Impact Report

Ramsay Hospital
Research Foundation

Ramsay Hospital
Research Foundation

2024-2025

Contents

Professor Cheryl Jones

Chair

Message from our Chair

It is my great pleasure to welcome you to the Ramsay Hospital Research Foundation's Annual Impact Report.

This past year has marked a period of significant growth for RHRF. For the first time, we conducted three grant rounds, receiving over 51 applications. Notably, the launch of our Social Determinants of Health Innovation Grant Round was a resounding success, attracting 16 high-quality submissions that proposed innovative approaches to addressing health inequities across Australia.

In March 2025, our board convened for a strategic planning day that set a clear direction for the Foundation over the next five years. RHRF remains steadfast in its mission: to improve patient outcomes, advance understanding of the diseases and conditions that affect them, and support the ongoing education and development of those who care for them. We are deeply committed to funding rigorous, impactful research and to investing in the people - researchers, clinicians, and innovators - who drive these advancements forward.

The influence of RHRF extends well beyond the research we support. We continue to strengthen our focus on implementation, placing a high priority on translating research findings into meaningful changes in clinical practice.

I would like to extend my sincere thanks to all researchers who dedicated time and effort to preparing and submitting applications, and offer warm congratulations to those selected for funding. From developing groundbreaking treatments to investigating the root causes of health disparities, the projects we support are helping shape the future of medical science and public health.

The past year saw the final year of tenure to Prof Helen Christensen and Ms Carmel Monaghan on our Board of Directors. I would like to thank them both for their guidance, insights, and leadership over their time with RHRF. I would also like to welcome Dr Brindan Suresh to the Board, who brings a wealth of knowledge. We look forward to working with Dr Suresh.

I also wish to express our deep gratitude to the Paul Ramsay Foundation for its ongoing support and generosity. Our shared commitment to breaking cycles of disadvantage through research is closely aligned with the vision of the Paul Ramsay Foundation, and we are proud to continue this legacy of building healthier, more equitable communities.

Warm Regards,

Professor Cheryl Jones
Chair, Ramsay Hospital Research Foundation

Ms Nicola Ware

CEO

Message from our CEO

Welcome to this year's Impact Report - a moment to pause and reflect on the progress we've made, the work we've championed, and the people who've made it possible.

It's a celebration of collaboration, innovation, and shared purpose. From new partnerships and bold ideas to the growing recognition of the social factors that shape health, this report captures not just where we've been, but where we're headed.

This year has been a pivotal one for RHRF - not just in terms of our growth - but in our consolidation of priorities and refining of processes. A deeper focus on collaborations and partnerships with all our stakeholders was at the forefront. These relationships are key to expanding the reach and relevance of the work we fund, and are helping us bridge the gap between research and real world impact.

We've also continued to embed the social determinants of health into our strategic priorities. It's clear that addressing the broader factors influencing health, like housing, education, and income, are essential to improving outcomes for all Australians. The launch of our Social Determinants of Health Innovation Grant round was a major milestone, and the calibre of applications we received speaks volumes about the value and innovation in this space.

I'd like to extend my sincere thanks to the RHRF team, the Scientific Review Panel and our Board for their strategic guidance, particularly during our planning day in March 2025. Their insight and leadership have helped shape a bold and clear direction for the Foundation over the next five years.

As we look ahead, our commitment remains strong: to fund high-quality, impactful research, to support the brilliant minds behind it, and to ensure that what we learn leads to meaningful change in care and outcomes.

Warm Regards,

Nicola Ware
CEO, Ramsay Hospital Research Foundation

About Ramsay Hospital Research Foundation

Founded in
2017

No. of employees
12

Our Vision

Making a meaningful contribution to improving health outcomes and breaking the cycle of disadvantage by addressing social determinants of health.

Our Mission

To provide better outcomes for our patients, to investigate the diseases and illnesses which affect them and to progress the learning and development of those who care for them.

Translation Focus

We are committed to supporting research with real world impact. Research that translates into actionable solutions, informs healthcare practices, and benefits patients and the broader community. By fostering meaningful partnerships with universities and research institutes, we strive to bridge the gap between evidence and implementation, ensuring that knowledge generates positive change.

Impact in Numbers

$30m
total funding awarded

4900+
participants recruited

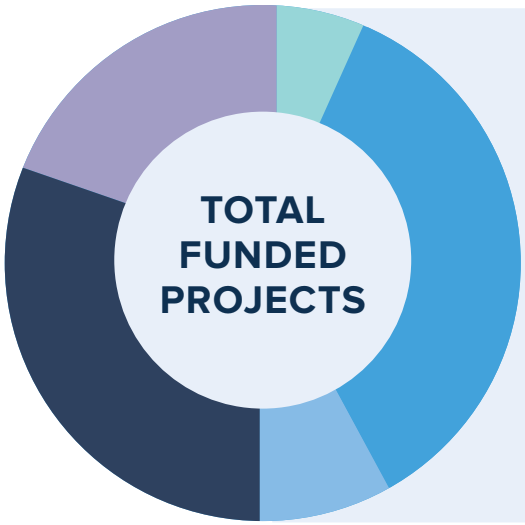
61
projects funded

19
completed projects

51
grant applications received in the 2024-25 year

72
Publications

231
principal and sub-investigators who have received RHRF grant funding



- **4** in cancer
- **5** in cardiovascular health
- **22** in mental health
- **18** in orthopaedics /musculoskeletal injury
- **12** in other areas

Board of Directors

RHRF is governed by a Board of Directors who guide the strategic 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 Cheryl Jones
Chair

Professor John Horvath
AO

Professor Sally Redman *AO*

Ms Jennifer Samson

Dr Robert Herkes

Dr Brindan Suresh

2024-25 Highlights

Inaugural **Social Determinants of Health Innovation Grant Launched**, delivering over $2.3 million in funding to projects tackling disadvantage.

RHRF Accepted as MRFF Eligible Organisation, now able to support our Ramsay VMO's through the application process for MRFF funding and administer funds.

Ramsay Research Consumer Engagement Pilot Launched, making significant steps to incorporating the consumer voice in all that we do.

First MoU for RHRF signed with the **Australian and New Zealand Urogenital and Prostate Cancer Group (ANZUP)** to collaborate on facilitating high quality clinical trials for below the belt cancers.

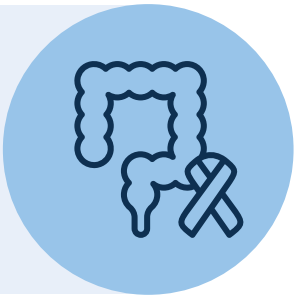
Recent Cancer Research

DETECT PM

Exploring the Utility of Peritoneal Tumour DNA to Detect Clinically Occult Peritoneal Metastasis in Locally Advanced Colorectal Cancer

Professor Jeanne Tie

2023 Translational Challenge Grant | $399,627 Awarded



Why it matters?

Colorectal cancer (CRC) is the second leading cause of cancer-related deaths worldwide. About 15% of patients with CRC experience Peritoneal Metastases (PM) and have an average survival of less than 12 months because they are often underdiagnosed by standard methods and have a poor response to treatment. This project aims to use state-of-the-art technology to analyse cancer DNA in abdominal fluid in bowel cancer patients to accurately identify peritoneal disease and predict future relapse.

Impact

A biomarker such as ptDNA could enable earlier diagnosis of PM for the individual patient, creating a window of opportunity for earlier treatment with existing or novel therapies to prevent subsequent peritoneal relapse and improving survival. Longer term, ptDNA analysis can also be more broadly applied to other gastrointestinal cancers such as gastric and pancreas cancers where peritoneal metastases are prevalent.

This project will target a diverse patient population, including disadvantaged regional/rural patients, which will enable equitable access to expert diagnostics.

DARO-LIPID

A novel approach to precision metabolic medicine to overcome treatment resistance in men with advanced prostate cancer

Dr Tahlia Scheinberg

2022 Translational Challenge Grant | $400,000 Awarded

Why it matters?

Abnormal patterns of blood-borne lipids can identify men with metastatic prostate cancer, who are likely to be resistant to standard treatment, darolutamide. The DARO-Lipid study is a study of the addition of opaganib to standard care for men with poor prognostic metastatic castration resistant prostate cancer (mCRPC), who are predicted to be resistant to darolutamide. These men will be identified through a blood test (PCPro) which identifies patients with mCRPC with a poor outcome lipid signature.

Impact

DARO-Lipid is a world first lipid targeted treatment for patients with prostate cancer.

Through involvement of patients recruited from public and private hospitals, rural, regional and metropolitan areas, a range of geographical areas and SES backgrounds, the study will be able to make a difference for participants from across the spectrum of social advantage and disadvantage.

PCPro is an inexpensive test, and opaganib is an oral treatment that can be administered in any geographical area, without the need for specialised equipment. This helps to overcome some of the barriers of social disadvantage.

BRAIN CANCER REGISTRY

Australian Brain Cancer Registry Project

A/Prof Rosalind Jeffree

2021 Collaborative Research Request | $400,000 Awarded

Why it matters?

Primary brain cancer, particularly glioblastoma, remains a devastating diagnosis with no cure and a survival rate of less than two years for most patients. Access to the best existing treatments and standard care is crucial for improving outcomes and quality of life, especially in the absence of new therapies.

There is considerable variation in brain cancer care across Australia. The ABCR aims to address this by collecting data to understand symptom burdens and treatment-outcome relationships. The ABCR will identify the extent of variation in care between participating hospitals, doctors, and states and the relationship between variation and outcomes.

Impact

For the first time in Australia, care of patients with brain cancer will be benchmarked against the Australian average, international publications and public expectations.

"The Australian Brain Cancer Registry is the first of its kind globally, capturing population-wide diagnosis, treatment and outcome data for brain cancer patients. With RHRF's support, this critical research infrastructure will reduce unwarranted variation in care, monitor new treatments, and be used to run cost-effective registry trials."

- **Professor Lindy Jeffree, Chair, Brain Cancer Australia National Consortium**

Brain Cancer Australia National Consortium Members: Robyn Leonard (Founder), Prof Lindy Jeffree (Lead Investigator), Prof John Simes, Prof Michael Besser and Mythily Sachchithananthan (Project Manager).

Advancing Early Detection of Peritoneal Metastases in Bowel Cancer

Project Overview

The Detect-PM Study, led by Professor Jeanne Tie, is a groundbreaking initiative aimed at transforming the early detection of peritoneal metastases in patients with locally advanced colon cancer.

Despite curative surgery and adjuvant chemotherapy, approximately 15% of patients with locally advanced colon cancer experience relapse in the peritoneum - the lining of the abdominal cavity. Patients with peritoneal metastases have an extremely poor survival, averaging less than 12 months because they are often underdiagnosed by standard imaging methods and have a poor response to systemic treatment.

While blood-based ctDNA testing is effective in predicting distant organ metastases (e.g, metastases in the liver), it lacks sensitivity for detecting peritoneal relapse due to the peritoneal-plasma barrier and distinct mechanisms of disease spread.

Research Innovation & Objectives

Professor Tie's team is pioneering the use of circulating tumour DNA (ctDNA) in peritoneal fluid to identify subclinical disease before it becomes visible through conventional imaging.

The study seeks to:

- Demonstrate that ctDNA found in peritoneal fluid collected during curative-intent surgery can accurately detect microscopic peritoneal disease.
- Predict future recurrence in patients with non-metastatic clinical T4 colon cancer.
- Compare the sensitivity of peritoneal ctDNA detection with current blood-based ctDNA tests and cytology.

Expected Impact

Professor Tie anticipates that peritoneal ctDNA detection will:

- Be more sensitive than current blood tests and cytology.
- Enable earlier intervention and treatment.
- Significantly improve patient survival and quality of life.

This study has the potential to redefine clinical practice by introducing a novel biomarker for early peritoneal relapse, offering hope to patients who currently face limited options once metastases are established.

The project will target a diverse patient population, including disadvantaged regional and rural patients, and will measure participants socioeconomic disadvantage using the index of relative socioeconomic advantage and disadvantage (IRSAD). Testing the feasibility of centralised molecular testing for samples collected from a diverse hospital setting, will enable equitable access to expert diagnostics.

> *'We are hoping that detection of peritoneal disease in a subclinical state will provide a much-needed opportunity for earlier intervention to prevent disease recurrence.'*
>
> **– Professor Jeanne Tie, Study PI.**

Link to the Project's Rapid Research Video

Recent Mental Health Research

KETAMINE IN PTSD

Investigating the use of ketamine as a memory reconsolidation blocker to reduce trauma memories in individuals with PTSD who have not responded to conventional treatments

Dr Wọlé Akósílè | 2024 Translational Challenge Grant | $399,999 Awarded

Why it matters?

Post-Traumatic Stress Disorder (PTSD) is a debilitating condition that significantly impairs psychosocial functioning and socio-economic status (SES) of sufferers, including military veterans.

PTSD often leads to unemployment, underemployment, and homelessness, creating a substantial burden on individuals and society. Building on recent promising findings, this study will investigate the use of ketamine as a memory reconsolidation blocker to reduce trauma memories in individuals with treatment-resistant PTSD.

Impact

This study could pave the way for a novel, more effective treatment approach for PTSD. The project investigates ketamine as an adjunct to psychotherapy for PTSD, aiming to enhance treatment efficacy. By offering an effective treatment option, this project aims to restore hope and provide a path to recovery for veterans who have long struggled with PTSD and not responded to conventional therapies.

WREN MODEL

Towards Better Mental Health Care for Women: The WREN Model

Professor Mal Hopwood

2024 Translational Challenge Grant | $400,000 Awarded

Why it matters?

Women are uniquely affected by a number of challenges related to gender norms and stereotypes and gender-based discrimination, including high rates of emotional, sexual and physical abuse, poverty and single parenthood. These factors intersect with other social and economic inequities that influence individuals' experience and access to mental healthcare. While women with mental illness seek mental health services, their specific needs and experiences have often been overlooked in treatment and research.

WREN (Women's Recovery Network) was established in 2023 as an innovative response to the Royal Commission into Victoria's Mental Health System (RCVMHS) recommendation on public-private partnerships and the need for units designed to facilitate sexual safety and gender-sensitive care.

Impact

This project aims to conduct quantitative and qualitative research into the new model of mental health care. Outcomes and service improvements identified during this research can be immediately implemented into patient care within the WREN services. This research will also support ongoing development of WREN to further expand the model of care to additional facilities and assist other services implementing inpatient services for women.

KETAMINE VS KAP

Pilot RCT of Comparative Effectiveness of Ketamine vs Ketamine-Assisted Psychotherapy in Treatment Resistant Depression with/without Adverse Childhood Experiences

Professor Colleen Loo | 2024 Translational Challenge Grant | $400,000 Awarded

Why it matters?

Depression that has not responded to standard treatments (psychotherapy, medications) is a major health problem that affects approximately half a million Australians a year. Ketamine has emerged recently as a highly effective treatment for such “treatment resistant” depression (TRD). Adverse childhood experiences (ACE) such as abuse and neglect place people both at higher risk of depression in adult life, and higher likelihood that the depression will be “treatment resistant”. Early reports suggest that ketamine is a particularly effective treatment for those with TRD and ACE.

Impact

This study will be the first to evaluate standard ketamine treatment (KET) vs ketamine-assisted therapy (KAP), examining the effects of each approach in those with and without ACEs. Currently KAP is practiced with no supportive RCT evidence, and this study will inform a phase 3 RCT, which will contribute to much needed practice guidelines around this treatment. It will also produce data on cost effectiveness and consumer experience of KET and KAP instructing best practice.

“

Too many people with PTSD remain trapped by memories that resist even our best treatments. My study seeks to open a new pathway for healing by disrupting these traumatic memories at their core, offering hope not just for symptom relief, but for genuinely transformative recovery.”

- **Dr Wọlé Akósílè, PI on Ketamine in PTSD study.**

TRENA Trial

TRENA Trial – one of the largest studies of its kind in anorexia nervosa

Project Overview

Anorexia nervosa is a debilitating psychiatric disorder, often emerging in adolescence or early adulthood. Despite intensive inpatient care, many individuals experience relapse or require ongoing support after discharge. The condition significantly impacts daily functioning, relationships, education, and employment leading to long-term disadvantage.

The TRENA Trial (Trial for Enhanced Neuromodulation in Anorexia) is a pioneering study conducted at Ramsay's Northside Clinic in St Leonards. It investigates whether adding noninvasive brain stimulation to standard inpatient care can reduce core symptoms and improve long-term outcomes.

The trial compares two approved modalities:

- Transcranial Direct Current Stimulation (tDCS) – low electrical currents applied via a wearable headset
- Transcranial Magnetic Stimulation (TMS) – focused magnetic fields targeting specific brain regions

Participants receive standard psychological care alongside one of the stimulation treatments during their hospital stay. Those using tDCS are trained to self-administer the therapy, which continues up to eight weeks. TMS is delivered in-clinic over a similar timeframe.

Innovation & Accessibility

A key feature of the TRENA Trial is its optional 12-week at-home brain stimulation extension. This offers continued therapeutic support post-discharge, particularly benefiting:

- Patients in remote or rural areas
- Individuals with limited access to follow-up care
- Those at higher risk of readmission

This model enhances continuity of care and empowers patients to manage their recovery beyond the hospital setting.

Anticipated Impact

The TRENA Trial is one of the largest studies of its kind in anorexia nervosa. It aims to:

- Identify which brain stimulation method is most effective for core symptoms like disordered thinking, low mood, and anxiety.
- Inform future regulatory approvals and clinical guidelines.
- Reduce relapse rates and improve long-term functioning.

This trial represents a bold step toward transforming how anorexia and related cognitive symptoms are treated, offering hope for more effective, accessible, and enduring care.

'Knowing that I could be part of a cure or way forward for what is an awful disorder makes my heart sing. Whether I had been given the placebo or not didn't factor into my decision as I see it that I had absolutely nothing to lose, only something to gain.'

– Anonymous patient participating in the TRENA Trial.

Link to the Project's Rapid Research Video

'So as a clinician, I often see and hear about the negative impacts that mental health disorders and other brain conditions have on people's thinking....I know that for most people, there's no treatment or assistance - and they just have to have to live with it. This is what's motivated me to help to develop new interventions and treatments'

– Dr Donel Martin, PI on the TRENA Trial

Recent Orthopaedic Research

WELLNESS PROGRAM

Musculoskeletal Wellness Program: A Virtual pre-operative program to support older adults through joint replacement surgery

Professor Adam Semciw

2024 Translational Challenge Grant | $398,498 Awarded

Why it matters?

Many older Australians requiring joint replacement surgery, particularly those in regional communities face significant barriers to accessing pre-operative education and care, which can negatively impact their surgical outcomes and recovery.

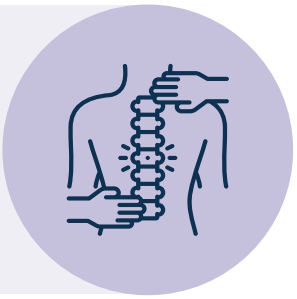
The project aims to develop and test a digital program that helps older adults prepare for joint replacement surgery from home.

Impact

The development of a digital pre-operative program will transform patient care by:

- Improving access to care directly from home
- Enhancing patient independence by allowing them to actively manage their own preoperative care journey
- Providing more equitable care delivery by minimising financial impact, workplace disruption and socioeconomic barriers to accessing pre-operative care
- Enabling data-driven personalised care allowing for timely adjustments to treatment programs and early identification of potential issues.

ADAPT-ED



ADAPT-ED: adaptive trial of emergency department interventions for back pain

Dr Tarcisio Folly de Campos

2024 Translational Challenge Grant | $399,670 Awarded

Why it matters?

Back pain is a major health issue and the fifth most common presentation to Australian Emergency Departments (EDs). Affecting approximately 4 million Australians annually, back pain incurs direct healthcare costs of about $2.8 billion. This highlights the urgent need for effective pain management strategies to improve patient outcomes, reduce unnecessary hospitalisations, and minimise use of opioids, which carry risks of misuse and dependence. The problem is that potentially harmful opioids like oxycodone remain widely used and we lack relevant trial data to guide emergency clinicians' choice of pain medicines.

Impact

The project aims to evaluate the comparative effectiveness of five analgesic medications for back pain in EDs. This will provide patients with

- Improved pain management
- Enhanced satisfaction with care provided
- Improved health literacy
- Reduced Emergency Department length of stay.

TKA PATIENT AID

Improving the delivery of equitable and evidence-based care for patients considering total knee arthroplasty by implementing a patient decision aid

Dr Verinder Sidhu

2024 Translational Challenge Grant | $398,424 Awarded

Why it matters?

Total knee arthroplasty is the most common joint replacement surgery performed for osteoarthritis. Despite most patients experiencing improvements in pain and function following total knee arthroplasty, 1 in 5 patients are not satisfied with their outcome.

Shared decision making is a collaborative process through which clinicians help their patients make evidence-informed decisions which align with each patient's goals.

Impact

The project will design and evaluate implementation strategies for a decision aid developed in a previous trial, which supports shared decision-making between clinicians and adults considering total knee arthroplasty. The aid will improve health equity by minimising disparities caused by differences in health literacy. The decision aid will enhance patient knowledge and support person-centered dialogue that prioritises individual patient expectations and needs.

HAND SURGERY LITERACY

Improving Health Literacy and Reducing Health Disparities for Hand Surgery Patients

Dr Brett McClelland

2024 Translational Challenge Grant | $377,140 Awarded

Why it matters?

Nearly half of all patients seeking hand surgery have low health literacy, which is a barrier to effective communication and engagement in care. This contributes to poorer health outcomes and greater healthcare utilisation and costs.

With the advancement in diagnostic and surgical techniques, health information and systems are becoming increasingly complex. Low health literacy creates a cycle of disadvantage compounding existing barriers to optimal health outcomes for hand surgery patients.

Effective solutions to improve health literacy in hand surgery patients are an urgent and unmet need in Australia.

Impact

Through partnership with all key stakeholders and employing a co-design approach, this project will create a health literacy program that is easily accessible, readable, easy to understand and usable for a diverse patient population in both private and public health settings.

The health literacy program will improve individual health literacy as well as organisational health literacy, improving communication, empowering patients to actively engage in decision making and care processes. This will reduce the impact of social disadvantage, leading to better health outcomes and experiences of care while reducing unnecessary healthcare utilisation.

Orthopaedics

Adapting an Effective Cost-saving Mobility Program for Both Private and Public Hospitals

Project Overview

Professor Peter Youssef leads the implementation of the SureStep Mobility Program, a group-based standing exercise circuit designed to improve inpatient mobility and balance. Initial studies demonstrated significant benefits:

- Improved balance and postural control
- Reduced hospital readmissions
- Shortened length of stay
- Lower overall healthcare costs

Expansion & Implementation

The study was awarded an RHRF Translational Challenge Grant in 2023, and the programme is now being trialed at two new hospital sites:

- St George Private Hospital
- Prince of Wales Hospital

Inclusive Design

Rather than limiting participation, the programme is designed for a broad patient demographic:

- Wide age range
- Diverse cultural backgrounds
- Varied clinical conditions and hospital stays

This inclusive approach enhances the programme's scalability across different clinical settings.

Public–Private Collaboration

A key strength of this research is its dual-site implementation across both public and private hospitals. This collaboration allows the team to:

- Identify system-specific challenges and opportunities
- Develop tailored adaptation frameworks for each sector
- Ensure the program is scalable and sustainable across Australia's diverse healthcare landscape

By understanding the operational differences between public and private settings, the research aims to create a roadmap that supports widespread adoption regardless of funding model or hospital infrastructure.

Expected Impact

The research aims to deliver:

- A validated, adaptable mobility programme
- Improved patient outcomes and hospital efficiency
- A practical roadmap for future clinicians and researchers to embed mobility programmes into routine care

Looking Ahead

By developing tailored adaptation frameworks for both public and private hospitals, the project aspires to roll out nationally – benefiting inpatients across Australia and reducing system-wide healthcare burdens.

The SureStep research team gratefully acknowledges the contributions of all the team members to facilitate the adaptation and implementation of the program.

Link to the Project's Rapid Research Video

'I was really fortunate that I got this opportunity to not only investigate the effectiveness of this mobility program, but we really have a chance to make sure that what we find from the research can be translated into practice to help people in the community.'

– Melody Leung,
PhD Student on the Improving Mobility Trial

Recent Cardiovascular Research

SAD-AF STUDY

Selective Serotonin Reuptake Inhibitors and Depression in Atrial Fibrillation

Professor Jonathan Kalman

2023 Translational Challenge Grant | $400,000 Awarded

Why it matters?

Atrial fibrillation (AF) is an irregular heart rhythm and is the most prevalent cardiac arrhythmia globally. It contributes to more than $800 million in healthcare costs each year in Australia, and an increasing number of hospitalisations. Depression is a risk factor for AF and is associated with an increased incidence of new AF and recurrence of AF even after treatment methods of returning to normal (sinus) rhythm such as electrical cardioversion and catheter ablation. There is an urgent need for innovative therapeutic approaches to improve outcomes for patients with AF.

Impact

The SAD-AF Study is a world-first trial looking at whether medication used to manage depressive symptoms can improve AF in patients. The project will allow for a reduction in AF symptoms, time spent in AF, hospital presentations and pill burden. It will also allow for the potential development of integrated AF clinics across both the public and private sectors by cardiologists working together with mental health professionals.

MAMBO

Maternal metabolic health And Mother and Baby health Outcomes

Dr Sarah Price

2023 Translational Challenge Grant | $337,000 Awarded

Why it matters?

Young women living with metabolic disease - obesity, diabetes and hypertension - are at significant risk of having offspring with life-altering disease and disability. In early pregnancy, metabolic disease is associated with major congenital malformations such as congenital heart disease and spina bifida. In later pregnancy, metabolic disease increases the risk of preeclampsia and abnormal fetal growth. Offspring of mothers with metabolic disease are also twice as likely to develop obesity, diabetes, and hypertension in childhood. The cycle of poor maternal metabolic disease and poor pregnancy outcomes is preventable.

Impact

This project aims to ensure that all Australian women have adequate access to preconception care that protects the health and well-being of mothers and their offspring. The project will use data from a large observational cohort of women to develop a risk calculator that can be used to triage women with metabolic disease and link them with appropriate preconception care services.

TARP

Triggered Acute Risk Prevention: A Novel Model of Care to Improve Cardiovascular and Mental Health Outcomes

Professor Geoffrey Tofler

2023 Translational Challenge Grant | $400,000 Awarded

Why it matters?

Cardiovascular disease (CVD) remains Australia's biggest killer. Increasing evidence supports a bidirectional association between CVD and emotional stress, whereby emotional stress can trigger heart attack and stroke, while CVD in turn can result in mental stress.

The relative risk of heart attack increases up to 8-9 fold with acute anger and anxiety however the 2-hour hazard period implies that any preventive therapy has to be immediately available. Until now, there has not been a coherent approach to use this knowledge for prevention.

Impact

The proposed TARP model of care provides a "pill in the pocket" solution. The model of care empowers individuals to recognise acute emotional stress and respond appropriately, with medication (propranolol and aspirin) carried to be immediately available. A reduction in the psychological impact of acute stress and anger will also lead to improved quality of life and a potential reduction in post-traumatic stress.

"TARP is a novel approach to prevent heart attack and stroke which empowers people to manage their risk. It builds on evidence that heart attack and stroke can sometimes be triggered by stresses such as acute emotional stress, heavy exertion, pollution, respiratory infection and heavy meals."

Professor Geoffrey Tofler, PI on the TARP Study

Cardiovascular

Empowering heart failure patients to take control

Backed by a highly qualified, multidisciplinary team, this project brings together expertise and a shared commitment on improving communication to enhance patients' health literacy, empowerment and self-management of heart failure.

Project Overview

Heart failure (HF) affects around 476,000 Australians with vulnerable groups like those facing economic disadvantage and lower health literacy experiencing higher rates of hospitalisations and lower rates of evidence-based treatment. The focus of the project is on the critical importance of effective communication, health literacy and self-management to counteract the escalating personal, economic and social costs of heart failure that is not managed adequately.

Quantitative Phase

Researchers measured patients' health literacy, knowledge, and motivation, tracking how these change over time. They surveyed 160 patients at baseline and repeated at 3-6 months, across two hospital sites, one at Hollywood Private Hospital in WA and the other at Canberra Hospital in ACT.

Qualitative Phase

The qualitative research involved ethnographic observation, 67 in-depth context interviews with clinicians and managers across two sites, and audio recordings of actual interactions between clinicians and patients. The team followed 41 patients journeys through the two hospitals, recording as many interactions with each patient as possible including on team ward rounds, medical interactions with patients at the bedside, and nurse interactions with several involving patients with their family. This resulted in 562 authentic interactions being recorded, resulting in 868,000 words of clinician/patient interactions across the two sites. This is, to the teams knowledge, the largest database in the world of actually occurring spoken interactions.

Intervention & Impact

Through the research, the team has explored:

- Barriers to effective communication
- Real examples of how communication can hinder or enhance literacy
- System-level challenges that hinder patient self-management
- Opportunities for system improvements

The research has led to the development of a care bundle for heart failure; **CONNECT-HF: A complex inpatient intervention to support heart failure self-management through better communication and care coordination.**

These tools aim to:

- Improve shared decision-making
- Empower patients to manage their condition
- Support clinicians with frameworks that enhance communication

Following an implementation effectiveness trial of the resources they will be embedded into the hospital system creating scalable improvements that can be rolled out nationally and internationally.

Public–Private Collaboration

By working across both public and private hospital systems, the team gains a comprehensive view of the structural and operational differences that influence patient care. This dual-site approach enables:

- Identification of system-specific communication gaps
- Development of tailored interventions for each sector
- Broader applicability of findings across Australia's healthcare landscape

'Empowering patients with chronic heart failure to become effective self-managers of their condition is now recognised as economically, socially and politically essential and is consistent with policy directives that promote 'patient-centred care.'

– Professor Diana Slade,
Study Principal Investigator

Clinical Insight

Prof Abhayaratna reflects on the disconnect between scientific knowledge and bedside care:

"We needed something that qualitatively assessed how we communicate complex conditions like heart failure. We were doing this very badly."

One patient said to the research team:

"this nice doctor today he was using medical jargon which was a bit hard to follow at times [...] you get to listen and then, at the end of it, they'll ask you if you've got any questions. But the problem is, the question you've thought about right at the start is too late. You've forgotten it yourself."

This research offers a pathway to do better by transforming communication into a clinical tool that improves outcomes.

Looking Ahead

The project lays the foundation for future system-level reforms in chronic disease management. By addressing both individual behaviours and institutional structures, the team hopes to influence policy, reshape clinical practice, and ultimately reduce hospital admissions related to heart failure.

Link to the Project's Rapid Research Video

Addressing the Social Determinants of Health

Social determinants of health are the *"unfair and avoidable differences in health status seen within and between countries"* and include *"the conditions in which people are born, grow, live, work and age, and people's access to power, money and resources"* (World Health Organisation).

Supported by the Paul Ramsay Foundation, RHRF is committed to breaking the cycle of disadvantage through addressing key social determinants of health in every study we fund.

IMPROVING NAVIGATION

Improving community and health care navigation for culturally and linguistically diverse refugee and migrant women in South-Western Sydney experiencing mental health concerns

Professor Brendan McCormack and Professor Pandora Patterson

2024 Social Determinants of Health Innovation Grant | $798,275 Awarded

Why it matters?

The partnership between Community First Step and Sydney Policy Lab have a shared commitment to establish community-embedded, co-design projects to better the lives of people affected by structural disadvantage and social determinants of health in the culturally diverse community of South-Western Sydney.

Impact

The project aims to co-design a solution to improve experiences and outcomes for culturally and linguistically diverse (CALD) refugee and migrant women experiencing mental health concerns, navigating community and health systems. The development of sustainable structures, spaces and relationships hopes to allow for collaborative across work areas, rather than in silos.

CONNECTED MINDS

Connected Minds: Co-Designing Accessible Digital Mental Health Services for Children in Rural Communities

Ms Kathleen Davey and Mr David Salles

2024 Social Determinants of Health Innovation Grant | $760,850 Awarded

Why it matters?

Mental health challenges are rising among children, especially neurodivergent ones who face systemic barriers in education and healthcare. Without proper support, they risk poor mental health, disengagement from school, and long-term issues like unemployment and suicide.

Children in rural areas face even greater obstacles due to limited access to services. While digital tools offer potential solutions, many families struggle with digital literacy, low education levels, and mobile-only internet, making support harder to reach.

Impact

By working closely with children, parents, educators, and clinicians, the study will co-design solutions that make digital services easier to use. This approach allows for identification of barriers and creation of solutions that improve digital inclusion and accessibility in rural communities. Through testing and refining innovations, the project will ensure more neurodivergent children have the opportunity to benefit from these life-changing services, no matter where they live.

PREVENT FALLS

Engaging communities to prevent falls: a collaborative pre- and post-hospital support initiative

Professor Kim Delbaere, Professor Catherine Sherrington and Mr David Barnes

2024 Social Determinants of Health Innovation Grant | $800,000 Awarded

Why it matters?

Falls during and after hospitalisation are a leading cause of long-term disability and hospital readmissions in older adults. This project will co-design a sustainable, community-driven intervention to address the social determinants of health contributing to falls risk, including health literacy, access to community support, social isolation, healthcare disparities in regional areas and medication management.

Impact

A key impact of this project is its ability to strengthen care coordination between healthcare providers, and community organisations. By combining hospital-based education with community-led support and digital health, patients will receive tailored, holistic care at every stage of their recovery. This model enhances long-term outcomes by ensuring continuous access to necessary resources and interventions.

“This project brings lived experience to the foreront, empowering culturally diverse women from under-resourced communities to shape the solutions that support their mental wellbeing and access to care.”

Professor Pandora Patterson (Co-Principal Investigator on the ‘improving navigation’ study).

SDH

Beating severe ear disease in rural and remote Aboriginal and Torres Strait Islander children, through AI, innovation, and collaboration.

Aboriginal and Torres Strait Islander children living in rural and remote areas have the highest rates of ear disease in the world. The World Health Organisation has declared this an Australian “Public Health Crisis” requiring urgent and innovative solutions.

Project Overview

The research team have spent five years developing an Artificial Intelligence (AI) tool for Indigenous children known as “DrumBeat.ai”, supported by Microsoft’s AI for Good Lab. Using deep learning methods and over 10,000 otoscopic ear images of 4,000 children across 100 rural and remote communities in Queensland and the Northern Territory, DrumBeat.ai is able to diagnose ear disease with the same accuracy as an ENT Specialist.

This will enable local healthcare workers in remote communities to:

- Identify ear disease instantly and accurately using a video otoscope (ear camera)
- Triage patients for timely treatment and referral
- Predict and reduce the risk of complications

Community Engagement & Capacity Building

The success of this initiative is rooted in deep collaboration with Aboriginal and Torres Strait Islander communities. Elders and remote health workers played a central role in shaping the tool’s design and consent protocols, ensuring cultural safety, trust, and local ownership.

To build lasting capacity, the team is conducting hands-on training workshops for 40 remote-area practitioners. These sessions will equip local health workers with the skills to use the AI tool confidently and independently, fostering sustainable healthcare improvements beyond the life of the project.

By providing an instant suggested diagnosis at the initial point-of-patient-contact, the DrumBeat.ai project has the potential to reduce morbidity and complications caused by delayed treatment and missed diagnosis.

Real world Impact

The team are now pursuing in-field trials at four research sites comprised of rural and remote, as well as regional and urban settings, to evaluate the algorithm’s performance in the real-world.

By decentralising diagnostic capability and embedding AI into existing screening programs, DrumBeat.ai:

- Reduces delays in diagnosis and treatment
- Improves access to specialist care
- Minimises long-term health and social consequences
- Builds capacity within Indigenous communities

This approach directly addresses systemic health inequities by ensuring that children in underserved regions receive timely, high-quality care regardless of geography or specialist availability.

'DrumBeat.ai brings revolutionary AI technology to the Outback, giving every child the chance to hear, learn and thrive'

– Project team insight

Link to a video of Dr. Al-Rahim Habib speaking about the project

Recent Publications

2025 Publications from RHRF Funded Research

Funded Study: NfL

Eratne D, Kang MJY, Lewis C, Dang C, Malpas CB, Keem M, Grewal J, Marinov V, Coe A, Kaylor-Hughes C, Borchard T, Keng-Hong C, Waxmann A, Saglam B, Kalincik T, Kanaan R, Kelso W, Evans A, Farrand S, Loi S, Walterfang M, Stehmann C, Li QX, Collins S, Masters CL, Santillo AF, Zetterberg H, Blennow K, Berkovic SF, Velakoulis D; MiND Study Group. Plasma and CSF neurofilament light chain distinguish neurodegenerative from primary psychiatric conditions in a clinical setting. Alzheimers Dement. 2024 Nov;20(11):7989-8001. https://doi: 10.1002/alz.14278.

Preprint: Eratne, D., Kang, M., Lewis, C., Dang, C., Malpas, C., Ooi, S., Brodtmann, A., Darby, D., Zetterberg, H., Blennow, K., Berk, M., Dean, O., Bousman, C., Thomas, N., Everall, I., Pantelis, C., Wannan, C., Cicognola, C., Hansson, O., Janelidze, S., Santillo, A., Velakoulis, D., The MiND Study Group. Plasma glial fibrillary acidic protein and neurofilament light chain in behavioural variant frontotemporal dementia and primary psychiatric disorders. medRxiv 2024.08.08.24311409. https://doi.org/10.1101/2024.08.08.24311409

Funded Study: M-HELP

Lee, L., Gerber, K., Kammers, M.P.M. Providing emotional care for early pregnancy loss: Development and evaluation of a new training module for healthcare providers. Midwifery. 2025 (140) https://doi.org/10.1016/j.midw.2024.104233.

Funded Study: CARE Network

Bayes, A., Cao, T.V., Barreiros, A.R., Massaneda-Tuneu, C., Dong, V., Thornton, N., Glozier, N., Beesley, L., Moreno, D., Gálvez-Ortiz, V., Short, B., Martin, D., Loo, C. Safety outcomes of ketamine for treatment-resistant depression in clinical settings and development of the ketamine side effect tool-revised (KSET-R). Psychiatry Research. 2025. https://doi.org/10.1016/j.psychres.2024.116334.

Funded Study: Obstetric Care

Price, S.A.L., Nankervis, A. Considering the use of GLP-1 receptor agonists in women with obesity prior to pregnancy: a narrative review. Arch Gynecol Obstet 311, 1241–1247 (2025). https://doi.org/10.1007/s00404-024-07849-9

Price SA, Lewin A, Nankervis A, Barmanray R. Using continuous glucose monitoring (CGM) to understand glucose control in women with obesity during pregnancy. Clin Obes. 2025 Apr;15(2):e12717. https://doi: 10.1111/cob.12717.

Funded Study: RASKAL

MacDessi, S. J., Wernecke, G. C., Bastiras, D., Ghadirinejad, K., Harries, D., Cashman, K., Heath, E., Lorimer, M., Holder, C., & Harris, I. A. (2025). Statistical analysis plan for the Robotic-Assisted Surgery and Kinematic ALignment in total knee arthroplasty (RASKAL) registry-nested randomized trial. Bone & Joint Open, 6(3), 352-360. https://doi.org/10.1302/2633-1462.63.BJO-2024-0206

Funded Study: SuPeR Knee

Ribbons K, Payne K, Ditton E, Johnson S, Wills A, Walker FR, et al. (2025) Determining patient activity goals and their fulfillment following total knee arthroplasty: Findings from the prospective, observational SuPeR Knee study. PLoS ONE 20(1): e0317205. https://doi.org/10.1371/journal.pone.0317205

Ribbons, K., Cochrane, J., Johnson, S. et al. Biopsychosocial based machine learning models predict patient improvement after total knee arthroplasty. Sci Rep 15, 4926 (2025). https://doi.org/10.1038/s41598-025-88560-w

Funded Study: MAMBO

Price SAL, Koye DN, Lewin A, Nankervis A, Kane SC. Maternal Metabolic Health and Mother and Baby Health Outcomes (MAMBO): Protocol of a Prospective Observational Study. JMIR Res Protoc 2025;14:e72542. http://doi.org.10.2196/72542

Funded Study: EPIK

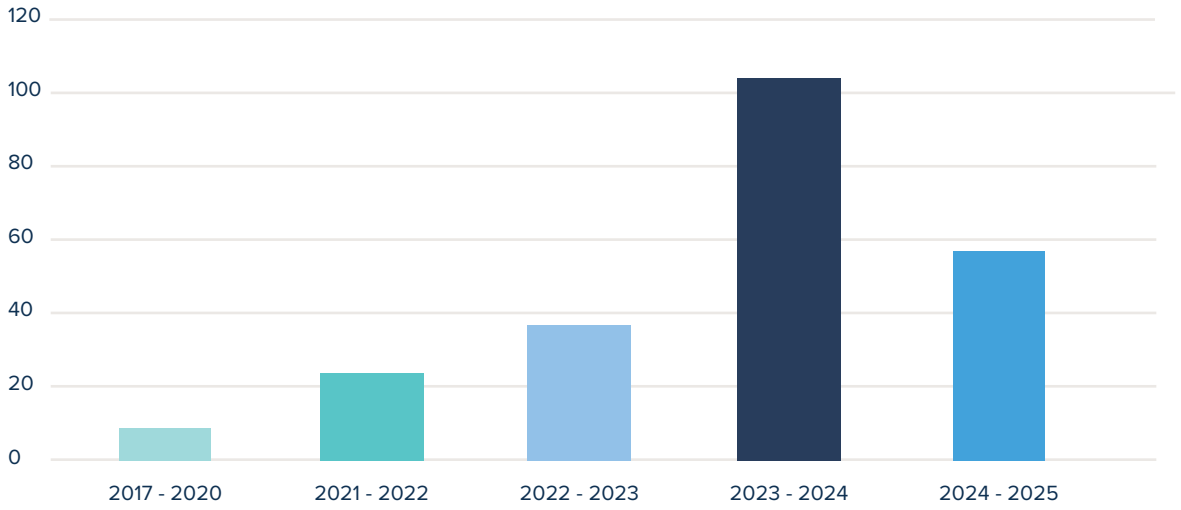
Chadha, N., Adie, S., Zadro, J., Harris, I., Ackerman, I., Dear, B., Maher, C., Buchbinder, R., Billot, L., Cameron, I., Smith, P., Lewis, P., Vertullo, C., McAuliffe, M., Jenkin, D., Ferreira, G. STAKEHOLDERS' PERCEPTIONS OF THE EARLY PAIN INTERVENTION AFTER KNEE REPLACEMENT MODEL OF CARE: A QUALITATIVE STUDY. Osteoarthritis and Cartilage. 2025. doi: 10.1016/j.joca.2025.02.727

Our Researchers

At the heart of RHRF are the highly skilled, and wonderfully ambitious network of researchers. These people drive innovation, and inspire change.

231 Principal Investigators & Sub Investigators have received RHRF grant funding from 2017 - 2025.

Total Investigators to Receive RHRF Grant Funding by Year



Left: Dr Sarah Price & Colleague Right: Jane Fisher and Team

Supporting our researchers

Rapid Research Video Series

Watch below some of our researchers unpack the background, insights and impact behind their latest studies.

Professor Diana Slade and Professor Christopher Etherton Beer, on their project **"Improving communication to enhance patients' health literacy, empowerment and self-management of heart failure".**

Melody Leung on her PhD project, **"Improving mobility and preventing falls in hospitals: adaptation and implementation of a cost saving program."**

Professor Jeanne Tie on her project **"Detect-PM".**

Professor Jane Fisher on her project **"Collaboration between a public and private early parenting center to improve social disadvantage through continuous quality improvement."**

Dr Donel Martin on his study **"TRENA Trial".**

Research Consultations

The launch of our research consultations in Biostatistics, RHRF Grant Writing, and Ramsay Ethics & Governance have been pivotal in supporting our researchers and streamlining processes to better enabling the conduct of high quality and timely research.

> *"Amazing assistance thank you. You explained complex concepts to me in a way I could understand and provided practical ways for me to solve my stats questions." - Annonymous researcher who used the biostatistics consultation service.*

Elevating the Consumer Perspective in Research

Health consumers, patients, those with lived experience, community members, and family and carers, are the reason we do what we do. Therefore, it is essential to listen, include, and be led by the voices of those who our work affects most.

We commit to include the consumer voice into:

- our research priorities and direction of funding;
- the development, design and implementation of our research;
- the communication of our research and dissemination of results.

Ramsay Research Consumer Engagement Pilot Launched

In May 2025, we officially launched our Consumer Engagement Pilot, bringing five selected sites on board to help shape the future of consumer involvement in research at RHRF and Ramsay Heath Care Clinical Trials Network.

This pilot isn't just a trial - it's a step towards making research more inclusive, transparent, and community-driven. From testing new recruitment strategies to co-designing resources with real consumers, the pilot will generate momentum towards broader implementation.

Laying the foundation for a National Consumer Database

The pilot will also inform the development of the Ramsay Research National Consumer Database. This initiative will enable consumers to participate in RHRF grant-funded projects and broader research activities, creating a sustainable pipeline for consumer-led research collaboration.

The Power of Partnerships in Research

Strategic partnerships bring together diverse expertise, resources, and networks.

First formal research partnership

A Memorandum of Understanding (MoU) has been signed with the Australian and New Zealand Urogenital and Prostate Cancer Trials Group.

This MoU marks the beginning of a dynamic and impactful partnership aimed at fostering, identifying, investigating, and acting upon opportunities to establish and deliver cutting-edge clinical trials in the field of genitourinary oncology.

The collaboration will strive to accelerate the development of innovative treatments and significantly improve patient outcomes for those affected by prostate, bladder, kidney, testicular, and other below-the-belt cancers.

Beyond clinical trials, the partnership will provide a wealth of opportunities, including grant funding, pioneering research initiatives, and the generation of new ideas to not only enhance the understanding of genitourinary cancers but also lead to the development of more effective treatments.

RHRF accepted as MRFF Eligible Organisation

This means that RHRF can support our Ramsay VMO's through the application process for MRFF funding, and can manage and administer the funds for research in accordance with MRFF standards.

This collaboration offers a streamlined process for Ramsay VMO's to apply for funding and conduct research.

From left to right: Dr Samantha Oakes, Ms Nicola Ware, Dr Yordanka Krastev

Successful 2024 Collaborative Research Requests

REHABILITATION EVALUATION

Preoperative Rehabilitation Evaluation and Spinal Surgical Treatment Intervention for Enhanced Recovery

Professor Manuela Ferreira

2024 Collaborative Research Request | $395,044 Awarded by RHRF with NHMRC Co-funding

Why it matters?

Low back pain affects one quarter of the Australian population and nearly 620 million people globally. More than 20,000 surgical procedures are performed for low back pain in Australia every year. This figure is set to increase with a growing and ageing population, further impacting an already overwhelmed health care system. Maximising surgical outcomes and decreasing hospital readmissions post-spine surgery is a key priority in NSW.

Impact

The study will evaluate the comparative effectiveness and cost-effectiveness of two innovative approaches: a digital multimodal intervention or a light touch, digital, self-directed education.

The virtually delivered interventions will enable:

- greater access for those unable to travel or in remote communities,
- improved continuity of inter-disciplinary care,
- the potential for reduced waiting times and resource efficiency.

CBM

Implementing Cognitive Bias Modification during detox to prevent alcohol relapse

Professor Victoria Manning

2024 Collaborative Research Request | $389,687 Awarded by RHRF with NHMRC Co-funding

Why it matters?

Alcohol Use Disorder (AUD) affects one in five Australians during their lifetime. AUD is the most common mental health disorder after anxiety and affective disorders. Many patients with alcohol dependence require a period of medically assisted withdrawal treatment to safely cease use. Withdrawal treatment is intensive and costly, with long wait-lists. Unfortunately, research indicates that ~85% of withdrawal treatment patients relapse within a year after leaving treatment.

Impact

Clinical trials show that Cognitive Bias Modification (CBM)—a safe, simple computer-based brain-training—can reduce high relapse rates during inpatient alcohol withdrawal treatment by reshaping patients' automatic responses to alcohol cues. Previously used only in research settings, this project will test whether CBM can be integrated into routine care across treatment services. The project will improve patient outcomes, reduce readmissions, and enhance service efficiency, while offering participants an effective, accessible tool to support abstinence alongside existing treatments.

Our Governance

Scientific Review Panel

The Scientific Review Panel assist and advise the RHRF Board of Directors on matters relating to the assessment and allocation of funds to clinical research.

The 2024-25 Panel consisted of:

- Professor Helen Christensen, Director
- Dr Robert Herkes, Director
- Professor Sally Redman, Director
- Ms Nicola Ware, CEO & Company Secretary

In addition to the Scientific Review panel, this year RHRF introduced external reviewers into the evaluation of grant applications - an exciting step that enhances transparency, and broadens the lens through which proposals are assessed. Their involvement strengthened the review process by offering insightful perspectives, and the reviewers expressed strong appreciation for the rigour and transparency of the entire process.

Audit and Risk Committee

The role of the RHRF Audit and Risk Committee is to assist the Board to discharge its responsibilities by reviewing and then making recommendations in relation to financial oversight & management of risk within RHRF. The committee does not replace or replicate established management responsibilities and delegations within the Foundation, or the reporting lines and responsibilities of audit functions.

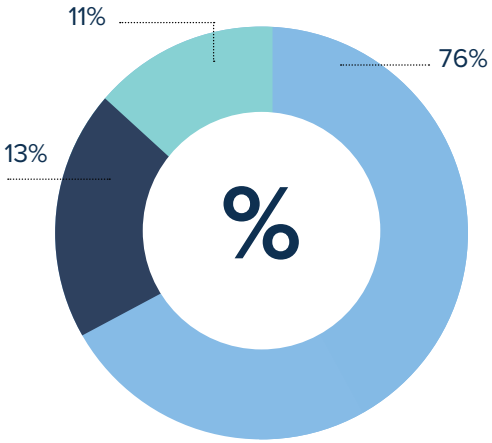
Members:

- Ms Jennifer Samson (Chair)
- Dr Robert Herkes, Director
- Ms Nicola Ware, CEO & Company Secretary

Our Finances

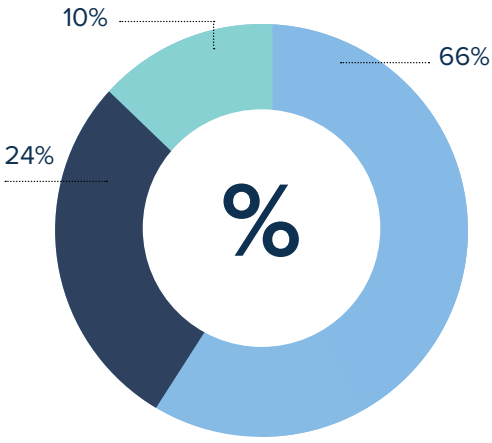
REVENUE

Total Revenue	$6.6M	
Revenue from Donations and Bequests	$5.0M	76%
Revenue from Goods or Services	$0.9M	13%
Revenue from Investments	$0.7M	11%



EXPENSES

Expenses	$5.6M	
Grants and donations made	$3.7M	66%
Employee expenses	$1.3M	24%
All other expenses	$0.6M	10%



Our Future

As we look ahead, our vision remains: to make a meaningful contribution to improving health outcomes and breaking the cycle of disadvantage by addressing social determinants of health.

We believe that knowledge alone is not enough - and aim to ensure that this research doesn't end in journals, but begins in communities.

From Research to Real-World Change

We are investing in mechanisms that accelerate the translation of research into policy, practice, and measurable outcomes. This means:

- Supporting implementation science to ensure research findings are adopted and adapted in real-world settings.
- Building pathways for community engagement and co-design, so that solutions are shaped by those they aim to serve.
- Prioritising equity-driven outcomes that dismantle systemic barriers to health.

Strategic Partnerships for Scaled Impact

We know that no single organisation can solve complex health challenges alone. That's why we are committed to continuing our investment in meaningful partnerships with universities, collaborative groups, government medical research institutes and industry to amplify our collective reach.

Building Capability, Capacity and Research Enablers

To shape a future where health equity is achievable, we must strengthen the ecosystem that supports research excellence. We are committed to:

- Developing the next generation of researchers through targeted fellowships investment in our people.
- Supporting researchers at every stage of their journey—from ideation to implementation—with expert advice and practical tools.
- Streamlining internal processes and systems to make engagement with RHRF efficient, transparent, and researcher-friendly.
- Supporting interdisciplinary collaboration that brings together public health, economics, sociology, and beyond.

Acknowledgements

Paul Ramsay Foundation

We extend a heartfelt thank you to The Paul Ramsay Foundation for their generous sponsorship and ongoing commitment to the advancement of health and medical research.

Farewell Carmel

On July 1 2025, Carmel Monaghan stepped down from the RHRF board, and from her position as CEO of Ramsay Health Care Australia.

Carmel was both the inaugural company secretary and inaugural board member of RHRF along with John Horvath and Chris Rex. In this role, she brought a wealth of knowledge, and expert guidance. Her commitment to research and innovation was fundamental to the establishment and ongoing development of both RHRF and the Ramsay Clinical Trials Network.

Carmels' legacy is one of resilience, innovation and deep respect for the people and communities Ramsay caters to.

Farewell Helen

Scientia Professor Helen Christensen (AO) stepped down from the RHRF Board in early 2025. Helen bought a vastly accomplished perspective shaped by decades of pioneering work in mental health research, digital innovation and public policy. Her leadership, insight and unwavering commitment to improving lives have left a mark on RHRF and it's mission. We are deeply grateful for Helen's contributions and the wisdom she shared so freely.

We wish to acknowledge and thank all the organisations and individuals we work with to deliver our research program.

Ramsay Hospital
Research Foundation