

# INNOVATION GRANTS



Facilitating over 8 years of staff-led research at Greenslopes Private Hospital

Our Journey





### THE GMRF INNOVATION GRANTS

The Gallipoli Medical Research Foundation (GMRF) is founded on an unwavering commitment to changing lives through innovative medical research. While much of our research will take years to go from bench top to bedside, we are also facilitating research projects with the aim of providing immediate and translational benefit to patients right now.

Established in 2012, the GMRF Innovation Grants Program, made possible by GMRF's generous donors and corporate Discovery Partners, has been contributing to practical advances in hospital operations and patient outcomes at Greenslopes Private Hospital (GPH).

This grants process harnesses the skill and experience of front line health staff into research aimed at providing an immediate and meaningful difference in areas such as staff training and education, patient comfort and recovery, and overall enhanced health for patients and staff.

Staff at GPH can apply for grants, with a value of up to \$15,000 each, to be used to conduct a short-term research project based on observations of ways to improve practices and procedures. While grant recipients generally have 12 months to conduct research and report findings, the flow on effects and benefits continue long after the project has been completed.

This booklet provides a snapshot of some of the grants conducted over the past eight years and the outcomes produced for patients and staff.



Since 2012, GMRF has funded 16 research projects to help enhance clinical outcomes at Greenslopes Private Hospital



### **2012: THE YEAR IT ALL BEGAN**

## Reducing the rate of infection for patients with catheters

Peripherally Inserted Central Catheters (PICCs) are used for long term intravenous therapies, poor venous access and chemotherapies. These lines can stay in for up to three months. Patients experiencing a PICC Line infection have prolonged hospitalisation and experience a variance in care receiving extra doses of antibiotics. This also removes the patient from home and work life adding extra stressors, further impacting on health improvement.

Desleigh Smith and Leanne Loizou from the GPH Quality and Safety Department applied for an Innovation Grant to reduce the incidence of infections in PICCS. They used a written form tracing the life of the PICC line from insertion through to care and removal, along with a reference guide. The project reduced the incidence of PICC infections to zero in the two wards trialled.

## Improving nutritional outcomes for orthopaedic patients

A high level of malnutrition was being reported amongst hip fracture

patients transferred to the GPH rehabilitation unit. Kathryn Anderson from Allied Health Manager Programs, led a project which focused on nutritional care to improve clinical outcomes for orthopaedic patients with hip related injuries. The project led to an apparent reduction in the severity of malnutrition in hip fracture patients transferred to the Rehabilitation Unit compared to the previous year.

## Implementing new guidelines for patient treatment procedures

Not for Resuscitation, in the setting of a hospital, can raise ambiguity of the appropriate treatment for a patient. Without clear guidelines, staff can become unsure of what is considered a life-prolonging treatment and what is palliative care. Carrie Toohey, Assistant Director of Nursing Services, led a project that reviewed procedures surrounding 'Not For Resuscitation' within the hospital.

The group implemented a new form which provided clarification of guidelines for family members, doctors and nursing stuff and ensured patients' wishes were followed. This form was trialled hospital-wide over a three month period with positive feedback from all staff. The updated form has now been implemented hospital wide, along with policy review.



### ADDING EVIDENCE TO OUTCOMES



Chronic pain is a debilitating illness that has dramatic impact on the quality of life of thousands of Australians. Chronic pain and post-traumatic stress disorder (PTSD) are the two most prevalent conditions among the ex-service population – with a large population of Veterans suffering with both.

A team at the GPH Keith Payne Unit conducted a GMRF Innovation Grant in 2015 to assess the psychological and functional outcomes of their chronic pain management program.

IMPACT (Independent Management of Pain through Activity and Cognitive Therapy) is an outpatient program offered at GPH to veterans and civilians which aims to alleviate the psychological effects of chronic pain and help sufferers manage their physical pain to better engage in everyday activities.

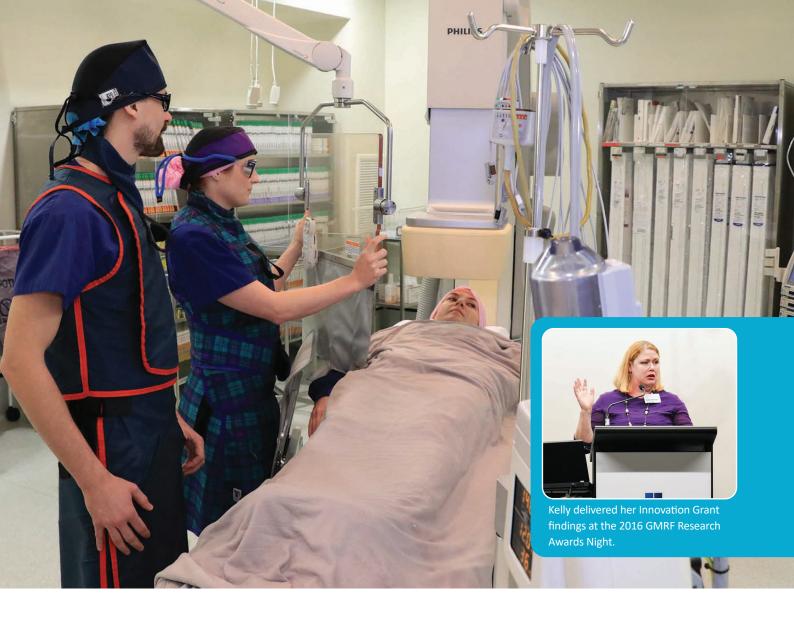
Jenny Pashley who has worked as an Occupational Therapist at GPH for 6 years says the program aimed to address the 'boom and bust' behaviours used by those who suffer both PTSD and chronic pain.

"When people have PTSD, they often keep busy to distract from the intrusive thoughts. But, by keeping busy, they're potentially pushing themselves into a pain flare-up and need to rest for a long period of time," Jenny says.

Grant Project Leader, Dr Karolina Alichniewicz, said her team always believed the program had been highly beneficial to participants, but the team needed hard scientific proof to prove their beliefs; "There wasn't much data in this space from Australia, so this grant was very important," Dr Alichniewicz says.

**OUTCOMES:** The research found both veteran and civilian participants reported significantly reduced levels of depression, anxiety and stress following completion of the IMPACT program.

"Our findings show that the IMPACT program is crucial to psychological and functional improvement of veterans suffering from chronic pain. Veterans reported even greater improvements than civilians following completion of the program, which emphasises the importance of a multidisciplinary approach to treatment of veterans with comorbid chronic pain," Dr Alichniewicz says.



### **ADDING EVIDENCE TO OUTCOMES**



## Examining the angiogram procedure to enhance outcomes

An angiogram is conducted to visualise a patient's coronary arteries using x-ray fluoroscopy. During

the procedure a scrub nurse and cardiologist stand side by side adjacent to the patient. To image the arteries, radiation is emitted from an x-ray tube positioned near the patient's chest.

Kelly Wilson-Stewart, A radiographer at GPH who has been involved in numerous angiograms, noted that whilst the doctors were protected by a movable lead shield, nurses didn't have a barrier between their upper bodies and the source of the x-rays. Kelly began monitoring the head dose to the cardiologist and nursing staff during cardiac angiographyand noted increased exposure levels for the nurses. Occupational dose to the head has been shown to increase the incidence in brain cancer, vascular aging and cataract formation.

To expand on her observations, Kelly conducted a GMRF Innovation Grant in 2015. Her research confirmed that nurses were significantly more exposed during cases accessed via the radial artery than those using the femoral artery approach, as suspected, based on the positioning of the lead shield.

**OUTCOMES:** Based on Kelly's findings, lead caps were purchased by the hospital to protect nurses' heads from absorbed radiation. There was also an adjustment of procedure, with the doctor more aware of the orientation of the lead shield and nursing staff more confident to request adjustments. Thanks to these changes, the head dosage to scrub nurses was almost halved.

Kelly has presented her Innovation Grant findings at numerous conferences and had the results published in the Journal of Advanced Nursing in 2019. She is now undertaking her Phd to extend the scope of this research.



### **ENHANCING BEST PRACTICE**

### Reducing recovery time for total knee replacement recipients

As is the case with many GMRF Innovation Grants projects, Senior Physiotherapist Pauline Teng's research began with an observation. In this case, the recovery process for patients who had received a total knee replacement. Immediately following the procedure, patients received two attachments; pain relief in the form of a patient controlled analgesia (PCA) and an indwelling catheter. Because of these attachments, two staff members were required to assist with patient mobilisation, transfer, and assistance with hygiene care.

"The attachments were impeding early mobilisation after surgery and making patients feel hesitant in their movements. They'd feel sicker with the attachments in and it impacted on how mobile they viewed themselves."

Pauline believes early mobilisation is crucial to good recovery. Participation in exercise classes immediately following a total knee replacement has been shown to improve patient's mental and physical wellbeing. The use of a PCA attachment impedes on a patient's ability to join these classes until three or four days after surgery.

"I wanted to see patients on fewer attachments. This would enable them to move with less restriction, participate in classes, and generally able to do more for themselves," Pauline says.

Pauline applied for a GMRF Innovation Grant so she could investigate whether the use of opioid analgesic patches compared to PCA will improve early mobilisation for patients and therefore lead to discharging from hospital sooner. By researching the impact



of attachments, Pauline aimed to shorten recovery time and improve overall patient wellbeing.

"This grant is so important to us because it can lead to improved outcomes for our patients. It reassures families that we've got the latest evidence and are doing everything we can for their loved ones," Pauline says.



### **INTO 2019 AND BEYOND**

Enhancing practical training for cardiac care staff

GPH Coronary Care Facilitator, Clare Foster, conducted a GMRF Innovation Grant project

in 2018 to produce and trial a protype temporary cardiac pacing simulator. The simulator represents a patients heart and enables nurses to practice theoretical concepts.

"There was a gap as to how we could train nurses practically. As we can't practice on patients, we needed to find another means to help the nurses upskill and retain their knowledge. All research indicates that hands-on learning is the best way to do that," Clare says.

Feedback has been very positive from the six coronary care staff who participated in the trial. As part of the project, participants will receive further assessment to ensure the skills and competencies are retained.



## New equipment to improve rehabilitation process

Occupational therapist Carissa Bernal-Carrillo received an Innovation Grant in 2018 to run a trial program, Rehacom, which assists therapists in rehabilitating patients in the areas of attention, concentration, memory, perception and unction of day-to-day tasks.

"Based on my Masters research, I found that cognition is an influential factor that impacts on patient's length of stay and outcomes," Carissa says.

"With a program like Rehacom we can potentially better identify the resources and therapy suited to a patient's recovery as an inpatient and the services and supports a patient requires for discharge. It also allows us to start doing practice much earlier on, hopefully leading to patients getting home sooner."

Carissa and her team are collating the final report in June 2021 to determine the impact on patient outcomes.



### **THANK YOU**



We are proud of the impact the Program has made and are sincerely grateful to the staff at GPH who gave of their time, expertise and resources to conduct these research projects.

It is a clear demonstration of what can be achieved through medical research when clinicians, scientists and the general community come together.

If you would like to find out more about the GMRF Innovation Grants Program, including the application process and sponsorship opportunities for 2020, contact the GMRF team on 07 3394 7284 or at enquiries.gmrf@ramsayhealth.com.au.



Greenslopes Private Hospital is proud to be Australia's leading private teaching hospital, owned and operated by Ramsay Health Care. The hospital has provided outstanding financial and in-kind support to GMRF and has been a proud supporter of the Innovation Grants since the program was launched in 2012.

## Thynne Macartney

Thynne Macartney Lawyers is a proudly independent law firm based in Queensland with strong boutique practices in Agribusiness, Maritime & Transport, Property and Insurance. They joined GMRF as a corporate Discovery Partner in 2016 and proudly support the Innovations Grants and other GMRF initiatives.



Get in touch to find out more

- **®** 07 3394 7284
- new enquires.gmrf@ramsayhealth.com.au



