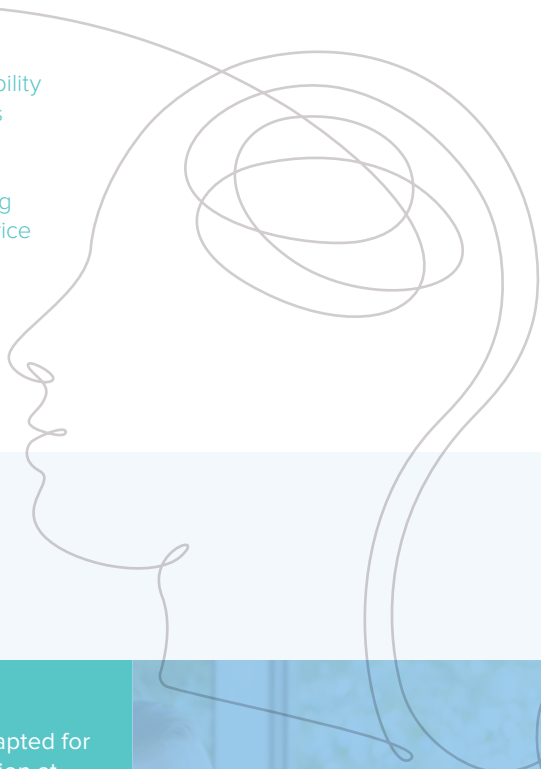
**“This project is an essential first step towards addressing a significant gap in services for ex-service personnel. It will be the first study in Australia to pilot a program designed specifically to target psychological adjustment and cultural reintegration from military service to civilian life.”**

### WHAT DIFFERENCE WILL THIS PROJECT MAKE?

An evidence-based reintegration program has the potential to lessen the substantial burden of mental illness and negative psychosocial outcomes in the veteran community that have been associated with transition difficulties. Importantly, this project is improving patient-care for the veteran community by recognising a significant area of need, and initiating the process to develop an effective and evidence-based treatment to address that need. Above all, it is our aim to help facilitate our veterans having the best chance at a mentally healthy and successful transition.

**STUDY**

Feasibility, acceptability and initial outcomes of a psychological adjustment and reintegration training program for ex-service personnel



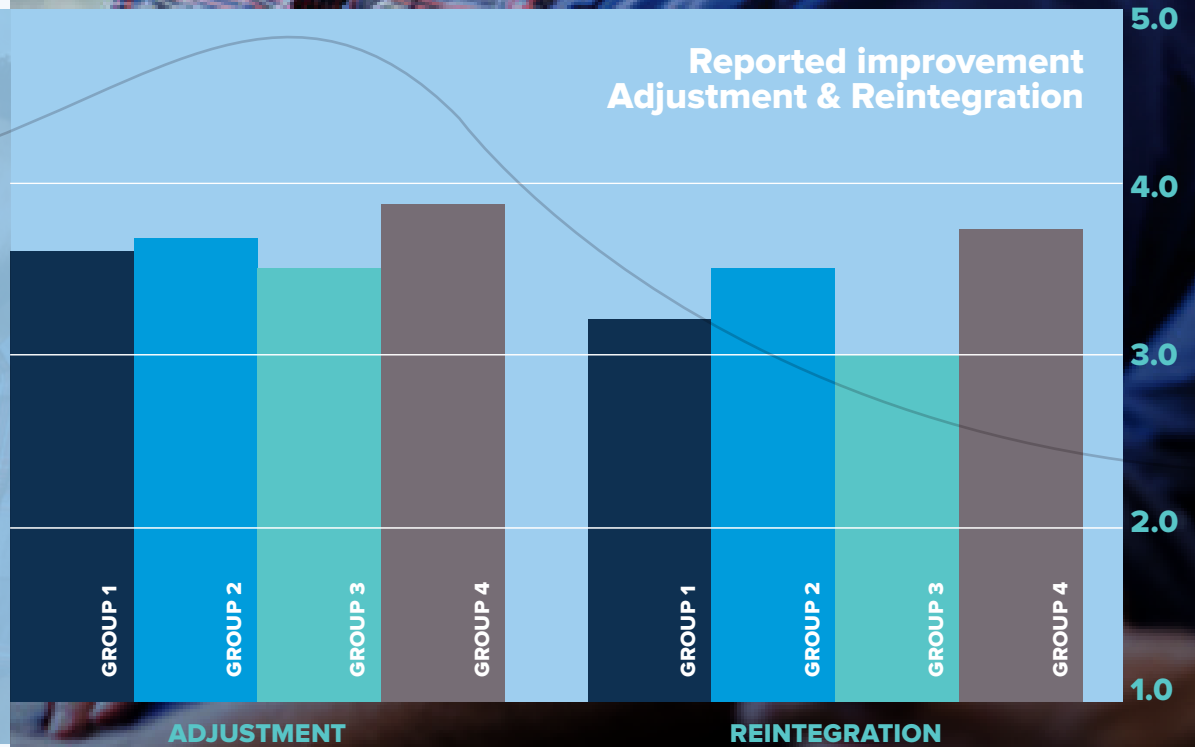
**FUTURE PLANS?**

This project has been adapted for a current serving population at the ADF Soldier Recovery Centre, Gallipoli Barracks in Brisbane.

This pilot also potentially enables the establishment of a scalable program suitable for delivery across Ramsay Health services. Ultimately, a version of the program may become integrated and delivered as part of routine practice among Ramsay facilities that offer mental health services for veterans nationally.



**Reported improvement Adjustment & Reintegration**



**STUDY**

# The PATHway trial: Participatory health through behavioural engagement and disruptive digital technology for post-operative rehabilitation following knee replacement or lumbar decompression

**CHIEF INVESTIGATORS**

Professor David Hunter (University of Sydney) and Professor Manuela Ferreira (NHMRC Principle Research Fellow)

**CLINICAL AREA**

Orthopaedic / Musculoskeletal

**SITES**

Lawrence Hargrave Private Hospital, Wollongong Private Hospital, Hunters Hill Private Hospital, Mount Wilga Private Hospital, Sydney Spine Institute, Spine Service Clinic and Harbour Spine Surgeons.

**FUNDING AWARDED**

\$1,154,965

**DATE PROJECT COMMENCED**

October 2017

**UNMET NEED**

Every year in Australia, over 550,000 elective surgical procedures are performed for all musculoskeletal (MSK) conditions, one in seven being for osteoarthritis (OA) of the knee or low back pain. Total knee replacement and lumbar decompression are very common surgeries in people with chronic knee and low back pain, contributing to \$6 billion spent every year on health care for these conditions.

With the rising prevalence of these conditions and ensuing surgical costs, quality of care and cost have become an important focal point. Post-surgical care in Australia, including inpatient rehabilitation for knee and spine surgery, is currently not standardised, sustainable or evidence-based, contributing to substantial clinical variation, poor outcomes, and increased health care costs.

Patients cannot benefit from treatments that are not developed or delivered according to the best available evidence.

This variance in care often results in a discrepancy in treatment outcomes, and increased healthcare costs, in addition to patient disengagement and lack of adherence to rehabilitative care.

**THE PROJECT**

A team of researchers from the Sydney Musculoskeletal Health at the University of Sydney, led by Professor David Hunter and Professor Manuela Ferreira, are conducting the PATHway trial.

PATHway seeks to demonstrate the overall benefit of a standardised rehabilitation pathway and digital technology to support rehabilitation in the home.

It is 12-month research study, evaluating the efficacy and cost-effectiveness of **A 6-MONTH TECHNOLOGY PACKAGE** of:

- A **home-based exercise app**,
- A joint range of **movement monitoring app**,
- A **wearable physical activity tracker** built-in with motivational reminders, and
- A **remote health coaching** delivered via video calls and text messages.

Plus a post-surgical clinical pathway (standardised, evidence-based, multidisciplinary rehabilitation program) in patient-reported pain following total knee replacement or lumbar decompression.

**HOW WILL THIS PROJECT CHANGE HEALTHCARE DELIVERY?**

The current pandemic has shown us how critical the need to deliver care to participants remotely is. If proven to be a cost-effective alternative, this study will help increase the capacity of providing post-surgical care to a higher number of people and broader geographic reach.

**“Apart from feeling good about helping to further the understanding in what might make for better physiotherapy, I found the at-home approach very convenient. The exercises were not overdemanding, and I am very happy with my progress.”**

– John, PATHway participant

**STUDY**

The PATHway trial:  
Participatory health through behavioural engagement and disruptive digital technology for post-operative rehabilitation following knee replacement or lumbar decompression

**Incorporate wearable technology & gamification to optimise patient engagement**

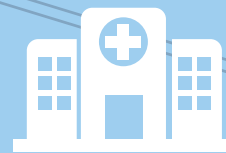
**OUTPUTS TO DATE**

Development and publication of systematic review and meta-analysis on technology-assisted rehabilitation following total knee or hip replacement for people with osteoarthritis (2018-2019) – Paper published on BMC Musculoskeletal Disorders and is available (open access) at <https://bmcmusculoskeletdisord.biomedcentral.com/articles/10.1186/s12891-019-2900-x>

Protocol paper – published by BMJ open and is available (open access) at <http://dx.doi.org/10.1136/bmjopen-2020-041328>

Duong V, Dennis S, Ferreira ML, Heller G, Nicolson PJA, Robbins SR, Wang X, Hunter DJ. *Predictors of adherence to step count intervention following total knee replacement: an exploratory cohort study.* Journal of Orthopaedic and Sports Physical Therapy. Accepted April 24, 2022. doi: 10.2519/jospt.2022.11133

Duong V, Dennis S, Ferreira ML, Nicolson PJA, O’Connell R, Robbins SR, Wang X, Hunter DJ. *One-third of participants underestimate their step count adherence in a digital physical activity program following total knee replacement: a longitudinal repeated-measures cohort study.* Physiotherapy Research International. Accepted June 5, 2022 <https://doi.org/10.1002/pri.1966>



**What measures are required to demonstrate better outcomes and cost-effectiveness?**



Mobility and symptoms



Quality of care



Adherence to treatment



Cost-effectiveness

**STUDY**

# SuPeR Knee: Development and implementation of an advanced clinical decision-making support tool for the delivery of efficient, personalised rehabilitation for patients undergoing total knee arthroplasty (TKA)

**CHIEF INVESTIGATOR**

Professor Michael Nilsson  
(Centre for Rehab Innovations,  
University of Newcastle)

**CLINICAL AREAS**

Orthopaedic / Musculoskeletal

**SITES**

Lake Macquarie Private Hospital, Gateshead NSW, Kareena Private Hospital, Caringbah NSW, Baringa Hospital, Coffs Harbour NSW and Wollongong Private Hospital, Wollongong NSW.

**FUNDING AWARDED**

\$1,546,860

**DATE PROJECT COMMENCED**

September 2018

**UNMET NEED**

Typically, when patient information is collected, it is generally focused on selected medical or targeted joint parameters and does not take into consideration parameters such as patient anxiety, stress resilience, quality of pain, social support, and sense of purpose, all of which have recently been shown to be a significant predictor of outcome. The current model will explore the influence of these additional parameters on recovery and wellbeing following TKA, thereby providing evidence for a more comprehensive therapeutic strategy.

**“The respect of staff, ease of setting up appointments and doing the physical activities all from home, made it more relaxing and personal.”**

**THE PROJECT**

This project is designed to develop a clinical decision support (CDS) tool that will assist with patient stratification and decision making on rehabilitation after TKA targeting individual's biopsychosocial needs.

Eleven orthopaedic surgeons, at 4 NSW Ramsay sites, including Lake Macquarie Private Hospital, Kareena Hospital, Baringa Hospital and Wollongong Private Hospital, have provided referrals for 1696 potential project participants. The project has been well received by TKA patients contacted, reflected by a 70% recruitment rate and so far, 960 participants have been enrolled. The average age of participants is 68 years, with equal numbers of males and females. The majority reside in the inner-city or metropolitan areas (75%), with the remainder living in regional and rural areas (25%). The major diagnosis is osteoarthritis (99%) and most are undergoing a unilateral TKA (88%).

The project is still in the participant recruitment phase, with only interim data available to analyse and explore the trends in the changes of patient reported outcome measures.

The benefits of TKA have been demonstrated, with the median combined scores for self-reported, knee pain, stiffness, and limitations on daily activities, **being reduced by 44%** at 3 months following TKA, compared to those reported in the month preceding surgery.

In addition, physical health aspects of reported **quality of life improved by 22%** above those reported before surgery.

**HOW WILL THIS PROJECT CHANGE HEALTHCARE DELIVERY?**

If successful, this project will provide a tool that will assist health professionals with their decisions on comprehensive rehabilitation, being provided at the right time, to the right individuals. The outcome will underpin and support the development of individualised biopsychosocial interventions leading to improved overall outcome and reduction in the time and cost of rehabilitation treatment.

This project will provide a means of stratification of patients in a clinical setting, identification of 'at risk' individuals early in their recovery journey and support appropriate follow-up services to be implemented.

**STUDY**

SuPeR Knee: Development and implementation of an advanced clinical decision-making support tool for the delivery of efficient, personalised rehabilitation for patients undergoing total knee arthroplasty (TKA)

**WHAT DIFFERENCE WILL THIS PROJECT MAKE?**

The development, implementation and validation of a clinical decision model will have both short and long-term benefits. The short-term benefits associated with the development of this model, would be a commitment to change the focus of rehabilitation from being a generic necessity, to addressing the benefit of developing an appropriate tailoring of services provided to match individual patient needs.

In the future, the implementation of a standardised impact and assessment framework which encompasses a more comprehensive clinical model, will also allow for accurate evaluation of alternative rehabilitative programs to be implemented, which in turn can lead to further enhancement of positive patient outcomes.

**“It was satisfying to be able to contribute in some small way to helping future treatment of patients”**

**FUTURE PLANS?**

Given the scope of data collected in the project, the clinical decision model will provide information of multiple individual domains apart from motor function alone.

The data will provide information on social support and interactions, stress, resilience, and mood state. Possessing information on each of these domains, in combination with evidence attesting to the contribution to long-term outcomes, will allow for the provision of additional future services to support patients in these domains.

Working with Ramsay Health Care in the future we can explore ways of implementing our findings into the clinical setting, to provide therapists with a clinical tool that will assist them to adopt a more comprehensive strategy for providing ongoing rehabilitative services.

**OUTPUTS**

Elizabeth Ditton, Sarah Johnson, Nicolette Hodyl, Traci Flynn, Michael Pollack, Karen Ribbons, Frederick R. Walker, Michael Nilsson. *Improving Patient Outcomes Following Total Knee Arthroplasty: Identifying Rehabilitation Pathways Based on Modifiable Psychological Risk and Resilience Factors*, *Frontiers in Psychology*, 2020, 11.

Jodie A. Cochrane, Traci Flynn, Adrian Wills, Frederick R. Walker, Michael Nilsson, Sarah J. Johnson. *Clinical Decision Support Tools for Predicting Long-Term Outcomes in Patients Undergoing Total Knee Arthroplasty: A Systematic Review*. *The Journal of Arthroplasty* 2020, 36(5): 1832-1845.

**11** ORTHOPAEDIC SURGEONS

**4** NSW RAMSAY SITES

**1,696** POTENTIAL PROJECT PARTICIPANTS

**70%** RECRUITMENT RATE

**960** PARTICIPANTS ENROLLED

**68** AVERAGE AGE 68 YEARS

**50:50** RATIO OF MALES AND FEMALES

**75%** INNER-CITY OR METROPOLITAN AREAS

**25%** REGIONAL AND RURAL AREAS

**99%** MAJORITY HAVE OSTEOARTHRITIS

**89%** MAJORITY HAVE UNILATERAL TKA

**STUDY**

# GLAD Study: Testing risk genes in conjunction with clinical characteristics to develop a clinically applicable algorithm for predicting outcomes in patients with depression

**STUDY TITLE**

GLAD study: Genes, Clinical Assessment and Depression

**CHIEF INVESTIGATOR**

Professor Philip Mitchell  
(University of New South Wales)

**CLINICAL AREA**

Mental Health

**SITES**

Ramsay Clinic Northside and  
Ramsay Clinic Cremorne.

**FUNDING AWARDED**

\$678,994

**DATE PROJECT COMMENCED**

October 2018

**UNMET NEED**

Major depressive disorder (MDD; unipolar depression) and bipolar disorder (BD) are common and highly disabling conditions. On average, 15 to 25% of Australians suffer from MDD and 1.3% from BD over their lifetime. These two conditions comprise two of the leading causes of disability due to any physical or mental illness. Further, the depressive disorders account for 40.5% of the DALYs (disability-adjusted life years) caused by mental and substance use disorders, with BD causing a further 7%.

In other words, almost half of the disease burden due to mental illness and substance use is due to these mood disorders.

**THE PROJECT**

The Genes, cLinical Assessment and Depression (GLAD) study is one of the first studies in the world attempting to link polygenic risk profiling to patient outcomes in major depressive disorder (MDD) and bipolar disorder (BD).

The aim of the GLAD study is to explore the role of genes in conjunction with clinical factors to develop a clinically applicable algorithm for predicting outcome in patients with MDD or BD. This project will clarify if assessment of polygenic risk scores (PRS) in conjunction with relevant clinical characteristics assists clinically in the prediction of outcome for patients with MDD and BD.

## 360

 OUT OF 500  
**PATIENT SAMPLES**

Currently 360 patients from Ramsay Clinic Northside and Ramsay Clinic Cremorne have been assessed in detail and given genetic samples via "spit kits".

## 252

 GENETIC  
**SAMPLES ANALYSED**

Genetic samples from the first 252 patients have been successfully genotyped by the Australian Genome Research Facility (AGRF). The study is aiming for a final sample of at least 500 depressed patients by June 2023.

**"We have been delighted at the enthusiastic response of the Ramsay wards to this research project from both nursing and medical staff."**

– Professor Philip Mitchell



**STUDY**

GLAD Study: Testing risk genes in conjunction with clinical characteristics to develop a clinically applicable algorithm for predicting outcomes in patients with depression

**HOW WILL THIS PROJECT CHANGE HEALTHCARE DELIVERY?**

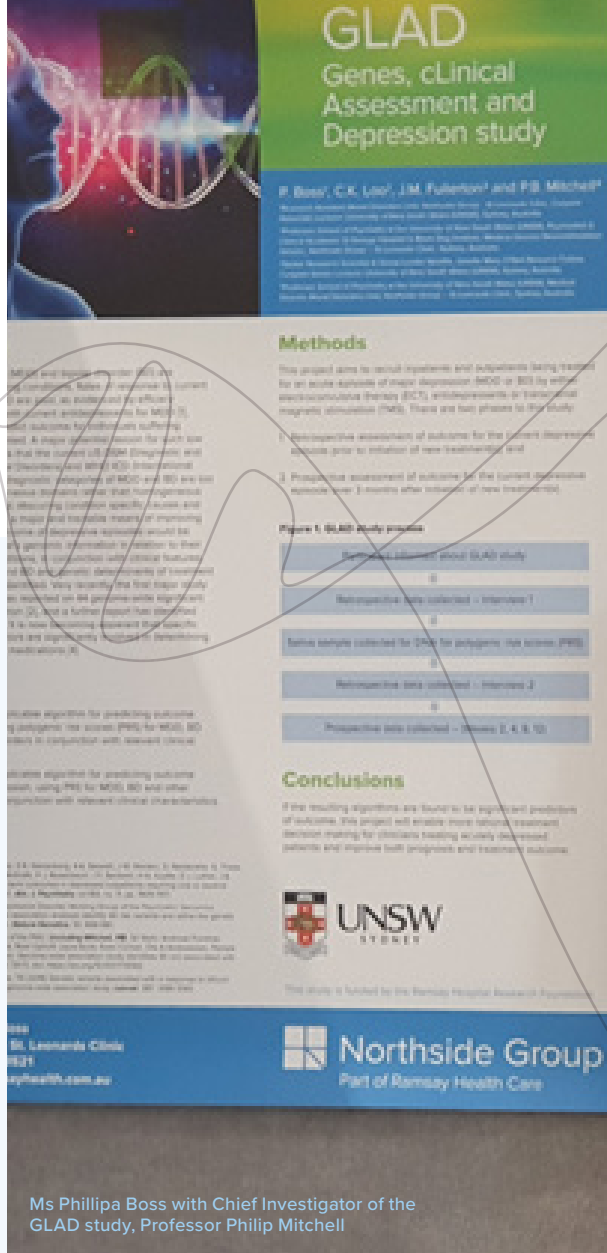
The GLAD study will begin to demonstrate the clinical value of the PRS and establish whether there is a link between this score and patient outcomes after treatment. The development of the algorithm is designed to assist clinicians in understanding the factors leading to any poor outcome in their patients, and in tailoring their treatments more accurately. If the genetic risk profile of a patient can be linked to an outcome, particularly in patients with MDD or BD it will result in quicker and easier diagnosis for patients and more accurate treatment.

**FUTURE PLANS?**

The GLAD study has ethics approval to use the genetic samples to contribute to international research consortia for the study of genetics in depression, and the genetics of response to electroconvulsive therapy.

**GOOD NEWS!**

Embedding the GLAD study research staff into the hospital setting was fundamental for the implementation and sustainability of the project. Ethics approval was received to include adolescent subjects aged 16 years and over in the study.



Ms Phillipa Boss with Chief Investigator of the GLAD study, Professor Philip Mitchell



**OUTPUT**

Boss, P., Loo, C.K., Fullerton, J.M., and Mitchell, P.B. *Genes, cLinical Assessment and Depression (GLAD) study. International Society for Bipolar Disorders (ISBD) Conference. Sydney, March 20th-23rd 2019. (Poster presentation).*

**STUDY**

Evaluation of the implementation of a delirium education intervention using clinical simulation in a private healthcare setting



**CHIEF INVESTIGATOR**

Professor Victoria Traynor  
(University of Wollongong)

**CLINICAL AREA**

Mental Health

**SITES**

St George Private Hospital,  
Kareena Private Hospital,  
Wollongong Private Hospital,  
Southern Highlands  
Private Hospital

**FUNDING AWARDED**

\$76,950

**DATE PROJECT COMMENCED**

September 2018

**UNMET NEED**

Delirium is an acute reversible health condition which presents as a short-term confusion caused by a physiological or psychological imbalance, such as an untreated infection, constipation, malnourishment, depression or chronic pain.

The main risk factors are age, dementia, undergoing surgery, social isolation, and polypharmacy. There are three types of delirium: a hypoactive delirium, hyperactive delirium, and mixed aetiology delirium.

A wide range of long-term health problems can occur following an episode of delirium: increased risk of other morbidities, including dementia and falls, an increased likelihood of relocating to a nursing home, increased mortality rates and for family members that must take extra time off work to care for older people recovering from a delirium.

**THE PROJECT**

The overall aim of this project is to:

**Deliver and evaluate an innovative delirium care education initiative**

The specific objectives are to:

- 1. Evaluate the effectiveness of a multi-modal education initiative** including delirium care Objective Structured Clinical Examinations (OSCEs) against traditional face-to-face education across aged care, medical and surgical wards, and
- 2. Evaluate the implementation of the effective intervention**

The implementation of the delirium education intervention and data collection has been completed.

We had a total of 414 staff attended the didactic delirium education session (F-2-F) and 63 staff complete the Delirium Simulation (OSCE) intervention. In total there was 82 completed observations of practice.

**The acute and reversible nature of delirium provides clinicians with the potential to prevent and treat delirium to reduce its effects on individuals, families, and healthcare providers.**

**HOW WILL THIS PROJECT CHANGE HEALTHCARE DELIVERY?**

A train the trainer program was delivered for staff at Southern Highlands and Nowra Private Hospitals to roll out the delirium education program.

**“The seminar alongside to simulation gave two approaches which worked with my learning/ understanding”**

**“Gave us an insight into what delirium was and that anything can increase chances of patients developing delirium”**

**STUDY**

Evaluation of the implementation of a delirium education intervention using clinical simulation in a private healthcare setting

**“The education was very simply explained and linked well to what we deal with on the ward”**

**OUTPUTS**

Montgomery, A., Chang, H.C., Ho, M.H., Smerdely, P., & Traynor, V. (2021). The use and effect of OSCEs in post-registration nurses: An integrative review. *Nurse Education Today*, 100, 104845.

Montgomery, A., Smerdely, P., Wu, A., Chang, H.C., & Traynor, V. (2020). Using simulation to translate delirium knowledge into practice in an Australian Aged Care ward. American Delirium Society (ADS) Annual Meeting, June 14-16, 2020 (Poster Presentation) (Conference cancelled due to COVID-19).

Montgomery, A., Wu, A., Traynor, V., Smerdely, P., & Chang, H. C. (2019). Simulation: translating delirium knowledge into practice. Australian Association of Gerontology (AAG) Annual Conference. 5-8 November 2019. Sydney, Australia. (Oral Presentation).

Montgomery, A., Ho, M., Traynor, V., Chang, H.C., Smerdely, P., Wu, A., McAllan, P., & Riley-Henderson, A. (2019). Using simulation to translate delirium knowledge into practice. 11th International Association of Gerontology and Geriatric (IAGG) Asia/ Oceania Regional Congress. 23-27 October 2019. Taipei, Taiwan. (Poster Presentation).

Montgomery, A. (2019). APR Intern Final Report. Evaluating the Implementation of a Delirium Education Intervention using Clinical Simulation in a Private Healthcare Setting.

Montgomery, A. (2020). *Delirium Care Education Program: Delirium champion guide*. ADHERE, University of Wollongong

ADHERE. (2019). *Delirium Care: what you need to know*. <http://adhere.org.au/pdf/deliriumcareflipchart.pdf>

Delirium Educational videos: <https://www.youtube.com/playlist?list=PLiLy0g5NNTTBmv3-IEKuT2raB5rZ3UWOdV>

**STUDY**

# Pharmacogenetics for severe mood disorders: A randomised controlled trial

**CHIEF INVESTIGATOR**

Professor Malcolm Hopwood  
(University of Melbourne)

**CLINICAL AREA**

Mental Health

**SITE**

Ramsay Clinic Albert Road

**FUNDING AWARDED**

\$762,216

**DATE PROJECT COMMENCED**

December 2020

**UNMET NEED**

Major Depressive Disorder (MDD) and Bipolar Disorder (BD) are common and highly disabling conditions. Approximately 15 to 25% of Australians suffer from MDD and 1.3% from BD over their lifetime and these two conditions comprise two of the leading causes of disability due to any physical or mental illness. Rates of response to current treatments for MDD and all phases of BD (particularly depression and mixed states) are poor, as evidenced by effectiveness of current antidepressant treatment for MDD.

One reason for variable treatment outcomes is that common variations in genes involved in the movement of medications and/or the effect of medications on the body can affect the dose required to achieve a response to medications.

As a result of this attention has turned toward identification of genetic markers that could assist with determining who will or will not respond to MDD or BD treatment and the dose at which response is likely to occur. This emerging field has identified a number of potential genetic markers for response to antidepressant medication.

**THE PROJECT**

A genetic test was developed by CNSDose to look at the variation in 16 genes known to be associated with how the body transports and metabolises antidepressant medication.

Through a simple cheek swab, the test can check for these biomarkers in participant's genes, which may help doctors decide which antidepressant medications participants may respond to.

The aim of this study to further evaluate how useful the Amplis – EVO™ Mental Health genetic test is in assisting doctors prescribing decisions in the treatment of severe mood disorders. The study will also provide decision makers with the information for informed policy changes associated with treatment of severe mood disorders.

**Given the limited pipeline of new treatment options for MDD and BD, better utilisation of current treatments is vital. Clinicians are in need of support to manage complex and severely unwell patients with mood disorders.**

**STUDY**

Pharmacogenetics for severe mood disorders:  
A randomised controlled trial

**HOW WILL THIS PROJECT CHANGE HEALTHCARE DELIVERY?**

This emerging field has identified a number of potential pharmacogenetic markers for antidepressant response and builds on similar successful work in other areas such as oncology and neurology.

Obtaining higher remission rates in the treatment of mood disorders like MDD and BD is a critical goal in order to reduce the burden of these terrible disorders.



**STUDY**

# Using practice analytics to understand variation and support reflective practice

**CHIEF INVESTIGATOR**

Professor Tim Shaw  
(University of Sydney)

**CLINICAL AREA**

Data Analytics

**SITE**

Albert Road Clinic and others

**FUNDING AWARDED**

\$210,000

**DATE PROJECT COMMENCED**

March 2019

**UNMET NEED**

There are increasingly large amounts of data being generated that provide insights into the outcome of care delivered by clinicians and teams. To date, much of this data is generated at the organisational level and focused on top-down reactive responses to perceived issues with care.

There is limited understanding of what data will be most actionable by clinicians and teams or what scaffolding or support clinicians and teams require to internalise and 'make sense' of this data to proactively monitor care.

The Practice Analytics program will address this problem by improving understanding of how these data can be extracted, scaffolded and used by health professionals to reflect on their practice. It will also develop novel tools to harness these data by health professionals and teams for this purpose, and how their practice reflection can be captured in Continuing Professional Development platforms

**THE PROGRAM**

The program focuses on the use of emerging data available Inpatient Administration Systems, Electronic Health Records, registries and other aggregate data sources.

The aim is to develop solutions and scaffolds that will enable health professionals to harness data from these systems to support practice reflection and learning.

It will also investigate how the use of these data by individual health professionals and teams can be linked to mandatory professional development requirements, and help organisations meet requirements for the national governance standards for organisational accreditation.

An RHRF supported a PhD scholarship has just commenced within the larger Practice Analytics program. The project is exploring the role of patient report measures in clinical decision making and practice reflection. It is anticipated that the project will generate a rich understanding of the barriers and enablers to the use of patient reported measures by health professionals, particularly their use to reflect on their practice.

**The Practice Analytics program aims to solve a complex problem within healthcare: harnessing diverse data sets to make them accessible and actionable to health professionals.**

**The Digital Health CRC brings together Australia's health and aged care sectors, industry and academia to support the growth of a strong digital health industry, improve patient outcomes and experience and deliver sustainable digital health solutions.**

\*The Practice Analytics program is supported through a project grant from the Digital Health CRC Limited ("DHCRC"). The DHCRC is funded under the Commonwealth's Cooperative Research Centres (CRC) Program.

**STUDY**

Using practice analytics to understand variation and support reflective practice

**HOW WILL THIS PROJECT CHANGE HEALTHCARE DELIVERY?**

This program will change healthcare by providing practical recommendations on how electronic data can be used to:

- Support practice reflection,
- Support the scaffolds that make data useful to support behaviour change,
- Support the individual role or patient reported measures in health professional reflection and practice improvement,
- Change how health professionals use data, which can be recognised in Continuing Professional Development requirements.

**FUTURE PLANS?**

A cornerstone of the program is to ensure research findings can be applied in practice by health sector partners. The program team is working collaboratively with each industry partner on the Practice Analytics program, and key stakeholders from industry and the health sector to identify translation pathways and ensure they are realised.

**STUDY**

# Investigation of the rate of psychotropic polypharmacy in Australian patients with post-traumatic stress disorder upon admission to an in-patient mental health facility

**CHIEF INVESTIGATOR**

Dr Rebecca Mellor (Gallipoli Medical Research Foundation)

**CLINICAL AREA**

Mental Health

**SITES**

Greenslopes Private Hospital, New Farm Clinic

**FUNDING AWARDED**

\$195,000

**DATE PROJECT COMMENCED**

March 2020

**UNMET NEED**

War veterans coping with post-traumatic stress disorder (PTSD) often present with numerous health conditions and require treatment with multiple medications, known as polypharmacy.

Psychotropic polypharmacy is the simultaneous use of two or more psychotropic medicines, which are drugs capable of affecting the mind, emotions, and behaviour.

**THE PROJECT**

To investigate the incidence of psychotropic polypharmacy in Australian patients with PTSD upon admission to an in-patient mental health treatment facility and to describe the risks associated with potentially inappropriate prescribing patterns.

It involved the retrospective review of clinical data from 219 veterans with PTSD who were admitted over a 12 month period to an Australian in-patient mental health facility for management.

The prevalence of general ( $\geq 5$  total medications), psychotropic ( $\geq 2$  N-code medications), and sedative ( $\geq 2$  medications with sedating effects) polypharmacy and Drug Burden Index (DBI) were calculated. Medication class combinations were reported, and potential adverse effects were determined.

Mean age of participants was 62.5 ( $\pm 14.6$ ) years. In addition to PTSD, 90.9% had a diagnosis of  $\geq 1$  other psychiatric condition, and 96.8% had a diagnosis of  $\geq 1$  other non-psychiatric medical condition.

The prevalence of general polypharmacy was 76.7%, psychotropic polypharmacy was 79.9% and sedative polypharmacy was 75.3%. DBI scores ranged from 0-8.2, with 66.2% of participants scoring  $\geq 1$  (high risk).

Within-class polypharmacy was most common for antidepressants, and benzodiazepines were prescribed with antidepressants in 43.8% of combinations. Fifty patients (22.8%) were taking one or more combinations of drugs that could have resulted in a clinically significant drug-drug interaction.

In summary, this cohort of inpatient veterans with PTSD had a high prevalence of general, psychotropic, and sedative polypharmacy, and were at high risk for drug related adverse events.

This highlights the importance of increasing awareness of polypharmacy and potentially inappropriate drug combinations, and the need for improved medication review by prescribers.

**“These patients are at significant risk of adverse health events – a situation that can potentially be lessened by improved medication review practices”**

– Dr Mellor





### **FUTURE PLANS?**

This study provides evidence of the extent of the issue of (psychotropic) polypharmacy in the veteran population with psychological and physical comorbidities. It will contribute to a larger evidence base that will be referenced and utilized in a planned process of development of enhanced clinical guidelines for the treatment of veterans with PTSD and other comorbidities. The planning is currently underway.

### **OUTPUT**

Mellor, R., Khoo, A., Saunders-Dow, E. *et al.* Polypharmacy in Australian Veterans with Post-traumatic Stress Disorder upon Admission to a Mental Health Facility: A Retrospective Chart Review. *Drugs - Real World Outcomes* (2022). <https://doi.org/10.1007/s40801-022-00298-3> <https://link.springer.com/content/pdf/10.1007/s40801-022-00298-3.pdf>

**STUDY**

# Optimising outcomes for frail hospitalised older adults – volunteer support and pain assessment interventions: A cluster randomised control trial

**CHIEF INVESTIGATOR**

Associate Professor Rosemary Saunders (Edith Cowan University)

**CLINICAL AREA**

Frailty

**SITE**

Hollywood Private Hospital

**FUNDING AWARDED**

\$734,070

**DATE PROJECT COMMENCED**

May 2020

**UNMET NEED**

Australia's population is increasingly ageing. In 2017, there were 3.8 million Australians aged 65 and over (accounting for 15% of the total population) and this is projected to reach 8.8 million (22%) by 2057. Given that ageing is closely linked with frailty, the increasing frail ageing population is a challenge for health services.

In hospital, frailty is known to result in adverse outcomes such as falls, fractures, functional dependence, post-operative complications, increased length of stay, readmission to hospital and death during hospitalisation. Poor pain assessment and pain management are linked to frailty and delirium.

**THE PROJECT**

The study will evaluate the effectiveness of using nurse-led volunteer support and a technology driven pain assessment (PainChek® Universal) compared with standard care, on changes in frailty and specific clinical outcomes of older adults during hospitalisation, at discharge and at 30 days after discharge.

Pain can often be undiagnosed or misdiagnosed in older adults especially if the patient has cognitive impairment (e.g., dementia). PainChek® Universal is an app that uses face recognition technology and user completed checklists to assess pain in patients unable to self-report using traditional numeric scales.

There were two parts to this project, a prevalence study and an intervention study. The prevalence study aimed to provide a snapshot of frailty and pain across the hospital on a single day. All patients admitted to the hospital were invited to complete a survey assessing frailty and pain. Results from 251 participants found that 26.7% were frail, 68.1% were currently experiencing pain and 81.3% had experienced pain in the last 24 hours.

The intervention study aimed to evaluate the effectiveness of nurse-led volunteer support and technology-driven pain assessment (PainChek® Universal) in preventing the progression of frailty. Over 60 volunteers were trained to provide support to older adults in hospital and nursing staff were trained to assess pain using PainChek® Universal.

The interventions ran for 12 months. Evaluation of the volunteer training found overall volunteers were very satisfied with the training and felt prepared to undertake the role.

Pre- and post-intervention surveys with staff revealed strong support for the volunteer program with 88% of respondents agreeing the program should continue.

Patient clinical outcomes and further stakeholder (patient, family, staff and volunteer) evaluations are still being analysed and an economic analysis will also be conducted.

**“I was impressed with the program and loved the experience.”**

– Patient's quote about the volunteer support

**“It is very good to see young student volunteers in the program, and training plus mentoring would be important.”**

– Patient's quote about the volunteer support

**STUDY**

Optimising outcomes for frail hospitalised older adults – volunteer support and pain assessment interventions: A cluster randomised control trial

**FUTURE PLANS?**

Nurse-led volunteer support for older adults in hospital has potential benefits for patients, families, staff and the hospital. The model of support and associated care plan will be made available through publications to allow other hospitals to adopt and adapt the program for their own use.

Evidence of the effectiveness of technology-driven pain assessment in an acute setting has the potential to improve outcomes for patients and may lead to it being adopted widely as has been seen in the aged-care sector.

**OUTPUTS****JOURNAL ARTICLES**

Saunders, R., Crookes, K., Seaman, K., Ang, S. G. M., Bulsara, C., Bulsara, M. K., Ewens, B., Gallagher, O., Graham, R. M., Gullick, K., Haydon, S., Hughes, J., Atee, M., Nguyen, K.-H., O'Connell, B., Scaini, D., & Etherton-Beer, C. (2022). Effectiveness of nurse-led volunteer support and technology-driven pain assessment in improving the outcomes of hospitalised older adults: protocol for a cluster randomised controlled trial. *BMJ Open*, 12(6), e059388. <https://doi.org/10.1136/bmjopen-2021-059388>

Saunders, R., Crookes, K., Atee, M., Bulsara, C., Bulsara, M. K., Etherton-Beer, C., Ewens, B., Gallagher, O., Graham, R. M., Gullick, K., Haydon, S., Nguyen, K.-H., O'Connell, B., Seaman, K., & Hughes, J. (2021). Prevalence of frailty and pain in hospitalised adult patients in an acute hospital: a protocol for a point prevalence observational study. *BMJ Open*, 11(3), e046138. <https://doi.org/10.1136/bmjopen-2020-046138>

**CONFERENCE PRESENTATIONS**

Saunders et al. (November, 2022). Families' experiences of volunteers supporting older adults in hospital. Abstract accepted for poster at the 55th Australasian Association for Gerontology Conference, Adelaide, Australia

Crookes et al. (November, 2022). Nurse-led volunteer support for hospitalised older adults: A new model. Abstract accepted for a talk at the 55th Australasian Association for Gerontology Conference, Adelaide, Australia

Crookes et al. (September, 2022). Nurse led volunteer support for hospitalised older adults: Volunteers making a difference to care. Abstract accepted for a talk at the Australasian College of Health Service Management Congress, Perth, Australia

Saunders et al. (June, 2022). Staff experiences of volunteers supporting older adults in hospital: A mixed-methods study. Poster presented at 22nd World Congress of Gerontology and Geriatrics, held online.

Saunders et al. (April, 2022). Optimising outcomes for hospitalised older adults – nurse led volunteer support interventions: A stakeholder evaluation. Poster presented at International Conference on Frailty and Sarcopenia, Boston, USA (presented virtually)

Crookes et al. (November, 2021). Nurse-led volunteer support for older adults: A new approach to hospital volunteering. Talk presented at Volunteering WA State Conference, Perth, Australia

Crookes et al. (November, 2021). Point prevalence of frailty and pain in adult inpatients of an acute private hospital. Talk presented at the 54th Australasian Association for Gerontology Conference, held online

Saunders et al. (September, 2021). Point prevalence of frailty and pain in adult inpatients of an Australian acute private hospital. Poster presented at the International Conference on Frailty and Sarcopenia, held online

Scaini et al. (August, 2021). Evaluation of the effectiveness of a volunteer training program in a nurse led volunteer model of patient support. Talk presented at the Hollywood Research Forum, Nedlands, Australia

Crookes et al (August 2021). Point prevalence of frailty and pain in hospitalised adult patients: Implications for nursing care. Talk presented at the Hollywood Research Forum, Nedlands, Australia

Crookes et al. (May, 2021). Point prevalence of frailty and pain in hospitalised adult patients: Implications for nursing care. Talk presented at the 10th International Congress on Innovations in Nursing, Perth, Australia

**MEDIA**

Nine News Perth report on study (02/05/2021) <http://www.mediaportal.com/mp/playnow.aspx?u=163003&p=1765363329&key=80372061903210319871818517521967520869>

"Nedlands hospital in frailty study" *The Senior Western Australian* (03/06/2021)

"Hope world-first research trial at Hollywood will inform care of frail older hospitalised adults" *Medicus* (May 2021)

"Frailty study" *Medical Forum* (June 2021)

"Phones detect patient pain" *The Post* (08/05/21)

**STUDY**

# ADAPTS: Antibiotic Dysbiosis and Probiotics Trail in InfantS: A randomised controlled trial on the effect of probiotics on gut microbiome in newborns with antibiotic-induced dysbiosis

**CHIEF INVESTIGATORS**

Dr Jason Tan and  
Dr Ravisha Srinivasjois  
(Joondalup Health Campus)

**CLINICAL AREAS**

Maternity / Children

**SITE**

Joondalup Health Campus

**FUNDING AWARDED**

\$111,700

**DATE PROJECT COMMENCED**

February 2019

**UNMET NEED**

A healthy and balanced gastrointestinal microbiota is important to maintain good health. The gastrointestinal microbiota varies significantly between individuals, and it changes constantly in infants until 12 months of age when it starts to reflect an adult composition.

Early life exposure to antibiotics causes significant imbalance to the healthy intestinal flora (dysbiosis). Dysbiosis of gut flora has been shown to increase the risk of chronic, non-communicable childhood conditions such as allergic disease, asthma, and obesity; and can alter the vaccine response.

**THE PROJECT**

This novel study aims to:

- 1. Link antibiotic exposure in early life to subsequent imbalances to the gut flora and examine the length of dysbiosis,**
- 2. Show that probiotic administration has a positive effect on this dysbiosis, and**
- 3. Show that probiotic administration will improve infant gastrointestinal symptoms.**

A gastrointestinal symptomatology questionnaire and sleep questionnaires were completed by the parents. Stool collection at 8 months for the study of gut microbiome was also completed. A face-to-face interview at 8 months along with blood test to understand the impact of probiotic supplementation on immune markers, strength of immune response was planned as per the study protocol.

A total of 61 patients were randomised. Baseline stool was available in 45 patients. Gastrointestinal questionnaires were available in 38 patients. 6-week stool specimen was available in 29 patients. However, the uptake for 8 months blood test was low.

The recruitment and sample collections were completed in March 2022. The data is being collated and all the relevant information about the use of probiotic, placebos, and the medical history of study subjects is being collected.

**This study will explore the negative effects of antibiotic exposure in newborn infants and examine whether probiotic supplementation can modulate these effects.**

**STUDY**

ADAPTS: Antibiotic Dysbiosis and Probiotics Trail in Infants: A randomised controlled trial on the effect of probiotics on gut microbiome in newborns with antibiotic-induced dysbiosis

**WHAT DIFFERENCE HAS THIS PROJECT MADE?**

The study has triggered a keen interest in carrying out research in the neonatal space. The senior nurses have initiated their own clinical projects under our supervision. As this study is one of its kind, it has created a lot of interest in similar interest from peer hospitals.

**FUTURE PLANS OF THIS PROJECT?**

If positive and encouraging results are found, the study results will be replicated in infants thereby extending the benefits to this vulnerable group too.



**STUDY**

# Cohort investigation of women admitted with their infants or toddlers to Masada Private Hospital Early Parenting Centre to identify indicators of immediate- and medium-term program impact

**CHIEF INVESTIGATOR**

Professor Jane Fisher  
(Monash University)

**CLINICAL AREAS**

Children / Mental Health

**SITE**

Masada Private Hospital  
Early Parenting Centre

**FUNDING AWARDED**

\$506,343

**DATE PROJECT COMMENCED**

April 2020

**UNMET NEED**

In Australia about 15% of women experience a depressive, anxiety or adjustment disorder in the year after giving birth and, about one per thousand, the severe mental disorder of postpartum psychosis.

Up to 45% of infants have dysregulated sleep with frequent overnight waking and short daytime sleeps. Infants who sleep poorly are more likely to have feeding difficulties and to cry intensely and be difficult to soothe.

The postnatal mental health of women is a major determinant of their capacity to provide sensitive responsive care for their infants or toddlers and thereby optimise infant mental health and early childhood development.

**THE PROJECT**

This project aims to generate evidence about the characteristics of women and their infants or toddlers admitted to Masada Private Hospital Early Parenting Centre and indicators of short and medium impact to inform benchmarking of current clinical services and provide a comparison for new and enhanced services. The project has involved several steps:

1

**First, paper-based self-report and clinical assessment forms were modified** so that all questions were structured with fixed rather than open-ended response options.



2

**Second, all forms were then digitised on Vision Tree Optimal Care (VTOC)** which is a cloud-based patient report outcome system being implemented by Ramsay Health Care.



3

**Third, all staff were trained in the use of the digitised forms.**



4

**Finally, following implementation of the forms in routine care, data were extracted from the electronic record about each parent and child dyad admitted in a twelve-month period.**



Data was available for about 1200 women-child dyads who had been admitted to the 5-night program in this period.

An interim analysis of data from the first 400 consecutively admitted mother-child dyads found among women, that at pre-admission, 64.2% scored > 9 on the Edinburgh Postnatal Depression Scale (EPDS) indicating that they were experiencing clinically significant symptoms of depression and anxiety.

Overall, 56% were experiencing disability related to severe fatigue and 66% lacked confidence in soothing or settling their babies.

On the day before they were discharged from the program, 9.1% had an EPDS score > 9, and more than 80% were confident in soothing and settling their babies.

Both are highly statistically significant ( $p < 0.001$ ) improvements.

**STUDY**

Cohort investigation of women admitted with their infants or toddlers to Masada Private Hospital Early Parenting Centre to identify indicators of immediate- and medium-term program impact

At the follow-up assessment completed 6 weeks post-discharge, there had been a slight worsening of clinically significant depressive symptoms, which were reported by 12.5%, but overall, the substantial improvements in this indicator had been maintained.

Similarly, only 11% were disabled by fatigue and all reported being confident in caring for their babies some or most of the time.

Children's sleep behaviours had also improved. Most parents stated that their children woke at least 3 times overnight prior to admission, but before being discharged most children either did not wake at all or only once (usually for an age-appropriate feed) in the preceding night.

**WHAT DIFFERENCE WILL THIS PROJECT MAKE?**

This project provides the strongest evidence to date that structured psycho-educational residential early parenting programs are an effective treatment for moderately severe maternal mental health problems and dysregulated infant behaviours. The data will be of national and international interest to jurisdictions seeking evidence-informed approaches to treat maternal mental health problems and to health services and clinicians.

We will be able to identify the characteristics of women for whom this program leads to complete remission of symptoms and those for whom it is insufficient. This will enable more specific planning for stepped approaches to care.

Most importantly, we have shown that the digitisation of routinely collected data is feasible and can be implemented with no interference with patient care and a small additional commitment to service administration.

These will inform the development of assessment protocols that can be implemented at scale in all early parenting and mother-baby psychiatric services and enable continuous quality improvement through benchmarking and progress to program consistency.

**FUTURE PLANS?**

Our long-term goal is to implement this protocol at all Ramsay Health Care Early Parenting Centres and Mother Baby Psychiatric Units with a view to establishing a national registry of joint mother-baby admissions to services for psychological or psychiatric causes.

**“Our staff are proud to contribute to this research and are very interested in the outcomes. We are committed to continuous improvement in the quality of our program and to understanding the needs of our patients”**

– Early Parenting Centre Manager Ms Patsy Thean



**STUDY**

# Robotic-Assisted Surgery and Kinematic ALignment in total knee arthroplasty (RASKAL): A registry-nested, multi-centre, 2 x 2-factorial randomised trial of clinical, functional, radiographic and survivorship outcomes

**CHIEF INVESTIGATOR**

Dr Samuel MacDessi  
(Sydney Knee Specialists)

**CLINICAL AREA**

Orthopaedic / Musculoskeletal

**SITE**

St George Private Hospital

**FUNDING AWARDED**

\$413,020

**DATE PROJECT COMMENCED**

August 2020

**UNMET NEED**

There are significant costs involved in the delivery of robot-assisted surgery and yet there is very little evidence to support claims that patients who undergo surgery with this technology have improved outcomes. Given the significant expenditure invested in robots in surgery, analysis of patient outcomes and implant survivorship compared to the current standards of care is required.

To date, no rigorously designed randomised trials have been undertaken to answer these important questions. They have not assessed whether improved outcomes from robotic knee replacements occur from the increased surgical precision, from kinematic alignment or from a combination of factors.

**THE PROJECT**

RASKAL will assess the effectiveness of robot-assisted surgery and kinematic alignment in this world-first registry-nested randomised trial by analysing patient outcomes and implant survivorship. These methods of surgery will be compared to the current gold standard of surgical care, computer-assisted surgery and mechanical alignment. Patients will be assigned to one of the four surgical groups - Robotic Assisted Surgery + Kinematic Alignment, Robotic Assisted Surgery + Mechanical Alignment, Computer Assisted Surgery + Kinematic Alignment or Computer Assisted Surgery + Mechanical Alignment.

The primary aim of the trial is to determine if there is a difference in pre- and post-operative Patient Reported Outcome Measures (PROMs) between the surgical groups. Collection of PROMs occurs via the Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR) RAPID platform which is widely used across multiple registry-nested clinical studies. Secondary endpoints include radiographic and functional measurements and long-term prosthesis survivorship.

The study has been implemented across three Australian states, at 10 sites with 15 surgeons. Recruitment and data collection are currently underway, with 117 participants thus far. The project is ongoing, so no results are available yet.

**A world-first registry-nested randomised trial comparing the effectiveness of robot-assisted surgery and kinematic alignment to current standards of care**



**STUDY**

Robotic-Assisted Surgery and Kinematic ALignment in total knee arthroplasty (RASKAL)

**WHAT DIFFERENCE WILL THIS PROJECT MAKE?**

The findings of this study will assist the orthopaedic community and health care organisations to provide the best and most cost-effective care for patients undergoing TKR.

**OUTPUTS**

Samuel MacDessi, Gregory C Wernecke, Durga Bastiras, Tamara Hooper, Emma Heath, Michelle Lorimer, Ian Harris

Robotic-assisted surgery and kinematic alignment in total knee arthroplasty (RASKAL study): a protocol of a national registry-nested, multicentre, 2x2 factorial randomised trial assessing clinical, intraoperative, functional, radiographic and survivorship outcomes

BMJ Open Jun 2022, 12(6)e051088; DOI:10.1136/bmjopen-2021-051088

**STUDY**

# M-HELP: Mental Health and the Early Loss of a Pregnancy: an intervention to support and guide bereaved parents and their health care providers through the loss

**CHIEF INVESTIGATOR**

Dr Marjolein Kammers  
(University of Melbourne)

**CLINICAL AREA**

Mental Health

**SITE**

Frances Perry House

**FUNDING AWARDED**

\$198,919

**DATE PROJECT COMMENCED**

September 2020

**UNMET NEED**

Up to one in four known pregnancies ends in miscarriage – which is defined as a pregnancy loss before 20 weeks of gestation. This prevalence translates to approximately 147,000 miscarriages annually in Australia. Research has shown that patients frequently experience significant psychological distress, trauma, and grief as a result of this type of pregnancy loss, which can last weeks, months or even years. Clinically significant depression, anxiety and post-traumatic stress disorder are also not uncommon.

Unfortunately, because of the high frequency of this type of loss and the silence/stigma around it, the adverse mental health impacts that can result for both patients and partners are often overlooked or unacknowledged by family, friends, and healthcare providers.

**THE PROJECT**

This project aims to improve the emotional wellbeing of patients and partners who experience early pregnancy loss, as well as to empower and support the healthcare providers who provide their care.

The M-HELP project is currently ongoing. At present, we have completed a total of 49 interviews. We now have a unique insight into the needs of all parties involved in early pregnancy loss: the patients, partners, and five staff roles (midwife, nurse, obstetrician, receptionist, and anaesthetist).

The next step is to create a tool for patients and partners to support their emotional wellbeing, as well as a staff tool to support them in providing this care. Based on the collected qualitative data, a support brochure for patients and partners will be developed that will provide written information covering medical as well as emotional care information.

Next to this, a staff training tool is being developed that will inform healthcare providers about the emotional care needs of patients and partners who experience early pregnancy loss. Among other topics, the tool will cover preferred language to describe the loss, ways to individualise care, and examples of different early pregnancy loss journeys through the hospital from a patient and partner perspective.

**“Because so much of this is emotional, and to be honest, the emotional impact of this has far outweighed the physical. Far outweighed it.”**

– Patient at Frances Perry House

**STUDY**

M-HELP: Mental Health and the Early Loss of a Pregnancy: an intervention to support and guide bereaved parents and their health care providers through the loss

**FUTURE PLANS?**

This project was developed and is currently being implemented at the Frances Perry House. It will provide patients and partners with an accessible and reliable source of information about both the medical implications and possible emotional impact of early pregnancy loss and empower healthcare providers to provide supportive, individualised care.

The M-HELP intervention is being developed with an intention to further implement these two support tools in other maternity hospitals.



**STUDY**

# Penicillin Allergy De-Labeling in Paediatric OutPatients (PADLPOP) study

**CHIEF INVESTIGATOR**

Dr Amy Whittaker  
(Leading Steps Paediatric Clinic)

**CLINICAL AREA**

Children

**SITE**

Pindara Private Hospital

**FUNDING AWARDED**

\$385,000

**DATE PROJECT COMMENCED**

March 2021

**UNMET NEED**

Approximately 10% of the population report having a penicillin allergy. However, over 90% of patients reporting a penicillin allergy are able to tolerate penicillin when formalised testing is undertaken.

Despite a clear understanding of the harmful effects of inappropriate penicillin allergy labels and clear advice advocating for routine testing, it is not yet, occurring in routine practice.

A parliamentary enquiry into allergy and anaphylaxis described an “urgent need to ‘de-label’ patients from their unproven drug allergies”, but also stated that services were “rarely available” in the public health system. Therefore, this type of assessment remains inaccessible to the majority of patients.

**THE PROJECT**

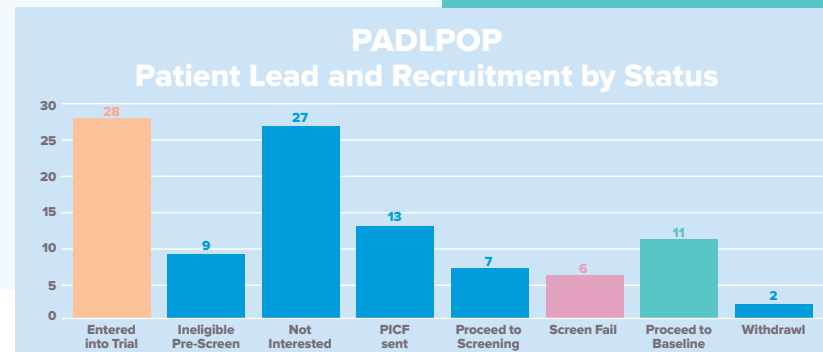
The study aims to find out if thousands of Australian children are missing out on effective healthcare because they have been wrongly labelled as allergic to one of the safest antibiotic treatments.

Research conducted within specialist settings has demonstrated that patients with low-risk penicillin allergy histories can be safely de-labelled (i.e. have inappropriate allergy labels removed) using an oral provocation challenge alone.

This paves the way for de-labelling to occur in the non-specialist setting. The current study conducts oral provocation challenges in the Emergency department at the Pindara Private Hospital.

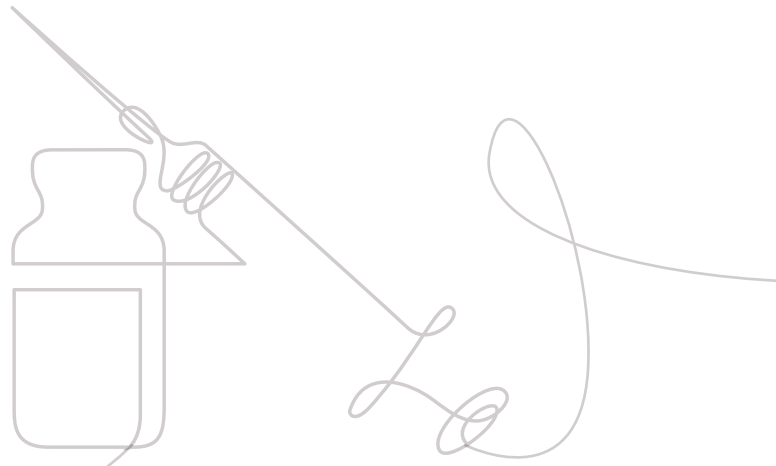
The PADLPOP study aims to:

- To identify children with a Penicillin allergy label** and arrange for community based private health sector assessment of children at low risk of a penicillin allergy.
- To de-label children with inappropriate penicillin allergy labels or provide clear documentation** which verifies the allergy and ensures appropriate management.
- Demonstrate that assessment by the general paediatrician with the support of the emergency department is safe and effective.**
- To evaluate the health-economic impact of community de-labelling** using this model of care.
- To generate an evidence-based resource which could be easily accessed and utilised by other doctors to support non-allergy specialists in the implementation of de-labelling services** (e.g. toolkit comprising questionnaire, testing protocol and parent information sheets)



**STUDY**

Penicillin Allergy De-Labeling in Paediatric OutPatients (PADLPOP) study



The study is currently in the recruitment phase. To date we have identified:

- 103 potential participants
- 6 screen fails (on screening assessment were identified as high risk and unsuitable for community de-labelling)
- 47 consented to participating in the study
- 6 subsequently excluded as identified as high risk and unsuitable for community de-labelling
- 28 completed an oral challenge
- 11 awaiting an oral challenge
- 2 withdrawn from Trial

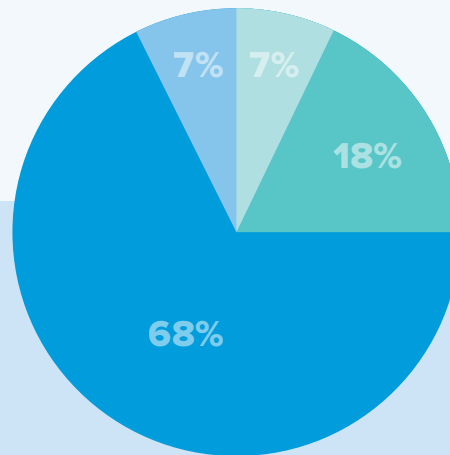
It is too early to draw any meaningful conclusions yet, however, the results to date are as follows:

- 19 (68%) confirmed not allergic and de-labelled
- 7 (25%) confirmed allergic
- 2 (7%) results of an oral challenge on 29/6/2022 are pending (no immediate reaction and no delayed reaction to date)
- 2 (7%) immediate allergic reaction –Both mild reactions
- 5 (18%) delayed reaction – all rashes

**WHAT DIFFERENCE WILL THIS PROJECT MAKE?**

The project is expected to result in positive outcomes at patient, service and population levels.

The removal of allergy labels in patients who are not truly allergic will prevent the unnecessary restriction of antibiotics, which has been associated with increased risk of treatment failures, increased risk of requiring intensive care support and increased length of stay as well as mortality.



**PADLPOP Patient OPC Status x Percentage**

- 68% - De-labelled
- 7% - Pending Post OPC 5 day
- 18% - Immediate Reactions
- 7% - Delayed Reactions

On the other hand, verifying a true penicillin allergy in patients enables appropriate documentation, precautionary measures and increases the safe use of antibiotics.

The results will be used to support the development of penicillin allergy assessment services for providing the best clinical care during childhood and later life.

At a populational level increased access to testing services will help limited the unnecessary use of broad-spectrum antibiotics, which is associated with antimicrobial resistance (generation of superbugs).

**FUTURE PLANS?**

Once safety and acceptability of antibiotic allergy testing in low-risk children by general paediatricians/emergency physicians has been demonstrated at Pindara Private Hospital as the pilot site there is scope to establish de-labelling services in other Ramsay hospitals across the country.

There is opportunity for the service to evolve to include adult patients with GPs expressing a desire to have penicillin allergy de-labelling services available to their adult patients.

**“My daughter was able to be treated with penicillin for the first time in years and she got better so much quicker”**

– A mother at an 8-month follow-up

**STUDY**

# Australian Cardiovascular COVID-19 Registry (AUS-COVID)

**CHIEF INVESTIGATOR**

Professor Ravinay Bhindi  
(University of Sydney)

**CLINICAL AREA**

Cardiovascular

**SITES**

Royal North Shore Hospital, North Shore Private Hospital, Westmead Hospital, Concord Repatriation General Hospital, John Hunter Hospital, Prince of Wales Hospital, Lismore Base Hospital, Royal Prince Alfred Hospital, Ryde Hospital, Wollongong Hospital, Belmont Hospital, Liverpool Hospital, St Vincent's Hospital Melbourne, Northern Hospital, The Alfred Hospital, Epworth HealthCare, The Royal Melbourne Hospital, The Prince Charles Hospital, Fiona Stanley Hospital, Royal Perth Hospital, Sir Charles Gairdner Hospital

**FUNDING AWARDED**

\$197,371

**DATE PROJECT COMMENCED**

September 2020

**UNMET NEED**

This study was quickly established when COVID-19 reached Australia's shores in early 2020. Early data suggested that cardiac complications, such as myocarditis, cardiomyopathy and acute myocardial injury were common in COVID-19 patients. Moreover, patients with pre-existing cardiovascular disease seemed to have a higher mortality from COVID-19. Despite these early signals, there were few high-quality studies that systematically examined the cardiac complications of COVID-19, and existing data was mostly extracted from small or highly selective cohorts in a pandemic setting, with unclear comparability to the Australian population.

**THE PROJECT**

The Australian Cardiovascular COVID-19 Registry (AUS-COVID) is an observational cohort study across 21 hospitals in Australia, including data on all index hospitalisations of patients with COVID-19. Our specific primary objective was to estimate the incidence of cardiac complications in patients hospitalised with COVID-19.

**Our multicentre Australian study provides clarification on the incidence of cardiac complications in hospitalised COVID-19 patients, in the context of a health care system that had not been overwhelmed by COVID-19.**

**KEY OUTCOMES**

The AUS-COVID Registry enabled assessment of a series of clinically relevant questions.

We examined the incidence of cardiac complications during hospitalisation with COVID-19 in Australia, from 644 consecutive patients recruited by 28 January 2021:

- One in 5 patients were admitted to the intensive care unit, one in 10 patients required intubation and approximately one in 7 patients died in hospital.
- The incidence of serious cardiac complications in hospitalised COVID-19 patients was low overall.

We also investigated the association of hypertension with mortality in patients hospitalised with COVID-19, from 546 consecutive patients recruited by 22 January 2021.

- Hypertension and common medication classes used to treat hypertension (ACE inhibitors and angiotensin receptor blockers) were not independently associated with increased mortality.
- Patients with preexisting heart failure were three times more likely to die from COVID-19 in hospital.
- Patients with chronic kidney disease and chronic obstructive pulmonary disease were twice as likely to die from COVID-19 in hospital.

**STUDY**

Australian Cardiovascular  
COVID-19 Registry  
(AUS-COVID)

**FUTURE PLANS?**

Recruitment for the AUS-COVID registry was completed in early 2022. Next steps are to analyse the data further, looking at salient endpoints like the impact of vaccination on cardiovascular complications.

**OUTPUTS****PUBLICATIONS**

- [1] Bhatia, K.S., Sritharan, H.P., Ciofani, J., Chia, J., Allahwala, U., Chui, K., Nour, D., Vasanthakumar, S., Kandadai, D., Bhagwandeem, R., Brieger, D., Choong, C., Delaney, A., Dwivedi, G., Harris, B., Hillis, G., Hudson, B., Javorsky, G., Jepson, N., Kanagaratnam, L., Kotsiou, G., Lee, A., Lo, S., MacIsaac, A., McQuillan, B., Ranasinghe, I., Walton, T., Weaver, J., Wilson, W., Yong, A., Zhu, J., van Gaal, W., Kritharides, L., Chow, C., Bhindi, R. Association of hypertension with mortality in patients hospitalised with COVID-19. *Open Heart*. 2021 Dec 7;8:e001853.
- [2] Bhatia, K.S., Sritharan, H.P., Chia, J., Ciofani, J., Allahwala, U., Chui, K., Nour, D., Vasanthakumar, S., Kandadai, D., Bhagwandeem, R., Brieger, D., Choong, C., Delaney, A., Dwivedi, G., Harris, B., Hillis, G., Hudson, B., Javorsky, G., Jepson, N., Kanagaratnam, L., Kotsiou, G., Lee, A., Lo, S., MacIsaac, A., McQuillan, B., Ranasinghe, I., Walton, T., Weaver, J., Wilson, W., Yong, A., Zhu, J., van Gaal, W., Kritharides, L., Chow, C., Bhindi, R. Cardiac complications during hospitalisation with COVID-19 in Australia. *Heart Lung Circ*. 2021 Sept 1;30:1834-1840.
- [3] Bhatia, K.S., van Gaal, W., Kritharides, L., Chow, C., Bhindi, R., AUS-COVID Investigators. Incidence of cardiac complications during index hospitalisation with COVID-19 in Australia: AUS-COVID study. *Med J Aust*. 2021 Aug 17;215:279-279.

**CONFERENCE ABSTRACT AND PRESENTATION**

Bhatia, K.S., Sritharan, H.P., Ciofani, J., Allahwala, U., Chui, K., Nour, D., Vasanthakumar, S., Kandadai, D., Bhagwandeem, R., Brieger, D., Choong, C., Delaney, A., Dwivedi, G., Harris, B., Hillis, G., Hudson, B., Javorsky, G., Jepson, N., Kanagaratnam, L., Kotsiou, G., Lee, A., Lo, S., MacIsaac, A., McQuillan, B., Ranasinghe, I., Walton, T., Weaver, J., Wilson, W., Yong, A., Zhu, J., van Gaal, W., Kritharides, L., Chow, C., Bhindi, R. Association of hypertension with mortality in patients hospitalised with COVID-19. American Heart Association Scientific Sessions 2021, 13th November 2021

**While clinicians and the healthcare system overall should remain vigilant, the incidence of cardiac complications during index hospitalisation was reassuringly low.**

**STUDY**

# Randomised Controlled Trial of Neurostimulation for Anorexia Nervosa (TRENA)

**CHIEF INVESTIGATOR**

Dr Donel Martin  
(University of New South Wales)

**CLINICAL AREA**

Mental Health

**SITE**

Northside Clinic, St Leonards

**FUNDING AWARDED**

\$1,097,926

**DATE PROJECT COMMENCED**

July 2021

**UNMET NEED**

Many people with anorexia nervosa have a prolonged illness duration over multiple years. The current treatment options are very limited. Clinical guidelines primarily recommend harm minimisation strategies, including hospitalisation (i.e., to assist with restoration of body weight), and psychological support.

**THE PROJECT**

Preliminary research has suggested that non-invasive brain stimulation treatments, including transcranial direct current stimulation (tDCS) and repetitive transcranial magnetic stimulation (rTMS) may have potential for improving symptoms of anorexia nervosa.

To investigate the relative effectiveness and acceptability of tDCS and repetitive transcranial rTMS for improving symptoms in people with anorexia nervosa. Participants will be inpatients in hospital receiving usual care.

**HOW WILL THIS PROJECT CHANGE HEALTHCARE DELIVERY?**

We anticipate that both tDCS and rTMS will be beneficial for further improving symptoms of anorexia. The results of this project will help to inform which of these treatments may be most beneficial and suitable for people with anorexia, which will be important for informing the design of a larger definitive randomised controlled trial.

**WHAT DIFFERENCE WILL THIS PROJECT MADE?**

It is possible that people with anorexia who participate in this study may gain further improvement in their symptoms. Symptom improvements from brain stimulation may translate to improvements in quality of life and day to day functioning.

**“People we will be receiving these treatments while they’re inpatients in hospital – these treatments modulate brain activity, and they are administered to target dysfunctional neurocircuits that we know are associated with symptoms of anorexia.”**

– Dr Donel Martin



**STUDY**

Randomised  
Controlled Trial of  
Neurostimulation for  
Anorexia Nervosa  
(TRENA)

**FUTURE PLANS?**

The results from this study will inform the design of a larger and more definitive randomised controlled trial which will be implemented at other sites.

Dr Donel Martin with a Transcranial direct current stimulation (tDCS) device.



**STUDY**

# Ramsay ADAPT: Implementation and pilot evaluation of sustainable and supported clinical pathway for managing anxiety and depression in cancer patients

**CHIEF INVESTIGATOR**

Associate Professor Joanne Shaw  
(University of Sydney)

**CLINICAL AREA**

Cancer

**SITES**

Lake Macquarie Private Hospital,  
Ramsay Psychology Charlestown

**FUNDING AWARDED**

\$260,070

**DATE PROJECT COMMENCED**

August 2021

**UNMET NEED**

Anxiety and depression in cancer patients is not routinely identified, and access to treatment is limited due to insufficient hospital-based cancer-specific psychological services.

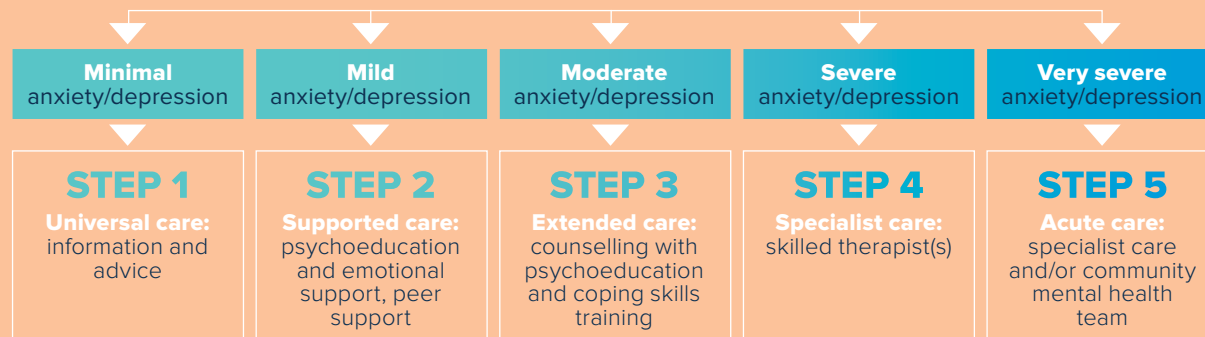
**THE PROJECT**

This research will provide a model of shared care to integrate sustainable and effective screening, detection, and management of anxiety and depression into private cancer services and community-based psychology.

It will provide evidence for how best to implement this model of shared care across private healthcare in Australia. This will significantly reduce morbidity, the burden of disability, and costs for the health system.

## The Clinical Pathway: Stepped Shared Care Model

- Provides **clear treatment options** based on symptom severity
- More intensive interventions reserved for patients who require specialist mental health treatment
- Flexibility to be tailored to reflect **local** referral networks and resources



**Phase 1**

The primary aim of Phase 1 is to determine the effectiveness of training community-based psychologists to deliver treatment for anxiety and depression in cancer patients.

The secondary aims are to evaluate the feasibility and acceptability of engaging with community-based psychologists in shared care for the management of anxiety and depression in cancer patients.

**Phase 2**

The primary aim of Phase 2 is to evaluate the feasibility and acceptability of implementing the ADAPT Clinical Pathway (ADAPT CP) into routine care in a private cancer service in Australia.

The secondary aim is to identify health professional, patient, community, and systems factors which enable or hinder adoption of this model into routine care in the private hospital sector.

**STUDY**

Ramsay ADAPT: Implementation and pilot evaluation of sustainable and supported clinical pathway for managing anxiety and depression in cancer patients

This project is a health service implementation project, which requires face-to-face training and stakeholder engagement meetings to initiate the research. Due to restrictions on entry into health care facilities for non-essential business during the COVID-19 pandemic, the start of this project has been delayed.

**WHAT DIFFERENCE WILL THIS PROJECT MAKE?**

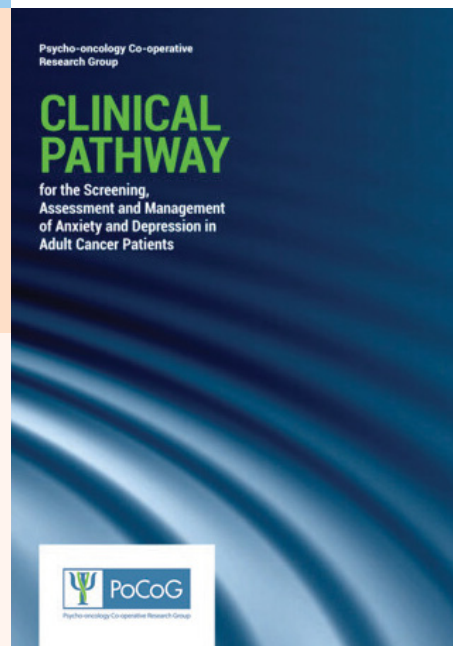
Implementation of an anxiety and depression screening and referral clinical pathway within cancer services will enable routine identification of anxiety and depression in cancer patients and provide a sustainable and effective referral network for patients to access appropriate psychological treatment. Expanding community-based psychologists' capacity to deliver cancer-specific anxiety and/or depression treatment to cancer patients, will increase patient ease of access to appropriate psychological treatment. This research will provide evidence for how best to implement this model of shared care across private healthcare in Australia, improving patient outcomes and increasing health system efficiency.

**FUTURE PLANS?**

The results of this research will inform a larger program of work to implement a national model of care and true collaborations across Ramsay Health Care cancer services and community-based psychology services.

**OUTPUT**

A conference abstract outlining the Psychology Training has been accepted for an oral presentation at the International Psycho-Oncology Society (IPOS) World Congress in August 2022, and a poster presentation at the NSW Cancer Conference in September 2022.



STUDY

# Nurse-led volunteer support interventions and a technology driven pain assessment for older adults with cognitive impairment in hospital

**CHIEF INVESTIGATOR**

Associate Professor Rosemary Saunders (Edith Cowan University)

**CLINICAL AREA**

Older Adults

**SITE**

Joondalup Health Campus

**FUNDING AWARDED**

\$100,000

**DATE PROJECT COMMENCED**

June 2021

*The RHRF “Enabling Research” Grants Scheme supports Hospital CEOs to gain funding to develop research capacity. These grants will facilitate the development of new ideas within a hospital and enable these ideas to be tested on a small scale, as pilot projects.*

*RHRF awarded two Enabling Grants in 2021 to Joondalup Health Campus and to Mt Wilga Private and Berkeley Vale Private Hospitals.*

**THE CHALLENGE**

The increasing older adult population and especially those with cognitive impairment (dementia, delirium or at risk of delirium) presents a growing challenge for acute health services particularly in maintaining patient safety.

Patients with dementia who are in hospital are twice as likely to experience falls, pressure injuries or infections in hospital, and six times more likely to develop delirium, two times more likely to die in hospital, and twice as likely to be readmitted to hospital.

Pain is also often poorly assessed and managed in people who have a cognitive impairment, and this can contribute to impaired mobility, inability to participate in therapeutic activities and delirium.

Support from trained volunteers focused on older adults needs, such as eating, drinking, ambulation and cognitive stimulation have been found to improve outcomes for older adults in hospital.

**THE PROJECT**

This study aims to evaluate a model of service delivery for older adults in hospital through the implementation of technology driven pain assessment and a nurse-led volunteer support program.

This project implemented a change of practice across two medical wards at Joondalup Health Campus with a high proportion of older adult patients with cognitive impairment.

All pain assessments were conducted using PainChek® Universal. PainChek® Universal is an app that, for people who can self-report pain records pain scores, and for people who cannot self-report assesses pain using a combination of face recognition technology and user completed checklists.

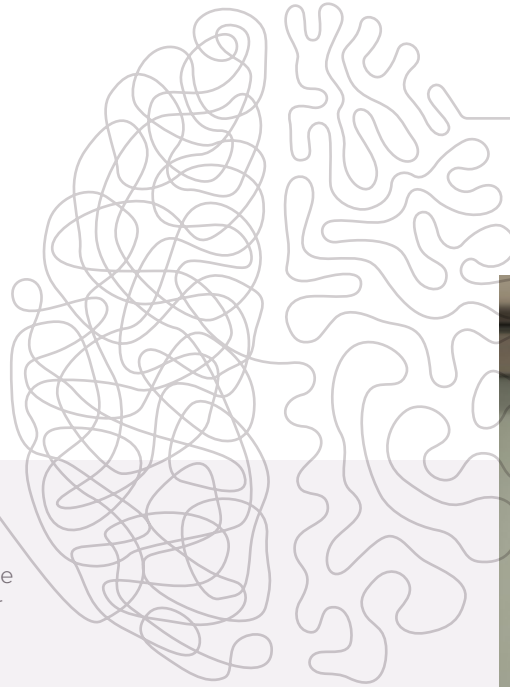
In addition, individualised nurse-led volunteer support was provided for each patient according to patient needs determined by the nurse at admission.

**“[Research Nurse trainer] made it extremely easy to learn”**

– Quote from volunteers when asked “What did you like best about training?”

**ENABLING RESEARCH**

- A dedicated role for a member of Joondalup Health Campus nursing staff was created within this project.
- This nurse was mentored in research by project investigators and led the training of volunteers and staff and provided oversight of the project at the site.
- Volunteers included health care students recruited through university departments.



A preliminary observational audit of assistant in nursing companion activities was conducted to gauge how volunteers may best complement existing role. In 49% of observations the companion was providing direct support to the patient, in 27% the companion was engaged in other support activities (e.g., documenting care) and in 24% no support was being provided. Support provided was mainly diversionary activities (40%) which predominantly comprised conversation with the patient (56%). These findings suggest deploying volunteers to engage patients in diversionary activities would free up assistants in nursing to support other areas of patient care and safety (e.g., activities of daily living).

**“Learning communications strategies for people with dementia and delirium”**

Quote from volunteers when asked “What did you like best about training?”

**WHAT DIFFERENCE WILL THIS PROJECT MAKE?**

This project aims to improve care and safety for hospitalised older adults especially patients with cognitive impairment. Benefits are also anticipated for the volunteers the majority of whom are health care students seeking experience in the acute care sector.

**FUTURE PLANS?**

Building on this project we have initiated a new implementation trial for PainChek® Universal at Hollywood Private Hospital.

**OUTPUTS**

**PUBLICATIONS**

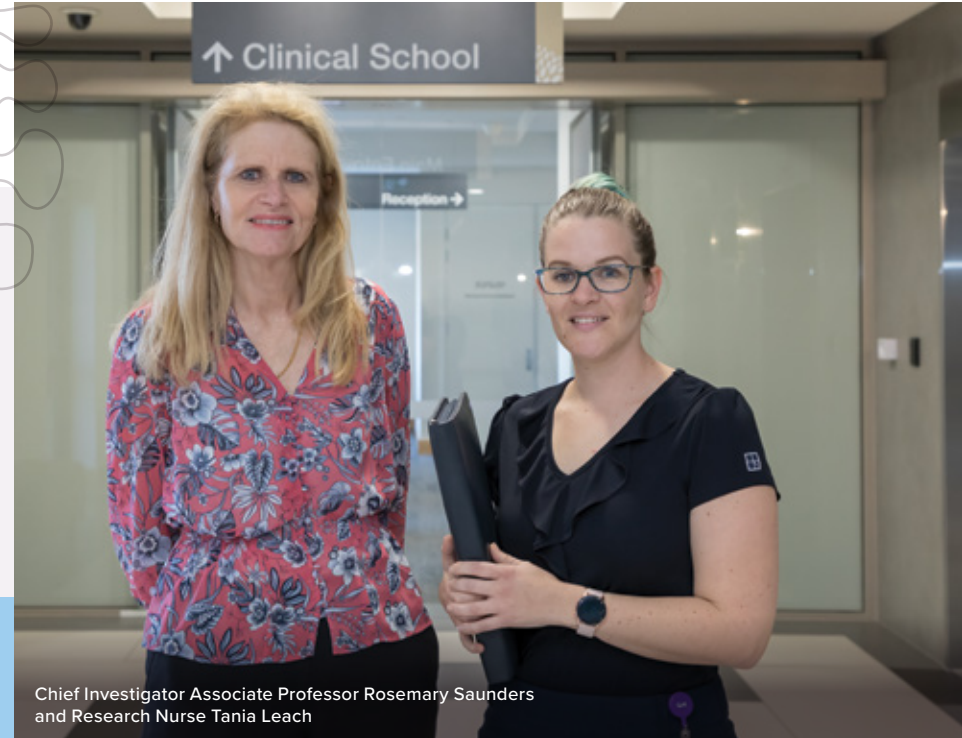
Saunders, R. & Crookes, K. (2022). *Assistants in Nursing Supporting Older Adults in Hospital: An Observational Audit*. Report prepared for Joondalup Health Campus.

**CONFERENCE PRESENTATIONS**

Saunders et al. (October, 2022). Assistants in nursing supporting older adults in hospital: An observational audit. Abstract submitted for a talk at the Australasian Conference on Care of Older People, virtual meeting

Crookes et al. (November, 2022). Nurse-led volunteer support for hospitalised older adults: A new model. Abstract accepted for a talk at the 55th Australasian Association for Gerontology Conference, Adelaide, Australia

Crookes et al. (September, 2022). Nurse led volunteer support for hospitalised older adults: Volunteers making a difference to care. Abstract accepted for a talk at the Australasian College of Health Service Management Congress, Perth, Australia



Chief Investigator Associate Professor Rosemary Saunders and Research Nurse Tania Leach



**STUDY**

Exploring the experiences, perceptions and attitudes of therapists delivering rehabilitation in a group format: A qualitative study

**CHIEF INVESTIGATORS**

Ms Lorrie Mohsen (Mt Wilga and Berkeley Vale Private Hospitals) and Ms Annemieke Clark (Mt Wilga Private Hospital)

**CLINICAL AREA**

Rehabilitation

**SITES**

Mt Wilga Private Hospital and Berkeley Vale Private Hospital

**FUNDING AWARDED**

\$100,000

**DATE PROJECT COMMENCED**

July 2021

*The RHRF “Enabling Research” Grants Scheme supports Hospital CEOs to gain funding to develop research capacity. These grants will facilitate the development of new ideas within a hospital and enable these ideas to be tested on a small scale, as pilot projects. RHRF awarded two Enabling Grants in 2021 to Joondalup Health Campus and to Mt Wilga Private and Berkeley Vale Private Hospitals.*

**THE CHALLENGE**

Traditionally, hospital-based physical rehabilitation for adults is delivered 1:1 by a trained allied health professional such as a physiotherapist (PT), exercise physiologist (EP), occupational therapist (OT) or allied health assistant (AHA). This format allows customised treatment and undivided attention from the health professional.

In addition to positive rehabilitation outcomes, evidence increasingly demonstrates the value of group-based therapy in the domain of participation for offering peer support, promoting exercise adherence, information discourse and motivating competition amongst participants.

More broadly, group-based therapy has emerged as a feasible option for health care providers to deliver therapy efficiently and economically allowing for simultaneous treatment of multiple patients. With a health system under pressure, organisations are turning to group therapy as a necessary model of practice to deal with growing waitlists and reduced resources.

Our facilities have had the desire to not only provide evidence-based practice, but to contribute to that body of evidence. The Enabling Research Grant provided the resources to appoint a dedicated Research Coordinator (PT) to assist us to establish and embed research into our daily practice amongst many of our clinical teams.

**“There was unanimous belief that the ‘how and why’ of group-based therapy can be financially dictated and participants acknowledged that there are limits to the therapist’s influence on its broad utilisation within the health system.**

**However, with a fundamental desire to deliver patient-centered, best care, the therapists in this study were able to suggest factors which enabled group therapy to be delivered effectively.**

**Overall, group therapy was reported to promote psychosocial wellness for patients and when used in conjunction with one-to-one therapy, provided a well-rounded model of therapy implementation.”**

**ENABLING RESEARCH**

Developing a research culture at this site by:

- **Establishing a Hospital Network Research Committee and Research Coordinator position**
- **Encouraging research as a topic in unit and department meetings to have research discussed at all levels of our hospitals.**

## STUDY

Exploring the experiences, perceptions and attitudes of therapists delivering rehabilitation in a group format: A qualitative study

## THE PROJECT

This study sought to identify therapist-reported opinions and attitudes towards group therapy by exploring their positive and negative experiences of delivering therapy in group format in a rehabilitation setting. The perceived barriers and enablers to the successful completion of the group therapies, was also discussed as part of this study.

## OUTCOMES

Following analysis of the data collected, four main themes were identified:

- 1. Psychosocial factors**  
– the shared experience;
- 2. Acuity matters**  
– the key to cohort success;
- 3. Factors informing practice**  
– who's responsible for success and failure? and
- 4. Rhetoric vs. reality**  
– groups aren't always more efficient.

## WHAT DIFFERENCE HAS THIS PROJECT MADE?

This project has allowed the clinicians to have a voice in the clinical practice of group therapy. They were able to participate in a large project that brought all of their voices, opinions and beliefs together to create a majority outcome that was then presented to their colleagues, peers and management team at the hospital.

The project has enacted a broader conversation and discussion-based consultation moving forwards regarding group therapy and how it should be delivered.

## FUTURE PLANS?

- Currently this project is specific to our 2 network sites but could be seen as an informative resource for other rehabilitation hospital sites.
- We will create focus groups to discuss the findings and establish steps to move forward in our group implementation.

## OUTPUTS

Onsite in-service education delivered to clinical staff across Mt Wilga and Berkeley Vale Private Hospitals  
Oral presentation of project at the Occupational Therapy Australia conference "OT Exchange: Learn, Practise, Enrich." In Melbourne 9-10 June 2022



**STUDY**

# Australasian Partnership for Improving Outcomes in Severe Depression

**CHIEF INVESTIGATOR**

Professor Colleen Loo  
(University of New South Wales,  
The Black Dog Institute)

**CLINICAL AREA**

Mental Health

**SITES**

Ramsay Clinic Northside,  
Ramsay Clinic Lakeside,  
Ramsay Clinic Albert Road,  
and Ramsay Clinic Adelaide.  
This project also includes  
40 other sites in Australia  
and overseas.

**FUNDING AWARDED**

\$750,000

**DATE PROJECT COMMENCED**

July 2021

*Ramsay Health Care and Ramsay Hospital Research Foundation are two of a number of partners in this NHMRC partnership grant. This funding scheme provides funding and support to create new opportunities for researchers and policy makers to work together to define research questions, undertake research, interpret the findings and implement the findings into policy and practice.*

**UNMET NEED**

Unlike formal research trials, which are conducted under highly specialised conditions, this project analyses treatment practices and treatment outcomes in real-world clinical practice (i.e., treatments provided in typical clinical settings). This project will collect and analyse data for severe depression, including electroconvulsive therapy (ECT), transcranial magnetic stimulation (TMS), transcranial direct current stimulation (tDCS) and ketamine.

This will be achieved via the development and implementation of a standardised data collection framework on patient characteristics, treatment approach and clinical outcomes such as symptom improvement, side effects and quality of life. The real-world clinical data collected via this framework can then be collated for benchmarking and research activities which will produce findings that can inform treatment guidelines and translation of research into clinical practice.

**THE PROJECT**

Data has now been collected in approximately 2000 individuals treated for severe depression across 10 hospitals in Australia and Singapore. Several projects have been conducted so far, yielding important findings that provide clinicians with insights into what is currently happening in real-world practice and suggestions on potential improvements.

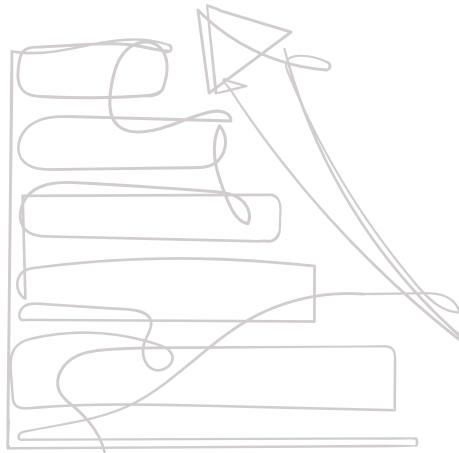
- **The impact of COVID-19 on ECT:** This study examined the impact of COVID-19 restrictions on patients' access to ECT, their treatment and clinical outcomes. It was the first multisite study in ECT which examined empirical data on this topic.

**“This project will help clinicians and service providers to evaluate the practise of ECT, TMS, ketamine, and tDCS treatments for severe depression. Benchmarking and research assist in identifying what works best, which can in turn improve how we use these treatments in the real world.”**



**STUDY**

Australasian Partnership for Improving Outcomes in Severe Depression



• **The utility of the Brief ECT Cognitive Screen (BECS) for early prediction of ECT cognitive adverse effects:**

The BECS is a simple tool developed to screen for cognitive side effects following treatment. This study aimed to examine the utility of the BECS in real-world ECT clinical practice. Results showed that the BECS predicted clinically significant cognitive side effects following ECT.

• **The Sydney Melancholia Prototype Index (SMPI) for predicting response to ECT for depression:**

Clinicians commonly consider melancholia to be a good predictor of ECT response, but the data has been mixed. This study investigated the usefulness of the SMPI, a tool for identifying melancholia, for predicting response to ECT.

**HOW WILL THIS PROJECT CHANGE HEALTHCARE DELIVERY?**

1. Identifying how real-world practice may differ from ideal practice as informed by research studies.
2. Identifying differences in practice across hospitals and clinics and reflecting on reasons for this. This provides us with an opportunity to identify whether clinical practice can potentially be improved at some centres.
3. Assessing how tools and methods developed in research actually work in a clinical setting and whether these are useful in day-to-day practice.

**FUTURE PLANS OF THIS PROJECT?**

1. Expanding from ECT to also include other new treatments for severe depression such as TMS, ketamine and tDCS.
2. Refining and improving the data collection framework, as well as inclusion of more hospitals beyond Ramsay in Australia and overseas
3. Ongoing benchmarking and research projects.

**OUTPUTS**

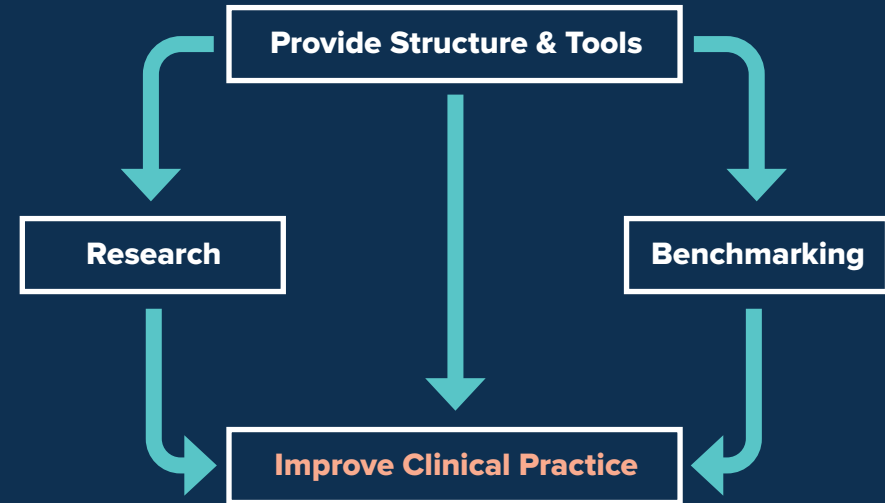
Kwan, E., Le, B., Loo, C.K., Dong, V., Tor, P-C., Davidson, D., Mohan, T., Waite, S., Branjerdporn, G., Sarma, S., Hussain, S., Martin, D.M. (2022). The impact of COVID-19 on ECT: a multisite, retrospective study from the CARE Network. *Journal of ECT*, 38, 45-51.

Martin, D.M, Tor, PC, Waite, S, Mohan, T, Davidson, D, Sarma, S, Branjerdporn, G., Dong, V, Kwan, E, Loo, C.K. (2022). The utility of the Brief ECT Cognitive Screen (BECS) for early prediction of cognitive adverse effects from ECT: A CARE Network study. *Journal of Psychiatric Research*, 145, 250-255.

Waite, S., Tor, P.C., Mohan, T., Davidson, D., Hussain, S., Dong, V., Loo, C., Martin, D.M. (2022). *The utility of the Sydney Melancholia Prototype Index (SMPI) for predicting response to electroconvulsive therapy in depression: A CARE Network Study.* Manuscript submitted for publication.



The **C**linical **A**lliance and **R**esearch in **E**CT & Related Treatments



# National Clinical Trial Network Overview

*Ramsay Health Care has established a National Clinical Trial Network and believes that the development of clinical trials and providing patients with access to clinical trials is a critical part of providing a system of high quality, leading care.*

*Ramsay has provided seed funding up to three years to help the Clinical Trials sites establish. Our ongoing role is to support each site, invest in infrastructure to support clinical trial activities, and to promote health literacy initiatives.*

## Benefits of clinical trials include:

- ✓ Rapid scientific advances in global cancer research which have shifted towards targeted cancer therapies
- ✓ Potential to receive a better treatment than the standard care currently on offer
- ✓ Harmonisation of regulators resulting in early access to drugs and devices
- ✓ Targeted therapies which have the potential to dramatically improve patient quality of life and survival
- ✓ Improved outcomes, even for those not given the treatment under investigation
- ✓ Improved quality of care leading to improved outcomes for all patients, even for those not participating in a trial

Many studies conducted through Ramsay are used to guide clinical practice and are translated into benefits for all patients with that condition.

**719**  
TOTAL  
PATIENTS INVOLVED  
IN CLINICAL TRIALS

From January 2020 –  
December 2021

**334**  
TOTAL  
ACTIVE CLINICAL  
TRIALS

From January 2020 –  
December 2021

## Key highlights include:

- **Dr Andrea Tazbirkova** (Pindara Private Hospital), has **dosed the first participant globally with an additional 24 participants consenting to the study:** A Phase 1 Clinical Study to Evaluate the Tolerability, Safety, Immunogenicity and Efficacy of the Neoantigen mRNA Personalised Cancer Vaccine SW1115C3 in Patients With Advanced Malignant Solid Tumours.
- On 21 September 2021, **Hollywood Private Hospital** was the **first site in the world to open for a new Novartis Phase 3 clinical trial for patients with metastatic pancreatic cancer**

## KEY HIGHLIGHTS

National Clinical Trial Network  
Overview

- **Lake Macquarie** was the **first site worldwide**, outside of the sponsor country (Austria), **to recruit for the BRCA-P trial focused on breast cancer screening for high-risk groups**
- **Lake Macquarie** was the **first site activated and has the highest number of pre-screened patients in Australia for the KATE 3 breast cancer trial**
- **Hollywood Private Hospital 1st site in world to activate for Phase 3 metastatic pancreatic cancer study** with Professor Adnan Khattak
- **Dr Patricia Walker** (Peninsula Private Hospital) **was accepted for publication with The Lancet Oncology (Impact factor 41.316) as a co-author for the study BGB-3111-304 [SEQUOIA]:** An International, Phase 3, Open-Label, Randomized Study of BGB-3111 Compared With Bendamustine Plus Rituximab in Patients With Previously Untreated Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma (CLL/SLL)
- **Dr Michelle Morris** (Sunshine Coast University Private Hospital) **was the first site globally to recruit a participant to the following study: HLX301-001:** A Phase 1/2 Study of HLX301, A Recombinant Humanized Anti-PDL1 and Anti-TIGIT Bispecific Antibody, in Patients with Locally Advanced or Metastatic Solid Tumors
- **Dr Michelle Morris** (Sunshine Coast University Private Hospital) **was the first site globally to recruit a participant to the following study: BAT-8009-001-CR:** A Phase 1, Multi-Center, Open-Label Study to Assess Safety, Tolerability, Pharmacokinetics, and Preliminary Efficacy of BAT8009 in Patients with Advanced Solid Tumours



# Clinical Trials Units Site Summary

SITE	TOTAL NUMBER OF ACTIVE TRIALS	TOTAL NUMBER OF PATIENTS INVOLVED IN CLINICAL TRIALS
Albert Road Clinic	9	237
Border Cancer Hospital (BMORU)#	85	161
Greenslopes Private Hospital (GMRF)#	45	101
Hollywood Private Hospital	9	20
John Flynn Private Hospital	28	5
Lake Macquarie Private Hospital	89	37
North Shore Private Hospital	2	0
Peninsula Private Hospital	17	29
Pindara Private Hospital	15	32
Southern Highlands Private Hospital	6	37
St George Private Hospital	13	36
Sunshine Coast University Private Hospital	8	12
Warringal Private Hospital	4	9
Wollongong Private Hospital	4	3

\* Joondalup Health Campus commenced as a Clinical Trials Site in December 2021

#Border Medical Oncology Research Unit and Gallipoli Medical Research Foundation are both external not-for-profit groups that coordinate clinical trials within a Ramsay Hospital. Both groups are a welcome addition to the Ramsay Clinical Trials Network, and we value their engagement and feedback.

# 334

TOTAL  
ACTIVE CLINICAL  
TRIALS

From January 2020 –  
December 2021

# 719

TOTAL PATIENTS  
INVOLVED IN  
CLINICAL TRIALS

From January 2020 –  
December 2021



# PROMS and PREMS

Patient-reported outcome measures (PROMs), Patient-reported experience measures (PREMS), and clinical outcome measures are an integral part of a high-quality, evidence-based health service.

PROMs seek the patient perspectives on the outcomes of their care and help health services to **incorporate the patient perspective into treatment evaluation.**

Measuring outcomes can help health services to:

- ✓ Better understand what matters to patients
- ✓ Identify best practice
- ✓ Ultimately improve care and the quality of our services

## CARE NETWORK

### OVERVIEW:

The Clinical Alliance and Research in Electroconvulsive Therapy (ECT) and Related Treatments (“CARE”) initiative provides a standardised framework for collection of quality clinical data in ECT. CARE is now expanding to develop and implement datasets for ketamine, Repetitive Transcranial Magnetic Stimulation (rTMS) and Transcranial direct current stimulation (tDCS) through a successful NHMRC Partnership Grant, supported by Ramsay Hospital Research Foundation and Ramsay Health Care, among other partners.

### IMPACT:

This project will establish a framework to address gaps in data to support best practice treatment, reducing clinical variation and improving service quality in a wide variety of neurostimulation treatments.

**STATUS:**  
Ongoing

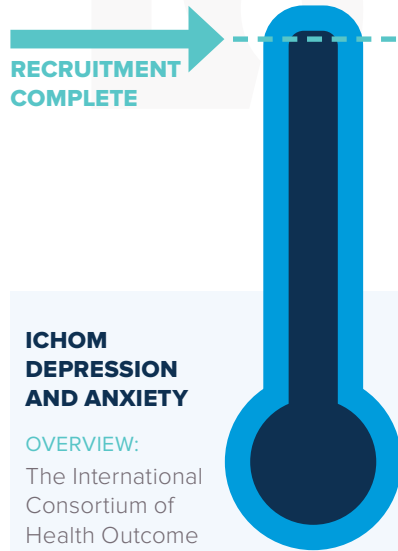
**ESTIMATED COMPLETION:**  
2025

**NO. OF PATIENTS PARTICIPATED:**  
+600 patients



## PROMS AND PREMS

Current Measures  
Overview



### ICHOM DEPRESSION AND ANXIETY

#### OVERVIEW:

The International Consortium of Health Outcome Measurement (ICHOM) Depression and Anxiety Study, led by Professor Mal Hopwood, is a research project designed to collect patient reported outcome measures (PROMs) from Ramsay patients receiving treatment for depression and/or anxiety.

#### IMPACT:

This project will provide vital information about the patient perspective on their treatment outcomes, providing clear insights and the opportunity for PROMs to be an intrinsic component of our mental health treatment evaluation.

**STATUS:** Follow Up

**RECRUITMENT STATUS:** Complete

**ESTIMATED PROJECT COMPLETION:** 2024

### REHABILITATION OUTCOME MEASURES

#### OVERVIEW:

Successfully translating the findings from an RHRF funded study, "Measuring patient change during rehabilitation", conducted by Dr Margie Schache, Dr Amanda Timmer and Dr Caroline Unsworth, Ramsay Health Care has introduced a national program to collect consistent clinical and patient reported outcome measures for all Ramsay patients receiving rehabilitation treatment across Australia.

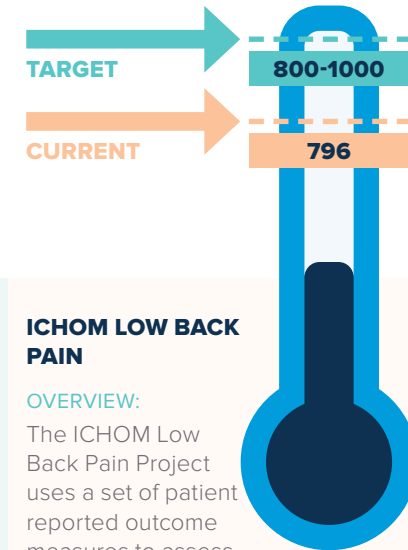
#### IMPACT:

At an individual level, these outcome measures help to measure each patient's treatment progress and demonstrate how far they have come. At an Organisation level, these measure help Ramsay to understand the quality of its rehab services and the impact it has to patient outcomes.

Through a series of interactive dashboards, data is available to both Executives and clinicians who are using it to understand how well Ramsay rehab is performing at a National and site level in a comprehensive manner. Using the data we are able to identify areas of excellence which demonstrate how we can improve care for our patients, and areas where clinicians may need additional support/training.

**STATUS:** Ongoing

**ESTIMATED PROJECT COMPLETION:** Ongoing



### ICHOM LOW BACK PAIN

#### OVERVIEW:

The ICHOM Low Back Pain Project uses a set of patient reported outcome measures to assess a patient's own perception of their wellbeing progress after conservative or surgical treatment for low back pain.

#### IMPACT:

This project will provide important insights into best practice management for low back pain and the factors which can influence patient outcomes.

**STATUS:** Active

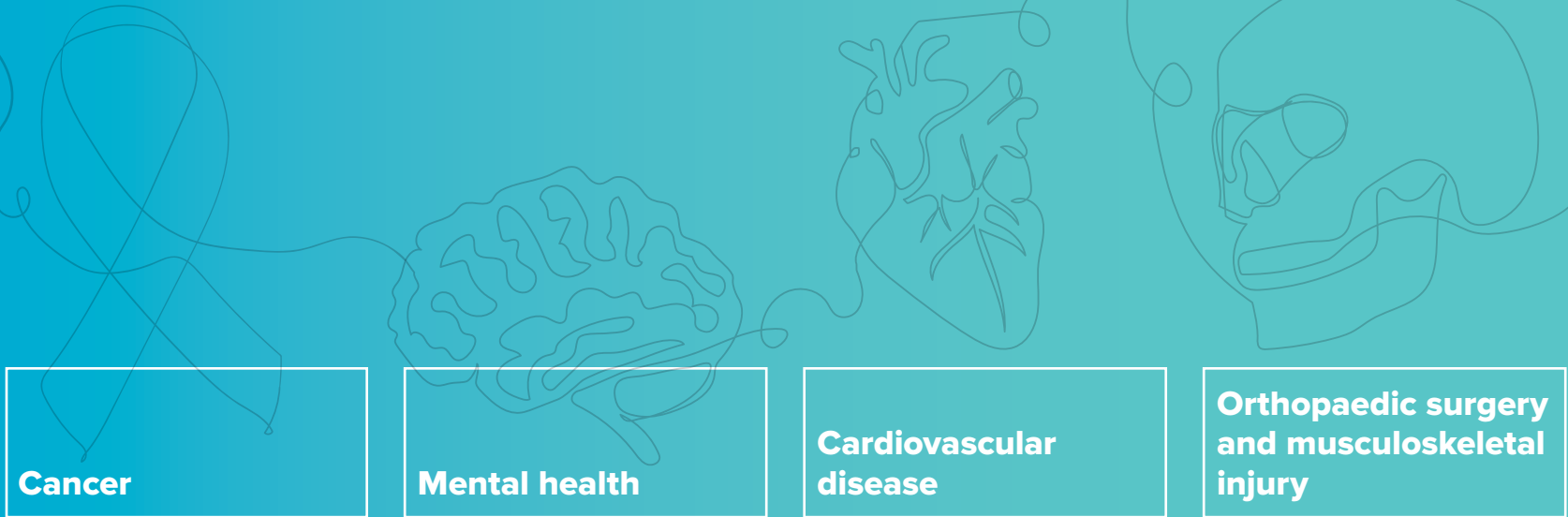
**ESTIMATED PROJECT COMPLETION:** 2026

**CURRENT RECRUITMENT NO.:** 796

**TARGET RECRUITMENT:** 800-1000

# The Next Five Years

From July 2021, for the next five years the Ramsay Hospital Research Foundation will focus on four clinical areas:



**2021-  
2025**

RHRF received significant funding from the Paul Ramsay Foundation to fund translational research projects that will break the cycle of disadvantage and improve patient outcomes by addressing specific determinants of health – such as health literacy, social and lifestyle risk factors, knowledge transfer between generations or the effects of climate change on health.

In addition to our focus on developing research that is conducted by Ramsay doctors and clinical care teams, we have expanded to ensure that other non-Ramsay treatment settings are included in our grant program. This ensures that the focus of our research is broad and we continue to attract a diverse range of applicants both internally and externally.

The attention on making a meaningful difference, particularly in the lives of people living with disadvantage will be prime driver of all activities across the Ramsay Hospital Research Foundation over the next five years. By addressing key determinants of health, we aim to lower the burden of disease for individuals and our health infrastructure and help people living with disadvantage move towards to potential intergenerational change.

# Our Board

RHRF is governed by a Board of Directors who guide the direction of the research we fund. The Board is also responsible for monitoring compliance with legal and regulatory obligations, and operational and financial performance.



Professor Sir Edward Byrne AC (Chair)  
*Global Chief Medical Officer, Ramsay Health Care*

Professor Sir Edward Byrne is currently Global Chief Medical Officer for Ramsay Health Care having succeeded Prof. John Horvath in February 2021.

Professor Byrne was President & Principal at King's College London and Chairman of King's Health Partners board from 1st August 2014 until early 2021.

Professor Byrne was a founding director of the Melbourne Neuromuscular Research Unit and the Centre for Neuroscience in 1993. He was also made Professor of Experimental Neurology at the University of Melbourne in 2001. His major research contributions have been in the field of mitochondrial medicine and neuromuscular disorders. His work is also focused on changes in universities and health systems to meet societal needs.

Recently, Professor Byrne has been appointed Chair of the Board at Orygen.

He served as head of the Medical School and vice provost of University College London from 2007 to 2009 and was the president and vice chancellor of Monash University for five years from 2009 to 2014.

He is also a fellow of the Academy of Medical Sciences in the UK and an honorary fellow of the Australian Academy of Health and Medical Sciences, which he helped found.

Professor Byrne was admitted as an Officer of the Order of Australia in 2006 and a Companion of the Order of Australia, Australia's highest honour, in 2014. He was elected as a Fellow of the Academy of Medical Sciences in the UK in 2019. He was awarded a Knighthood in the Queen's Birthday Honours in October 2020 for contributions to higher education and healthcare.



Mr Daniel Sims  
*(Chair - Resigned as Chair 28/04/2021, Resigned as Director 02/07/2021)*

Daniel Sims was appointed the Chief Executive Officer (CEO) of Ramsay Health Care's Australian operations in January 2015. In this role, he is ultimately responsible for the operating performance and strategic direction of Ramsay's hospital businesses in Australia. Mr Sims resigned as CEO of Ramsay Australia in October 2020, remaining with the organisation as Chief Operating Officer until July 2021 as he transitioned to retirement.

Mr Sims has been involved in the operational management of Ramsay Health Care since 2003. His previous roles in Chief Operating Officer (Australia and Asia), State Operations Manager (NSW), and Group Financial Controller (Hospital Operations).



Ms Carmel Monaghan  
*Chief Executive Officer, Ramsay Australia*

Carmel Monaghan was appointed Chief Executive Officer (CEO) of Ramsay Health Care's (Ramsay) Australian operations on 1 October 2020.

Ms Monaghan has worked across hospital, corporate and global positions in Ramsay for over two decades. Prior to her appointment as CEO of Australia, Ms Monaghan was the Group Chief of Staff of Ramsay's global operations gaining extensive experience and a comprehensive understanding of health care operations and strategy both in Australia and overseas.

In her time with Ramsay, Ms Monaghan has had a strong focus on delivering results through focusing on customers and developing strong doctor relationships. She is a respected leader with the ability to build an experienced and loyal team and her collaborative style and people-focused approach, is closely aligned with 'The Ramsay Way'. Having worked with the company's founder Paul Ramsay for many years, she has a strong belief in its organisational culture of 'people caring for people'.





Professor John Horvath

*Strategic Medical Advisor,  
Ramsay Health Care*

Professor John Horvath AO is the former Global Strategic Medical Advisor to Ramsay Health Care, retiring in February 2021.

Professor John Horvath is a Fellow of the Royal Australasian College of Physicians and a distinguished practitioner, researcher and teacher.

Professor Horvath served as Australia's Chief Medical Officer between 2003 and 2009 and has served as Chair of the Health Committee on the National Health and Medical Research Council (NHMRC). He has been a Board member of the Garvan Institute, Health Workforce Australia and Crown Resorts Ltd, and most recently served as Principal Medical Consultant to the Department of Health and Ageing from 2009 till 2015.

Before joining the Department of Health, Professor Horvath's career included 30 years in clinical practice at the Royal Prince Alfred where he established a number of clinical services and as Director of the Renal and Transplant Services. He has been active in teaching and research; policy development and implementation of national strategies on behalf of governments.



Professor Cheryl Jones

*Head of School and Dean,  
Sydney Medical School*

Professor Cheryl Jones is a paediatric infectious diseases physician and clinician-scientist, and now Head of School and Dean of Sydney Medical School in the new Faculty of Medicine and Health, at the University of Sydney. She has served on the Ramsay Hospital Research Foundation Board since December 2019.

Until 2018, she was Executive Director of the NHMRC AHRTC- the Melbourne Academic Centre for Health, Stevenson Chair of Paediatrics and Department Head, at the University of Melbourne and an infectious diseases paediatrician at Royal Children's Hospital, Melbourne. She is a world authority on childhood infectious diseases and a Fellow of the Australian Academy of Health & Medical Sciences (FAHMS).

Professor Jones provides specialist advice on matters related to infectious diseases and microbiology to the key stakeholders including the Commonwealth and, NSW, QLD, ACT, Vic state Governments. She is a Board member and Immediate Past President of the Australasian Society for Infectious Diseases, a member of international committees, and Australian statutory authorities and Boards (MCRI, RACP council).



Professor Helen Christensen (AO)

*Scientia Professor of Mental Health,  
UNSW Sydney*

Professor Helen Christensen (AO) is Scientia Professor of Mental Health at UNSW Sydney and Board Director of Black Dog Institute. She is the former Executive Director and Chief Scientist at Black Dog Institute, having led the organisation from 2011 to 2021.

Professor Christensen is a leading expert on using technology to deliver evidence-based interventions for the prevention and treatment of depression, anxiety, suicide, and self-harm. Her research also encompasses prevention of mental health problems in young people through school-based research programs. These programs are aimed at the prevention of depression and suicide risk through eMental Health interventions.

Professor Christensen is also on the Million Minds panel, a government initiative that has brought together the most distinguished academics and mental health professionals to reduce the prevalence of mental illness and suicide.



Professor Sally Redman (AO)

*Chief Executive Officer,  
Sax Institute*

Professor Sally Redman is an international leader in increasing the impact of research in policy, programs, and service delivery. A social scientist with a lifelong commitment to improving health and health services through better use of research, she has three decades of experience in leading respected not-for-profit organisations.

Professor Redman holds academic appointments at the University of Sydney, University of Newcastle and University of NSW and has published over 200 papers in peer-reviewed journals. In 2013, she was appointed an Officer in the Order of Australia for her distinguished service to public health and the promotion of relationships between researchers, policy makers and practitioners. She received the President's Award from the National Heart Foundation in 2017.

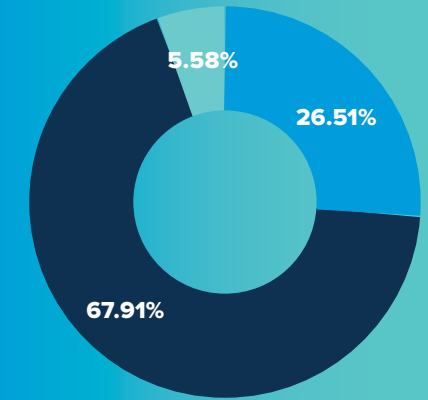
Professor Redman is the Chief Executive Officer (CEO) of the Sax Institute and a foundation member of the Prevention Centre's Leadership Executive.

## Financial Overview 2020-2021

Financial information from the latest AIS.

### REVENUE

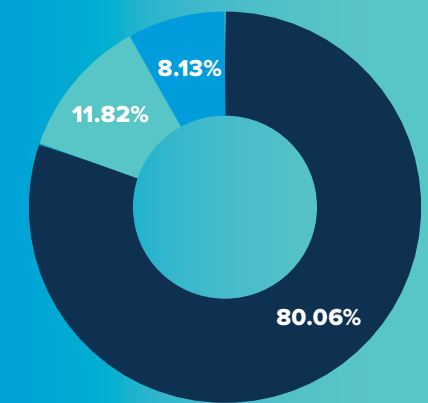
Total revenue: \$377,215.00



Revenue from Government	\$100,000
Revenue from Goods or Services	\$256,151
Revenue from Investments	\$21,064

### EXPENSES

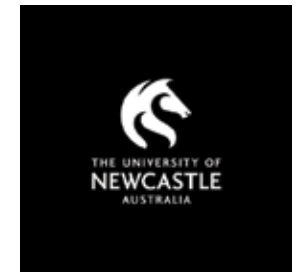
Total expenses: \$3,116,167.00



Grants and donations made for use in Australia	\$2,494,766
All other expenses	\$368,188
Employee expenses	\$253,213

# Acknowledgements

We wish to acknowledge all of the organisations that we support and work with to deliver our research program.





# Thank You to the Paul Ramsay Foundation

Ramsay Hospital Research Foundation would like to thank its major supporter, the Paul Ramsay Foundation, for its ongoing commitment to the advancement of health and medical research.

## ABOUT THE PAUL RAMSAY FOUNDATION

At the Paul Ramsay Foundation, we believe that people and communities across Australia deserve to thrive.

PRF's vision is to end cycles of disadvantage, so that everyone has access to opportunities, regardless of their circumstance or postcode. We seek to identify and partner with individuals, communities, and organisations, and work across sectors to collectively work together in achieving this vision.

The late Paul Ramsay AO established the Foundation in his name in 2006 and, after his death in 2014, left most of his estate to continue his philanthropy for generations to come.

[paulramsayfoundation.org.au](http://paulramsayfoundation.org.au)

