

ANNUAL REPORT
2018_
2019

HIGH IMPACT RESEARCH
TRANSFORMING EMERGENCY
HEALTHCARE

VOLUME 2



About this Report

This annual report summarises the Emergency Medicine Foundation's operations, activities and financial performance and position as at 30 June 2019. It showcases the research funded through Emergency Medicine Foundation, including new and completed research grants.

In this report references to 'EMF', 'the organisation', 'we', 'us' and 'our' refer to the Emergency Medicine Foundation (ABN 17 128 057 170) unless otherwise stated.

References in this report to a 'year' are to the financial year ended 30 June 2019 unless otherwise stated. All dollar figures are expressed in Australian dollars (AUD). All icons used in this publication were made by Freepik from www.flaticon.com

The Emergency Medicine Foundation acknowledges and gives its respects to the traditional owners and Aboriginal and Torres Strait Islander elders past and present, on whose land we work to fund research aimed at improving emergency healthcare services and patient outcomes. While every effort has been made to respect cultural traditions, readers are advised that this report may contain images or content referring to deceased persons. It may also contain words or descriptions that are culturally sensitive. The term Indigenous is occasionally used in this document to refer to Australian Aboriginal and Torres Strait Islander people.



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Who we are?
Strategic direction

Highlights: 2018-19
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Chapter 1

Increasing our impact on emergency healthcare



At the Emergency Medicine Foundation (EMF), our imperative is to fund scientifically robust, patient-focused research with the potential to achieve rapid clinical improvements in value-based emergency healthcare.

Through partnerships with government, industry and emergency healthcare providers, we develop and administer research grant programs which provide an exceptional return on investment and meaningful improvements in patient outcomes.

By investing in the future today, through emergency care research and partnerships that generate new knowledge to enhance the patient experience and outcomes, EMF is helping save lives and enhancing system-wide sustainability in Australia.

Since 2007, EMF has invested \$17.9 million in innovative, clinician-led emergency healthcare research and capacity building programs. This funding has led to significant, evidence-based changes in clinical care in Australia's emergency departments, ambulance and retrieval services. For more information, see Volume I, pages 5 and 13.

The result has been improved patient-centric emergency healthcare, with more Australians now receiving the right treatment, at the right time, and in many cases closer to home.

EMF is similarly delivering economic benefits and a substantial return on investment. An evaluation by KPMG, which was released in 2019, estimated that just six EMF-funded projects are directly linked to more than \$44 million in annual savings for the Australian healthcare system (see Volume I, page 12).

By funding clinician-researchers, particularly in Queensland, EMF has also been at the forefront

of building an emergency care workforce, which is proactively engaged in developing evidence-based clinical and system improvements.

Strategic overview

Overarching all EMF's activities is the vision to fund research which revolutionises emergency healthcare. Every initiative is designed to nurture clinician-researchers to generate evidence-based solutions, which are efficient, affordable and sustainable, and make life better for patients. In doing so, EMF is creating tomorrow's healthcare system today.

In 2019-20, EMF will take the first steps in a five-year plan to **expand the organisation's Australian footprint and increase its impact** on the country's emergency healthcare sector.

Foremost, to help address critical issues in emergency healthcare across Australia, EMF will concentrate on developing and piloting **new research grant programs**. These unique programs will address critical 'crunch' points in the emergency healthcare system, such as mental health, older persons, rural and remote services and Aboriginal and Torres Strait Islander healthcare.

Importantly, through these programs EMF will help emergency healthcare providers improve the patient experience, reduce long wait times and overcome sub-optimal healthcare outcomes. The programs will lead to rapid, clinician-led, evidence-based solutions for enhancing the patient emergency healthcare experience, improving Australian's health, reducing the cost of emergency healthcare, and increasing workplace satisfaction for the healthcare professionals.

EMF remains fully committed to its highly successful Queensland Research Program. To ensure the Program remains effective and relevant, **EMF is undertaking a review of its governance and management processes** as well



Tackling mental ill-health in emergency departments



In 2018-19, EMF funded a major study to assess the impact of increasing numbers of mental health-related presentations on Queensland hospital emergency departments.

Cairns Hospital Emergency Medicine Director, Dr Richard Stone, is leading the two-year research project, which he designed in collaboration with Professor Alan Clough from James Cook University and with the support of Northern Queensland Primary Health Network.

Professor Clough said of the collaboration: “We know that when those key professionals work together across acute care and primary health, excellent results can be achieved for patients, with more people getting the timely and appropriate support they need with fewer people being hospitalised unnecessarily.”

as looking at opportunities to strategically incorporate the consumer voice.

In response to increasing demand for small to medium-sized grants, EMF will increase the number of these grants it can fund by discontinuing its larger Capacity Building and Program grants and Research Scholarships from 2019-20. Within the constraints of EMF's budget, EMF anticipates being able to increase the number of grants awarded each year.

To ensure EMF's grant programs realise whole-of-system, sector-wide advances, there will be a concerted effort to consolidate existing partnerships as well as form new **alliances with industry, non-profits and private healthcare providers**. By creating a strong partner matrix, EMF will be well-positioned to inform clinical change.

Input from **consumers** is vital to guaranteeing EMF's research grant and capacity building programs remain progressive, viable and relevant in the long-term. To achieve this, EMF is working towards integrating the consumer voice into its grant programs.

Clinician engagement and **capacity building** is critically important. To develop sustainable, long-term workforce capability within the emergency healthcare sector, EMF is embedding capacity building initiatives within all its new, world-leading research grant programs. These new programs combine the most successful elements from our various capacity building initiatives and will provide a mix of structured mentoring, training and networking opportunities.

EMF is also looking at opportunities to develop a new platform for offering emergency healthcare

clinicians with a range of research resources and research support.

Critically, EMF will continue to build its brand and profile through **expanded communications and marketing activities**, including taking on a greater advocacy role.

In addition to EMF's standard communications practices, there will be new foci on fostering brand and business development opportunities. EMF will also investigate new channels and opportunities to further engage consumers, industry, government and the general public, both to inform research funding programs and increase its profile. Achieving this is likely to require a review of the EMF website structure and content to ensure it is in alignment.

Chapter 2

Funding emergency healthcare research



Pictured above: EMF General Manager, Dr Sonj Hall, with 2018-19 grant recipients at the 2019 Grants Award Ceremony



Since 2008, EMF has awarded grants to innovative, clinician-led emergency healthcare research.

Through our Queensland Research Program and our Rural and Remote Program, we fund projects which provide world-class evidence to reduce critical pressures on the emergency healthcare system, improve the patient experience and community outcomes and decrease healthcare expenses.

By selecting quality projects with the potential to drive clinical change rapidly, we are enabling Australia to tackle current and future issues affecting emergency healthcare services.

Queensland Research Program

Our core grant program

The Queensland Research Program is EMF's flagship emergency healthcare research grant initiative.

Through this highly successful Program, EMF is nurturing and funding clinician-led research, which is producing new, evidence-based solutions for efficient, affordable and sustainable emergency healthcare.

Since its launch in 2008, EMF has awarded more than \$17.7 million in 170 research grants and additional capability building initiatives associated with the Queensland Research Program.

With annual funding from Queensland Health, the program has led to significant, evidence-based changes in clinical care in Queensland's emergency departments, ambulance service and retrieval services.

It has resulted in improvements to value-based, patient-centric emergency healthcare. In total, 27 EMF Queensland Research Program grants have led to clinical

improvements in patient care. A further 13 are in early translation and likely to change care over the coming months. Long term, the 66 research projects in progress are expected to lead to rapid, significant impact. In 2018-19 alone, six EMF-funded projects were adopted by emergency healthcare providers.

This core program exemplifies the exceptional return on investment for clinician-led research. It also demonstrates the benefits for patients which clinicians can realise when they are funded to lead research.

An EMF commissioned KPMG economic evaluation – outlined in Volume I, page 12 – together with independent evaluations, have shown that just eight of the clinically adopted projects in Queensland are associated with \$38 million in economic benefits for the State's healthcare system. Nationally, this figure is even higher.

Scientifically, the output from EMF-funded Queensland clinician-researchers has been significant. Since 2008-09, their research has been promoted via 977 articles in peer-reviewed journals, conference presentations and book or book chapters.

Queensland Research Program highlights

2008-09 to 2018-19



28 completed grants have led to changes in patient care in Queensland emergency departments. A further 13 likely to lead to change in short-term. Long-term, 77 grants are still ongoing with the potential for significant impact.



977 journal articles, conference presentations, books or book chapters



\$17.7m awarded in grants and capacity building



170 grants awarded

The EMF Queensland Research Program is playing a key role in ensuring Queenslanders receive the right emergency healthcare, at the right time, and in many cases closer to home. It is also a powerful example of what government can achieve by partnering with EMF.

EMF research grants leading to clinical improvements in 2018-19

EMF's Queensland Research Program scores grant applications more highly if they have the potential for realising rapid clinical improvements for emergency healthcare issues. This practice is seeing EMF impact patient care and outcomes in a much shorter timeframe than other research grant programs.

In 2018-19, at least six new improvements to emergency healthcare, resulting from EMF-funded research projects, were implemented clinically in Queensland and in some cases internationally.

1. New clinical guidelines for treating prolonged seizures in children

A publication in *The Lancet* led to emergency departments internationally changing the second-line medications used to treat prolonged seizures in children. EMF co-funded the large

Australasian study, ConSEPT, behind this clinical guideline change. More details are included in Volume I, page 17.

2. New treatment for common hand injury

This year, Gold Coast Health emergency departments replaced plaster casts with 'buddy taping' for one of the most common hand fractures, known as a boxer's fracture. The change in clinical practice followed the outcomes from a large clinical trial, in which taping was found to be as effective as plaster but resulted in patients returning to work sooner and requiring less medical attention. A case study on this project is included in Volume I, page 16.)

3. Opioid prescribing toolkit

In Brisbane, the Metro North Hospital and Health Service adopted the 'Opioid Prescribing Toolkit' across nine emergency departments to reduce the over prescribing of opioids by clinicians. The project was trialled at Royal Brisbane and Women's Hospital with an EMF grant. See also the case study in Volume I, page 14.

2018-19 outcome highlights



5 outcomes adopted clinically



50 publications in peer-reviewed journals



13 projects completed



9 research excellence awards won by EMF-funded clinician-researchers



Initiative to reduce unnecessary cannulation rolls out across Queensland

A new educational program developed and trialled with research funding from EMF is being rolled out to Queensland emergency departments.

The Cannulation Rates in Emergency Department Intervention Toolkit (CREDIT) reduces the insertion of unnecessary, "just in case" Peripheral Intravenous Catheters/Cannulas (PIVCs).

CREDIT centres on a simple message for clinicians: "Are you 80% sure that the cannula will be used in your hemodynamically stable patient within the next 24 hours?" or more commonly "Are you 80% sure?".

The program was selected for clinical translation following the Clinical Excellence Division's 'PROV-ED' pitchfest in May 2019. Once fully rolled out, the program is estimated to save \$2.5 million each year in reduced consumables costs.

4. Roll out of CREDIT program to reduce unnecessary cannulation in emergency departments

As detailed in the case study on the opposite page, the Queensland Health Clinical Excellence Queensland funded the state-wide roll out of the EMF-funded intervention program, CREDIT, which reduces unnecessary cannulations in emergency departments. There is the potential for \$2.5 million in annual savings for the State's healthcare system.

5. Ultrasound-guided cannulation training program for clinicians

Gold Coast Health has introduced an ultrasound guided cannulation training program for clinicians to help reduce multiple attempts at cannulating patients with hard to find veins. The training program was developed and trialled with an EMF grant. See also the case study in Volume I, page 16.

6. New clinical guidelines for diagnosing head injuries in children

In Europe, a further clinical guideline change was made following EMF co-funded research into clinical guidelines – APHIRST and APHIRST Gap – for head injuries in children. The Scandinavian Neurotrauma Committee published practical, evidence-based guidelines for children in the *BMC Medicine journal*, doi.org10.1186/s12916-018-1166-8.

Completed research grants in 2018-19

EMF measures the completion of each EMF-funded research project as a key milestone. Each of these projects providing new evidence-bases with the potential to lead to changes in patient care and outcomes.

In 2018-19, EMF received final reports for 13 grants. Highlights of key final projects are included in Volume I of this Annual Report.

Importantly, four of the completed projects have been adopted into clinical practice by the emergency departments participating. These projects – detailed in the previous section – included:

- new clinical guidelines for treating prolonged seizures in children
- new treatment for common hand injury
- opioid prescribing toolkit
- ultrasound-guided cannulation training program for clinicians.

An evaluation of a new model of care for detainees in police watch-houses, designed to reduce transfers to emergency departments, looks likely to lead to the model being adopted widely. The model has continued in use on the Gold Coast following the trial and evaluation. See Volume I, page 15.

A further project resulted in the launch of Brisbane-based start-up company, De Motu Cordis. The pre-clinical study funded by EMF, led to the patenting of a novel adrenaline inhaler device for anaphylaxis. This technology formed the basis of a new start-up company. See Volume I, page 15.

The outcomes from a large, multisite clinical trial, which EMF co-funded, comparing two treatment options for pneumothorax looks likely to change the way emergency clinicians treat patients with a collapsed lung. The trial data will be published later in the year.

Inspiring research collaboration

EMF's Queensland Research Program stimulates a strong, collaborative research environment in Queensland.

“EMF-funded projects are linked to more than \$59 million in additional research funding.”

In 2018-19, clinician-researchers funded by EMF, actively collaborated with more than 90 Australian and overseas hospitals, universities, research institutions, government departments and other organisations. Many of these organisations collaborated on more than one EMF-funded project.

To help build inter-agency relations and research collaboration opportunities, EMF continued as a member of Life Sciences Queensland; an Associate Member of the Queensland Alliance for Mental Health— the main body representing the mental health sector in Queensland; and an Associate Member of Leading Age Services Australia – the national peak body representing and supporting providers of age services across residential care, home care and retirement living.

Attracting additional research funding into Queensland

By funding quality scientific research and building the research capability of Queensland clinicians, EMF is helping to attract further research funding into the State. Since 2008, EMF-funded projects have been linked to more than \$59 million in additional research funding.

Research funded via EMF grants continues to attract large and prestigious grants. In 2018-19, six active EMF-funded projects received more than \$2.5 million in leveraged grants, including a \$1.6 million National Health and Medical Research Council grant for the THRIVE project.

In addition, a Medical Research Future Fund grant was awarded to Associate Professor Andreas Schibler to continue his EMF and NHMRC-funded research into respiratory illness and sepsis in children.

Similarly, Professor John Fraser received a \$100,000 Advance Queensland grant to progress the commercialisation of an adrenaline inhaler, which was developed through an EMF grant — see Volume I, page 15.

Creating a solid scientific evidence base for clinical changes

The credibility, recognition and translation of clinical research is tightly bound to its acceptance and publication in peer-reviewed academic medical journals. Presentations at scientific conferences also play an important role in validating the quality of research, disseminating outcomes and ensuring clinical uptake.

During the year, EMF is aware of 50 journal publications relating to research projects which have received an EMF grant.

Significantly, EMF-funded research data was published in two of the world’s most prestigious medical journals, *The New England Journal of Medicine* and *The Lancet*. There were also publications in other leading medical journals, including *Circulation*, the *British Medical Journal*, the *Medical Journal of Australia* and *Annals of Emergency Medicine*.

The publication of EMF-funded research in these journals, pays strong testament to the quality of research being undertaken by Queensland clinicians.

EMF grant recipients were also active in presenting their research at conferences. There were 49 conference presentations made during the year, either oral or poster, at Australian and international conferences.

Research excellence recognised

During the reporting period, emergency healthcare clinicians received eight awards for their work on nine, EMF-funded research projects. EMF congratulates these clinician-researchers on their outstanding achievements:

[Dr Fran Kinnear](#) – 2019 Metro North Hospital and Health Service Research Excellence Awards, Research Support Award. Pictured with her award in the top photo on the right.

[Professor Julia Crilly](#) – Bond University Sustainable Healthcare Awards: 2018 Research Award. Pictured in the second picture on the right, with award sponsor, Health Service 360's Brian Dolan and his partner, Cath Dolan.

[A/Prof Stephen Macdonald](#) – 2018 Global Sepsis Award and 2018 Australasian College for Emergency Medicine Best paper by a Fellow. Pictured right, in the third photo at the World Sepsis Conference.

[Ms Tracey Hawkins](#) – International Conference for Emergency Nursing 2018 Research into Practice Award. Pictured on right in fourth photo at the ICEN 2018 conference.

[Redcliffe Hospital Emergency Department](#) – 2018 Redcliffe Hospital Research Symposium: Research Excellence Award.

[Dr Colin Page](#) – Australasian College for Emergency Medicine: 2018 John Gilroy Potts Award for best emergency medicine research

[Dr Kylie Baker](#) – West Moreton Health 2018 Research Award: 'Recognition and appreciation of her outstanding contribution and commitment to research'.

Notably, the Australasian College for Emergency Medicine and the peak emergency nursing college, ICEN, both recognised EMF-funded projects.





\$1.45 million

invested in new grants and capacity building initiatives

EMF research grants awarded in 2018-19

In 2018-19, EMF ran two grant rounds for its Queensland Research Program, offering up to \$1.2 million in grant funding. In total, 45 applications were received, requesting \$5.38 million in funding. Each application was reviewed through a highly rigorous and transparent process, with most applications ranking highly for scientific quality.

Following the review process, the EMF Board awarded \$1.25 million in grants to a third (17) of the applications. The successful projects covered a breadth of emergency healthcare research areas including Indigenous health, mental health, trauma, sepsis, older adults and cardiology as well as improving hospital services. Of the 17 projects, eight are clinical studies, which will involve the recruitment of more than 6000 patients.

To help support emergency healthcare clinician-researchers, more than \$200,000 was also invested in capacity building initiatives.

Out of Round grant

Funded by a 2011 EMF Capacity Building grant, The Prince Charles Hospital Emergency Department has engaged in more than 20 collaborative research projects. In March 2019, the Board approved an out of round application to enable the Emergency Department to complete these projects. The Prince Charles Hospital Foundation matched the \$20,000 EMF grant.

New grant schemes

In 2018-19, EMF offered two new grant schemes – JumpStart and Leading Edge – which were open to all Queensland Health clinicians providing direct clinical care in an emergency. These grants attracted 14 applications, of which 11 were from non-emergency specialists including nurses, pharmacists, a paramedic, a social worker, a psychologist and a Rural Generalist in training.

Reach across Queensland

In 2018-19, EMF research grant funding was distributed to seven out of the 16 Queensland Hospital and Health Service (HHS) districts.

Gold Coast was the most successful HHS, with clinicians based there receiving 37% of the funding, followed by Metro North (25%) and Metro South (20%). Outside of South East Queensland, four HHS districts received grants, including the Torres and Cape HHS, which also received an EMF Rural and Remote Research Program grant.

EMF also received grant applications from clinician-researchers based with the Queensland Ambulance Service and Retrieval Services Queensland.

A summary of the grants available through this Program is provided in Appendix 1. For more details on the metrics reported on in this Chapter, please see the Performance Metrics chapter.

Improving cellulitis care for Torres Strait islanders

A locally coordinated research project is underway in the Torres Strait to see how cellulitis – a type of bacterial skin infection common in the region – can best be managed by health workers and nurses in the community rather than in a hospital setting. Thursday Island Hospital's Dr Allison Hempenstall is leading the study with joint funding from EMF and HOT North.

Pictured: Dr Allison Hempenstall and patient. Photo Courtesy Dr Hempenstall.



New study to trial treatment for leading cause of childhood death

Queensland emergency clinicians were awarded a new EMF-funded study to develop a new treatment for sepsis, also known as septicaemia or blood poisoning, in children.

EMF awarded a \$99,975 grant to fund the state-wide trial, with sites from Thursday Island to the Gold Coast taking part in the study.



Rural and Remote Research Program

The Rural and Remote Research Program funds clinician-led research aimed at improving patient outcomes and healthcare services in Australian rural and remote locations during an emergency.

EMF launched this national Rural and Remote Research Program in 2014 with funding from philanthropic and industry donations.

Grants are open to all Australian-based emergency healthcare clinicians – including doctors, nurses, paramedics and allied health professionals – who are providing direct clinical care to patients in an emergency.

EMF opened a second Rural and Remote grant round in May 2018, offering up to \$50,000 to support a collaborative research project in the field of emergency medicine for the benefit of rural and remote patients within Australia.

2018-19 grant recipient

In November 2018, EMF announced the recipient of this grant round: James Cook University Centre for Rural and Remote Health Rural Lecturer and Weipa Integrated Health Service Clinical Nurse, Sally West.

Mrs West is investigating the use of nasal high flow therapy to treat babies with bronchiolitis in remote hospitals and health centres in collaboration with clinicians at Cairns Hospital, The Townsville Hospital, the Queensland Children's Hospital and Retrieval Services Queensland.

According to Mrs West, bronchiolitis is a very common respiratory illness in babies and remote Indigenous Australians have an even higher incidence rate than non-Indigenous Australians.

"We know that nasal high flow therapy can be safely and effectively used in tertiary and larger regional emergency departments to improve health outcomes for infants with bronchiolitis and keep them out of intensive care," said Mrs West.

"We want to know if we can use the therapy just as effectively in isolated remote communities, in particular for remote Indigenous Australians in the Cape," she said.

Chapter 3: Research capacity building



Building sustainable research skills and long-term research capacity among emergency healthcare clinicians is a key objective for EMF.

By developing highly skilled, innovation-focused clinician-researchers, in parallel with awarding research grants, EMF is creating a sound evidence-base for improving patient care and healthcare services.

Since 2008, EMF has invested more than \$3.5 million into building research capacity in Queensland public hospital emergency departments. Our initiatives have led to thriving research cultures in some of the State's busiest emergency departments as well as initiating research projects in regional and rural hospitals.

Clinician education & skills training

Research 101 Workshop

EMF ran a half-day Research 101 Workshop in March aimed at Queensland Health employees interested in emergency healthcare research. It included four presentations and a panel Q&A session.

The presentations were specifically tailored to first-time clinician-researchers; providing them with the key information they need to develop a research idea, write a grant and gain ethical and governance approval within Queensland Health.

QUT School of Nursing Head and Director for Queensland Health's state-wide Centre for Palliative Care Research and Education, Distinguished Professor Patsy Yates led the panel of EMF and guest speakers on the day. Other speakers included:

- Logan Hospital Emergency Department Director of Research, Dr Siegfried Perez
- Research Governance Officer for Redcliffe, Caboolture-Kilcoy Hospital, the Community teams and Metro North Hospital and Health Service Mental Health stream, Vanessa Constable
- Gold Coast University Hospital Emergency Department Research Development Manager, Amy Sweeny, and
- EMF Research Manager, Dr Angie Nguyen Vu.

The workshop attracted 37 participants. In addition, EMF also received numerous inquiries from rural and remote clinicians. To meet the needs of these clinicians, EMF recorded the talks from this workshop and made them available via our website as podcasts. At the time of writing, these podcasts had been downloaded 100 times.



Research networks

EMF Research Support Network

From September 2015 to February 2019, EMF piloted a capacity building program in Queensland – known as the Research Support Network or ‘RSN’ – committing more than \$2.2 million in developing and trialling the program. Ultimately, the RSN model proved unsustainable.

Despite deciding against rolling out the RSN as a permanent program, it was nonetheless a valuable experience. Learnings from the pilot will continue to inform exciting new capacity building initiatives from EMF into the future.

Queensland Emergency Department Strategic Advisory Panel (QEDSAP)

EMF partnered with the Queensland Health Clinical Excellence Division’s QEDSAP to organise a research-focused panel session at the group’s annual Forum in Brisbane on October 23, 2018.

EMF organised four presenters and a chair for the session: “Research into practice with the Emergency Medicine Foundation”. Presentations were made on EMF-funded research outcomes ready to be adopted into our emergency departments: lung ultrasound; why IV fluids don’t sober drunk patients; the CREDIT program to reduce unnecessary cannulation; and the ACRE/IMPACT new chest pain diagnostics. These were followed by a Q&A session.

The Forum was attended by 60 plus Emergency Department Directors, NUMs, allied health professionals and other senior hospital personnel from across Queensland. This was an ideal audience for EMF to raise its profile and

drive research translation. EMF hopes to continue partnering with QEDSAP in the future.

Queensland Emergency Research Collaborative (QERC)

An initiative of Queensland emergency medicine clinicians, QERC aims to improve the quality and impact of emergency health research activities by supporting multi-centre research and facilitating collaborations.

During the year, the group met in the EMF Boardroom on a bi-monthly basis, with EMF providing in-kind support, including secretariat duties.

In the future, QERC plans to hold meetings at locations around Queensland to grow its membership and further engage emergency healthcare clinicians in its collaborative research network.

FunDEmentals

FunDEmentals is an emergency care research interest group for social workers, which was launched in early 2018.

The group grew out of an EMF-funded research project and was supported by EMF to empower allied health professionals and foster emergency healthcare research activity by social-workers.

FunDEmentals is now well established and has more than 100 members across Australia and New Zealand. With the network in a position to operate independently, from July 2019 EMF will step down from its facilitator role. We believe the group will continue to grow and become a leading research network into the future.

Chapter 4: How we engage with our stakeholders



At EMF, we proactively engage with our stakeholders through a range of channels and events. Our activities are designed to engage emergency healthcare clinicians and drive new evidence-based emergency healthcare solutions. Our initiatives also promote new research outcomes to foster the fast uptake of new research outcomes into clinical care.

Celebrating clinician-researchers

EMF celebrated its grant recipients for 2018-19, with an award ceremony on Tuesday 12 March, in Brisbane. Attended by 68 guests, the event was an opportunity for EMF to publicly congratulate its recent grant recipients as well as celebrate ground-breaking research outcomes from its grants program.

During the Ceremony, talks were given on the outcomes from three EMF-funded research projects: a lung ultrasound multisite trial; the Hospital in the Nursing Home program evaluation; and the Buddy Taping trial. The talks were filmed and will be made available online.

Communication and promotional activities

See also the Performance metrics chapter for further details on information provided in this section.

Media

EMF works in close collaboration with the Queensland Health Corporate Media Unit (Proactive) as well as with individual clinician-researchers' Hospital and Health Services media teams and affiliated universities to promote the outcomes from projects to the public. During the reporting period, there were 11 media releases regarding EMF-funded research.

These media releases resulted in 40 known media stories in Australian and overseas print, online, television and radio media outlets, including *The Australian*, *The Courier-Mail*, the *New Zealand Herald*, *The Gold Coast Bulletin*, *The Conversation*, ABC radio, Seven News and Nine News.

Media releases regarding research into sepsis, seizure treatment for children, domestic and family violence and improved emergency healthcare for older persons proved the most popular with the media.

EMF website

Our website is an important tool for profiling EMF-funded research grants and the outcomes of these projects. Regular blog posts on the site about research projects draw a range of visitors, both from Australia and overseas. EMF leverages social media channels to drive new visitors to the site via the blogs. Primarily, the site was designed as a key resource for clinician-researchers when applying for EMF grants. It also operates as a comprehensive database, providing up-to-date details and outcomes for grants awarded by EMF.



Keeping older Australians out of emergency

A medical program developed by clinicians at one of Australia's largest hospitals, the Royal Brisbane and Women's Hospital (RBWH) is successfully keeping aged care residents out of hospital and reducing demand on emergency departments.

Dual Emergency and Palliative Care Staff Specialist at the RBWH, Dr Bill Lukin, evaluated the Hospital in the Nursing Home program, with funding from an EMF grant. He found the program significantly reduced the number of emergency department visits from older patients.

"The program led to an average 17% decrease in aged care patients presenting to the RBWH emergency department, a 36% drop in hospital admissions per emergency presentation and an

overall 47% decrease in hospital admissions. That's about one ward of people each month who are no longer being admitted to hospital," Dr Lukin said.

"We also found the program is cost effective, delivering Royal Brisbane a return of \$17 for every \$1 invested. Most importantly, receiving treatment at home is almost always better for an older patient," he said.

In 2018, the Hospital in the Nursing Home was expanded across the Metro North Hospital and Health Service and renamed the Older Persons Acute Assessment Service.

Photo: *The Queensland Minister for Health and Ambulance Services, Hon Minister Steven Miles MP, with Dr Bill Lukin and Joyce Anderson at the Parkview Aged Care Community (Wheller Gardens)*

In 2018-19, there were 15,525 visitors to the EMF site, viewing 35,741 pages in 18,647 sessions. Compared to the previous year, visitor numbers increased by 13% with a slight increase (6%) in the number of sessions—see Figure 4.2. Overall, the number of page views decreased marginally by 5% from 2017-18 when there was an influx of website activity driven by the EMF Research Symposium.

On average, visitors to the EMF website viewed two pages per visit, staying for 1.45 minutes. Over half the visitors found the site via an organic search, with about a third going directly to the site and a further 18% directed via social media.

About 70% of the visitors were from Australia. The remaining visitors were predominately drawn from North America (10%), India, the United Kingdom, France, New Zealand and China.

Social media

EMF has three social media accounts – Twitter, Facebook and LinkedIn – which had a combined 3688 followers at 30 June 2019. Through these sites, EMF actively engages with key stakeholders, including emergency healthcare clinicians, academics, government, industry and the general public.

During the reporting year, EMF made 621 posts via social media. This led to a total of 367,884 impressions.

There was a fall in impressions during the financial year, compared with the previous year. This is attributable to the availability of research stories as well as EMF prioritising its communications resources on meeting contractual reporting to Queensland Health.

Research Newsletter

EMF distributes a quarterly e-newsletter to its database of 1400 plus newsletter subscribers and grant recipients. ACEM Queensland also forwards the e-newsletter on behalf of EMF to its database. Combined, these newsletters were opened 7334 times during the year.

Videos

EMF filmed the talks given at the 2019 Grants Award Ceremony. We also took this opportunity to film interviews with several clinician researchers about their EMF-funded projects. The footage was edited into several short clips, which will be shared on the EMF website and via social media through the year. EMF also shared these clips with the HHSs and relevant university media teams.

During the year, there were a total of 426 YouTube views of EMF videos, with a story on asthma research in children the most popular.

Podcasts

EMF shared podcasts recorded at its 2019 Research 101 workshop. These educational talks, along with podcasts recorded at the 2017 EMF Research Symposium were downloaded 230 times during the year, providing an important resource for clinician-researchers.

Chapter 5: Organisation & governance



EMF operates an established best-practice governance system, thanks to the Board and its committee members who volunteer their time tirelessly to underpin this system.

EMF Board

The EMF Board holds fiduciary, legal and strategic responsibilities.

Primarily the Board ensures EMF has an annual financial plan and budget to meet its programs and priorities. It is also responsible for EMF meeting its legal requirements and remaining accountable to its stakeholders.

The Board works closely with the General Manager to set EMF's strategic agenda and oversees EMF attaining its vision and purpose.

It is responsible for, and has the authority to determine, all matters relating to the policies, practices, management and operations of EMF. The Board is required to do everything that may be necessary to effectively carry out EMF's objectives. The Board also has the final responsibility for the successful operations of EMF. Overall, the Board safeguards the ongoing sustainability and growth of EMF.

In 2018-19, the Board held five ordinary meetings, including the Annual General Meeting. Details of attendances at these meetings are provided in Table A4.1, Appendix 4.

Board composition

The EMF Board is composed of seven members. Of these, four must be emergency medicine specialists who are Fellows of the Australasian College for Emergency Medicine (ACEM). These members are nominated by ACEM and appointed by EMF members.

A fifth member of the Board is a Queensland Health representative. The remaining two Board Directors are skills-based members elected by the Board.

In 2018-19, the Board underwent significant membership changes, with three members completing their term of engagement and a further three stepping down due to personal and work commitments.

Several members of the Board had served for four or more years, including EMF co-founder Dr Michael Sinnott who had sat on the Board for more than nine, non-consecutive years; Dr David Spain for eight non-consecutive years and Mr Jason Currie for six non-consecutive years.

Dr Kim Hansen, Associate Professor Shane George, Dr Jeremy Furyk, Dr Andrew Spiller and Ms Cathy Montesin were newly appointed, with Dr Hansen taking on the role of Chair, replacing Dr Anthony Bell.

Emergency medicine specialists, Dr Hansen, Associate Professor George, Dr Furyk and Dr Spiller were the new ACEM nominees.

EMF Board Committees

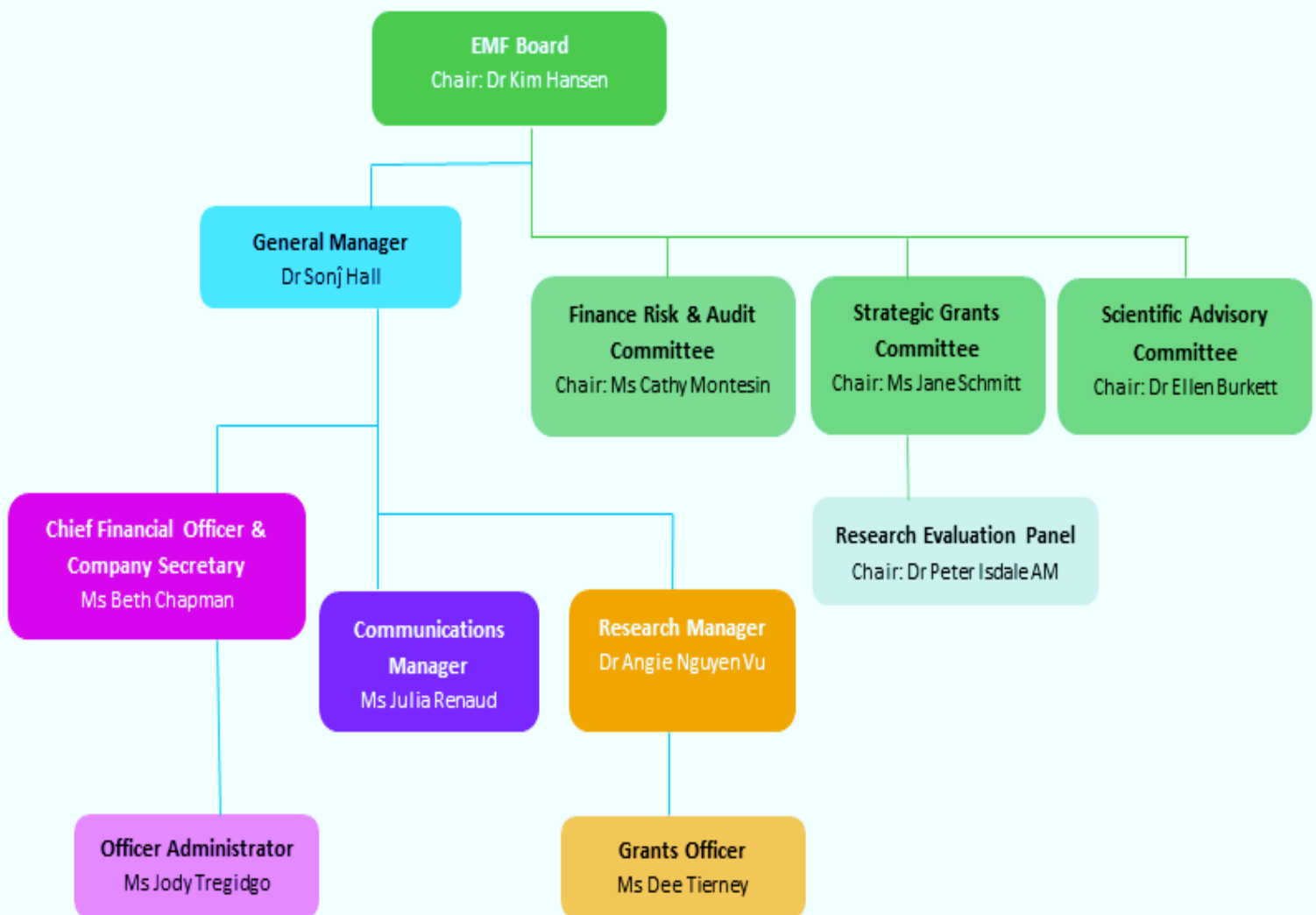
EMF's governance framework provides for additional advice and support for the EMF Board via three committees.

Each committee comprises one Board Director and several external, skills-based appointees. Each external member is individually recruited to provide expert advice and support.

The Strategic Grants Committee – and its Research Evaluation Panel – and, the Scientific Advisory Committee ensure EMF's research grants programs operate within a highly transparent and rigorous governance framework.

EMF organisational structure

As of 30 June 2019



FINANCE, RISK AND AUDIT COMMITTEE

The Finance, Risk and Audit Committee (FRAC) oversees the integrity of EMF's statutory financial reports and statements. It also monitors EMF to ensure an appropriate framework is in place to identify and manage risk and ensures that EMF is complying with regulatory, prudential, legal and ethical standards.

The Committee is responsible for reviewing EMF's compliance with all internal guidelines, policies and procedures; however, overall responsibility for risk oversight and management rests with the Board.

The Committee is made up of an EMF Board Director and external volunteers, who are listed in Table A4.3, Appendix 4.

In 2018-19, the FRAC met on six occasions, led by new Chair, Ms Cathy Montesin. The FRAC also welcomed new members, Ms Jacqueline Keller and Mr Martin Heads. South Australia-based Mr Paul Monaghan stepped down from the committee in February, after almost six years of service.

[Download](#) the Committee's Terms of Reference from the EMF website.

Scientific Advisory Committee

The purpose of this Committee is to provide strategic advice to the EMF Board on scientific matters for the EMF. It reviews research matters and complaints referred by EMF as well as overseeing an annual audit of EMF grant administration processes to improve the assessment and reporting mechanisms along with metric collection. In addition, the Committee deals with any feedback regarding the research programs and requests for changes to approved projects.

The members of this Committee and their attendance at meetings in 2018-19 are outlined in Table A4.4, Appendix 4.

During the year, Westmead Hospital's Dr Amith Shetty stepped down from the Committee as did retiring EMF Board Member, Dr Ed Oakley.

[Download](#) the Committee's Terms of Reference from the EMF website.

Strategic Grants Committee

The Strategic Grants Committee oversees the Research Evaluation Panel and reviews scores given to research grant applications by the Panel. It makes recommendations for research grant applications, with a set of final recommendations presented to the EMF Board.

The Committee's advice is based on EMF's strategic direction and the expected impact of a project. For the Queensland Research Program, close consideration is also made of current Queensland Science and Research Priorities.

This Committee only meets following a grant round. Attendance in 2018-19 and the list of Committee members are outlined in Table A4.2, Appendix 4.

[Download](#) the Committee's Terms of Reference from the EMF website.

Research Evaluation Panel

The Research Evaluation Panel has responsibility for reviewing applications for scientific merit and other scoring criteria. This panel consists of the Chair and numerous, external reviewers selected bi-annually from a pool of highly qualified, independent expert reviewers.

Grant applications are assessed by a minimum of two – with a preference for three – expert peer reviewers, consisting of a subject field expert, a relevant research methodology expert and an emergency healthcare professional to assess the contribution of the proposal to the

field. Grant applicants are provided with a copy of the assessment and given an opportunity to respond. Following this process, all applications are scored.

Members of this review panel are offered an honorarium for their time. Historically, panel members have chosen to donate this honorarium back to EMF.

The 43 members of the Panel in 2018-19 are listed in Table A4.5, Appendix 4.

Download the Panel's Terms of Reference:
http://emergencyfoundation.org.au/wp-content/uploads/2018/07/REP-EMF-QLD-Terms-of-reference_updated_Jun18-1.pdf

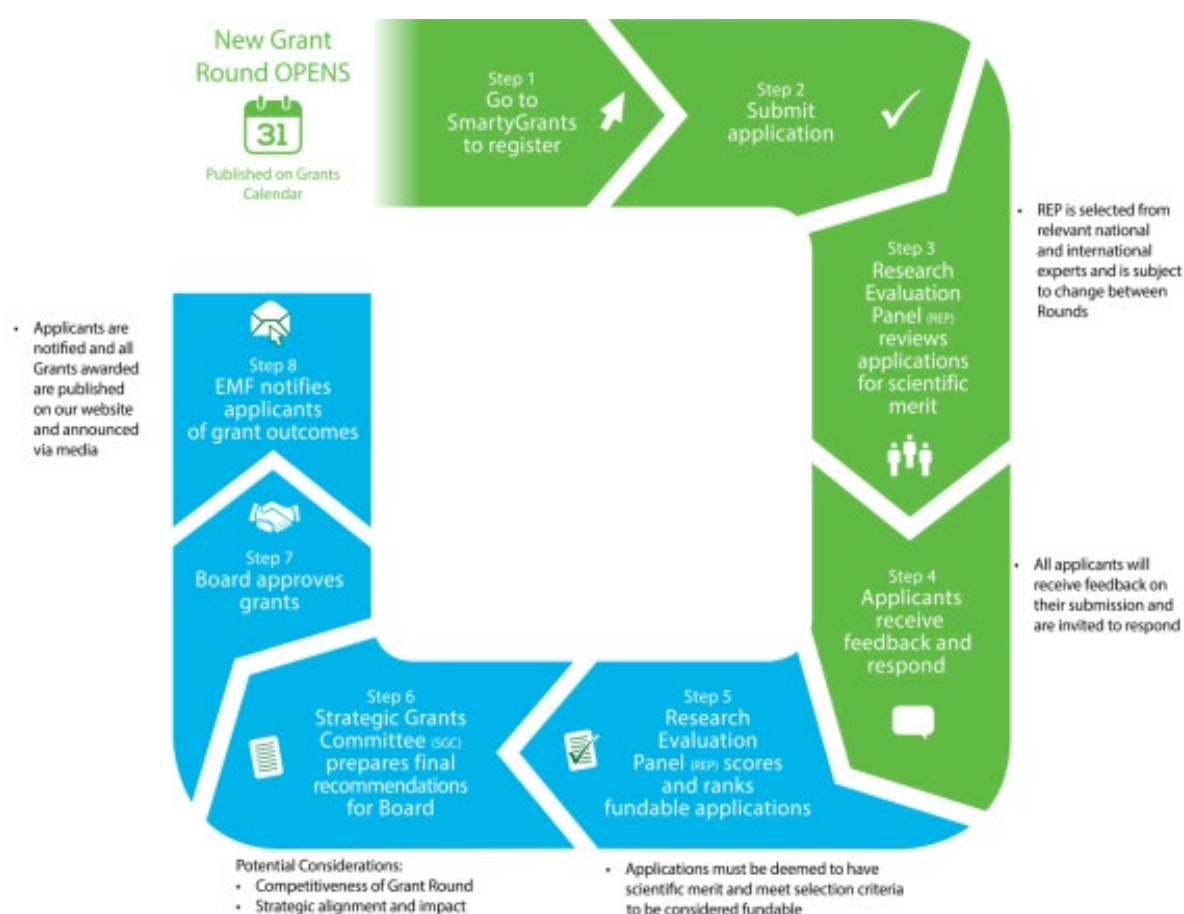
Research grants governance

Grant selection process

A three-tiered governance framework ensures the EMF process for selecting and managing research grants is transparent, robust and consistent. As shown in Figure 5.1, this includes the Research Evaluation Panel, the Strategic Grants Committee and the EMF Board.

The EMF Board makes the ultimate decision on grant recipients and their grant funding. This decision is aided by grant funding recommendations provided by the SGC.

Figure 5.1: EMF grant selection process



To be successful, a project must be translatable and have potential health economic benefits along with a strong focus on better patient outcomes.

Research governance is overseen by the EMF Scientific Advisory Committee.

Grant reporting

All EMF research grant recipients are required to provide six-monthly progress reports and a final report when the project is completed. Recipients must submit a request for any changes to the original approved project, including an extension of the period of their research grant.

Corporate and compliance reporting

Queensland Health

EMF maintains a close working relationship with its key funding body for the Queensland Research Program, Queensland Health. Our funding is managed via the Health Innovation, Investment and Research Office and EMF meets regularly with this office.

EMF is required to provide in-depth bi-annual reports as well as an Annual Report to Queensland Health regarding the Queensland Research Program.

The EMF General Manager meets once a year with the Queensland Health Director General.

Annual Report

On 31 October 2018, EMF submitted its Annual Report for 2017-18 to Queensland Health. A limited print run was produced, with copies made available on request. An electronic version of the report was available to download from the EMF website.

Program evaluation

After a decade of awarding grants, the EMF Board commissioned KPMG to evaluate the value of EMF's programs in terms of benefits they delivered for patients and the healthcare system, as outlined in Volume I, page 12.

In the resulting review, the *Emergency Medicine Foundation Research Investment Impact*, released in 2019, KPMG evaluated the economic benefits of eight research projects funded by EMF.

KPMG estimated these projects were associated with \$44 million in economic benefits each year for participating hospitals.

KPMG also estimated that if only five of the projects are translated more widely across Queensland, the potential annual economic benefit for the State is \$97 million. Similarly, if these five projects are adopted across all Australian emergency departments, the potential nationwide annual economic benefit is \$767 million.

This evaluation did not consider the significant impact EMF's research programs have had on the Queensland Health emergency healthcare workforce. Cultivating a research-active workforce is known to improve workforce retention rates, staff productivity and innovation. Notwithstanding this, it is clear EMF is delivering a high rate of return on Queensland Health's investment. Importantly, EMF's research programs are demonstratively improving the patient experience and health outcomes.

Corporate plan

2018-19 marked an invigorating new phase for EMF, with the appointment of Dr Sonj Hall as the General Manager and Dr Kim Hansen as the Board Chair.

The revitalised leadership, along with a largely new Board, developed a five-year strategic plan for EMF and a new 'Vision and Mission' statement. The strategic plan, as outlined in Chapter 1, is centred on realising rapidly implemented evidence-based solutions for improved patient outcomes in a medical emergency.

Operationally, moving forward, EMF will have an emphasis on growing operations and private sector and industry partnerships both in Queensland and across Australia.

Environmental responsibility

To minimise its environmental impact, EMF provides paper and waste recycling options within the office. Print cartridges are recycled. From 2019, EMF will no longer print its Annual Report in full. Only a 20-page highlights document will be printed, which will double as the organisation's key piece of marketing collateral.

Registrations and legislation

EMF is a non-profit organisation with charitable, health promotion and deductible gift recipient (DGR) status. Our Australian Business Number (ABN) is 17 128 057 170 and our Australian Company Number (ACN) is 128 057 170.

Much of EMF's highly rigorous grants governance is undertaken by volunteers to minimise costs while maximising quality.

Chapter 6: Our people





5.1 EMF staff (FTE)

66 clinicians, academics & professionals volunteered and/or worked for an honorarium on the EMF Board, committees and panels

Promoting evidence-based advances in emergency healthcare underpins every action made by the EMF team.

Our dedicated and highly talented staff delivers highly efficient and effective research grant programs. They know that clinician-led research funded by EMF has the real potential to improve patient outcomes and future-proof the healthcare system.

The EMF team is small, with six staff members working at the full time equivalent of 5.1. By employing highly skilled and talented staff, EMF ensures its team maximises outcomes on a minimal budget.

This year, EMF welcomed a full-time General Manager, Dr Sonj Hall, who was appointed with a mandate to take the organisation into its next phase of operations. The General Manager is responsible for managing EMF's operational activities in accordance with the direction of the Board.

Dr Hall is supported by a Chief Financial Officer and an Officer Administrator, while the research programs and capacity building activities are managed by a core team of two staff members. The organisation's stakeholder reporting obligations and promotional activities are met by a Communications Manager.

Volunteers

Volunteers contribute significantly to EMF and help keep administrative costs low.

All positions on the EMF Board, Finance Risk and Audit Committee, Scientific Advisory Committee

and Strategic Grants Committee are voluntary and receive no remuneration. In addition, many members of our Research Evaluation Panel (REP) forgo an honorarium payment and provide their time freely.

This year, 66 clinicians, academics and industry professionals made up our Board, Committees and REP, providing invaluable insight, direction and input into EMF and its programs.

Culture

EMF values and encourages a flexible, supportive and collegial workplace. In return, the company expects employees to act with equity, justice, fairness and compassion in dealing with others both internally and externally.

To encourage this behaviour as well as a professional work ethic, EMF put in place a performance management framework. This included a range of policies such as Code of Conduct and Workplace Bullying.

The company also provides workplace health and safety training and education. There were no workplace health and safety incidences in 2018-19.

Each year staff have formal performance development planning with their line manager supplemented with regular discussions. This allows for the planning of training and development opportunities aligned with EMF's purpose, the role and staff member's career trajectory.

Pictured on previous page: EMF team members, Dee Tierney, Jody Tregidgo, Dr Sonj Hall, Beth Chapman, Dr Angie Nguyen Vu and Julia Renaud

Chapter 7

Financial performance and outcomes



Financial summary

With a fulltime equivalent team of five (5.1 FTE), EMF runs a highly efficient operation.

In 2018-19, EMF committed more than \$1.5 million to research grants and initiatives aimed at building clinician research capacity. The remaining funds were used to manage research activities, as well as fulfil our contractual reporting and promotional obligations and for corporate administration.

EMF currently manages more than 60 active grants. In 2018-19, our operating costs ran at around 30%, as shown in Figure 7.1.

In this Chapter, a summary of EMF's financial performance and financial disclosures is provided. This summary was extracted from the EMF 2018-19 Financial Report.

For further financial information, please refer to the full financial report, which can be downloaded from the EMF website.

Completion of annual financial statements

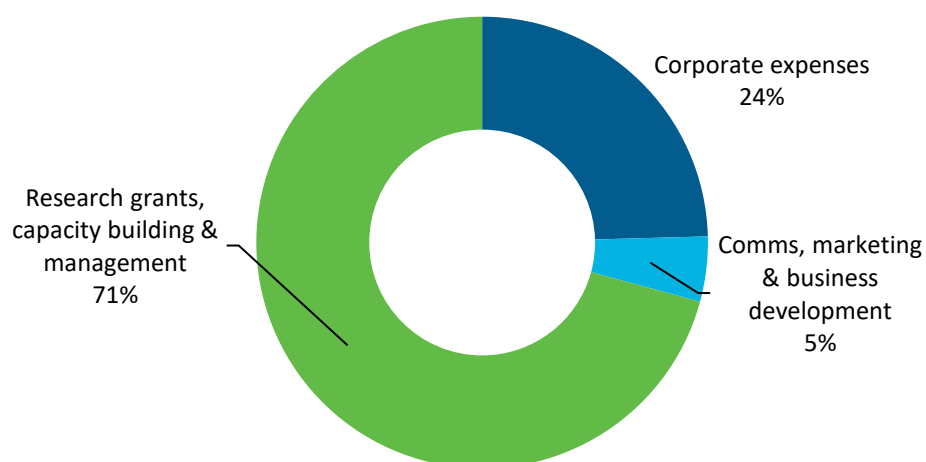
On 11 September 2019, the EMF Finance, Risk and Audit Committee recommended the EMF Board endorse the 2018-19 Financial Statements. The Board endorsed and recommended the Statements for signing on 18 September 2019. Bentleys Chartered Accountants independently audited these Statements.

Financial outcome

EMF operated within its budget in accordance with total sources of funds and revenue from the Queensland Government, earnings on investments as well as income from other sources, for the 2018-19 financial year.

In total, EMF dispersed \$1,552,276 for research. The expenditure for the year is shown in Figure 7.1.

Figure 7.1: Total expenditure for 2018-19



The company incurred operational expenses of \$638,641, which included corporate expenses, events and communication and business development activities. This was a 5% decrease on expenditure from the previous year (2017-18: \$674,415). The expenditure for the year is shown in Figure 7.1.

EMF ended the year with a surplus of \$22,091 against a deficit in 2017-18 of \$751,065. This surplus was gained partially through a change in the timing of grant payments as well as further cost cutting measures. Administrative operational costs across the two years remained constant.

Sources of funds

Since 2008, the Emergency Medicine Foundation has received \$2 million, plus GST, annually from Queensland Health to enable and fund the Queensland Research Program.

In 2018-19, EMF received the second tranche of funding under its current three-year funding contract with Queensland Health. The contract provides \$2 million, plus GST, per year from 2017-18 to 2019-20.

EMF also received \$213,008 from other sources, including \$187,188 generated in interest on EMF's invested cash reserves and \$25,820 in donations, research support funding as well as ticket sales from the EMF Research 101 Workshop.

Budget strategy

The EMF budget and strategy for 2019-20 was approved by the Board on the recommendation of the FRAC at its meeting on 7 May 2019.

The year ahead

Queensland Health investment

The current funding contract EMF has with Queensland Health for its core Queensland Research Program finishes on 30 June 2020. In a bid to renew this contract for a further three to five years, EMF submitted a funding proposal to Queensland Health in August 2019.

The proposal included an additional request for three pilot research programs. These pilots are designed to develop evidence-based solutions with their rapid implementation to improve health outcomes for some of the most vulnerable patients in emergency healthcare: those seeking care for mental ill-health, Aboriginal and Torres Strait Islander peoples, and rural and remote Queenslanders.

Other funding sources

Recognising the significant return on investment EMF's programs offer, the EMF Board and executive continues to pursue partnerships and additional funding opportunities with private sector healthcare providers, industry and the Commonwealth Government.

The complexity of problems and barriers to emergency healthcare cannot be solved in isolation. A collaborative, system-wide and sector-wide approach is essential to improve patient outcomes and future-proof the healthcare system.

Statement of financial position

As at 30 June 2019

	2019 (\$)	2018 (\$)
ASSETS		
Current assets		
Cash and cash equivalents	6,537,260	6,513,110
Trade and other receivables	31,118	69,079
Other assets	9,834	30,976
Total current assets	6,578,212	6,613,165
Non-current assets		
Property, Plant & Equipment	13,029	2,006
Total non-current assets	13,029	2,006
TOTAL ASSETS	6,591,241	6,615,171
LIABILITIES		
Current liabilities		
Trade and other payables	92,050	146,583
Total current liabilities	92,050	146,583
Non-current liabilities		
Provisions	14,560	6,048
Total non-current liabilities	14,560	6,048
TOTAL LIABILITIES	106,610	152,631
NET ASSETS	6,484,631	6,462,540
EQUITY		
Retained surplus (deficit)	6,484,631	6,462,540
TOTAL EQUITY	6,484,631	6,462,540

A full set of EMF's financial statements is available online at emergencyfoundation.org.au

Independent auditor's report

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF EMERGENCY MEDICINE FOUNDATION LTD



Report on the Audit of the Financial Report

Opinion

We have audited the financial report of Emergency Medicine Foundation Ltd (the "Company"), which comprises the statement of financial position as at 30 June 2019 and the statement of profit and loss and other comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information, and the director's declaration.

In our opinion the financial report of the Company is in accordance with Division 60 of the *Australian Charities and Not-for-Profit Commission Act 2012*, including:

- (i) giving a true and fair view of the Company's financial position as at 30 June 2019 and of its performance for the year then ended; and
- (ii) complying with Australian Accounting Standards – Reduced Disclosure Requirements and Division 60 of the *Australian Charities and Not-for-Profits Commission Regulations 2013*.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Company in accordance with the ethical requirements of the Australian Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Material Uncertainty Related to Going Concern

Without modifying our opinion, we draw attention to Note 1(o) in the financial report disclosing that the company's current funding agreement expires 30 June 2020 and a new agreement has not yet been finalised. This matter indicates a material uncertainty that may cast significant doubt on the company's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

Responsibilities of the Directors for the Financial Report

The directors of the Company are responsible for the preparation and fair presentation of the financial report in accordance with Australian Accounting Standards and the *Australian Charities and Non-for-Profits Commission Act 2012* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Company to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The directors are responsible for overseeing the company's financial reporting process.



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**INDEPENDENT AUDITOR'S REPORT
TO THE MEMBERS OF EMERGENCY MEDICINE FOUNDATION LTD**



Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation

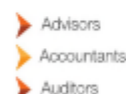
We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Bentleys Brisbane (Audit) Pty Ltd
Chartered Accountants

Ashley Carle
Director
Brisbane
20 September 2019



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Performance metrics



Queensland Research Program

1. 2018-19 Grant recipients

Grant scheme	Principal investigator	Project title	Site	Amount (\$)
Jumpstart	Dr Allison Hempenstall	Improving the care of skin infections in the Torres Straits	Thursday Island Hospital	35,328.80
Leading Edge	Dr Richard Stone	Emergency Examination Authorities and their impacts on North Queensland Hospitals	Cairns Hospital	92,979.00
	Dr David Spain	Valuing patients' experience in the emergency department	Gold Coast University Hospital	98,757.00
	Ms Brooke Charters	Paediatric Reduction in Emergency Cannula Accidental REmoval Trial – PRECARE trial	Logan Hospital	96,033.76
Staff Specialist	Dr Julian Williams	Improving blood culture collections in ED – Bugs in bottles project	Royal Brisbane and Women's Hospital	81,613.79
	Dr Megan King	Can children be sedated effectively with only one needle?	Gold Coast University Hospital	60,056.00
	Dr Sean Clark	Understanding why aged care residents are transferred to the ED	Caboolture Hospital	55,206.00
	Dr David Johnson	Junior doctors at triage improve patient flow in the ED	Hervey Bay Hospital	47,063.00
Project	Dr Megan King	Early Resuscitation in Paediatric Sepsis – A randomized controlled Pilot study	Gold Coast University Hospital	99,975.00
	Dr Don Campbell	Fibrinogen Early In Severe Trauma study II (FEISTY II)	Gold Coast University Hospital	100,000.00
	Prof Gerben Keijzers	Fluid Resuscitation in Emergency patients with Sepsis and Hypotension	Gold Coast University Hospital	96,018.00
	Dr Frances Kinnear	STOPAsthmaQLD: Study of pollen allergy impact on asthma in Queensland	The Prince Charles Hospital	90,539.00
	Dr Michael Aitken	International mass gathering impact on Gold Coast Hospitals emergency departments	Gold Coast University Hospital	40,000.00
Capacity Building	Prof Louise Cullen	The Royal Brisbane and Women's Hospital Emergency and Trauma Centre was awarded a third year of funding for an existing capacity building grant	Royal Brisbane and Women's Hospital	70,000.00
	Dr Frances Kinnear+	The Prince Charles Hospital Emergency Department was awarded a final tranche of funding for an existing capacity building grant.	The Prince Charles Hospital	20,000.00
Research Scholarship	Dr Siegfried Perez	Data Extraction from Electronic Health Records for a Chest Pain Clinical Data Registry: The Chest Pain DECoDeR Study	Logan Hospital	150,000.00
	Dr Elizabeth Marsden	The effect of a Geriatric Emergency Department Intervention (GEDI) program on outcomes for elderly residential care facility residents presenting to a regional emergency department: A mixed methods study.	Sunshine Coast University Hospital	37,500.00
Total				1,248,070

+ This grant was awarded out of Round by the EMF Board

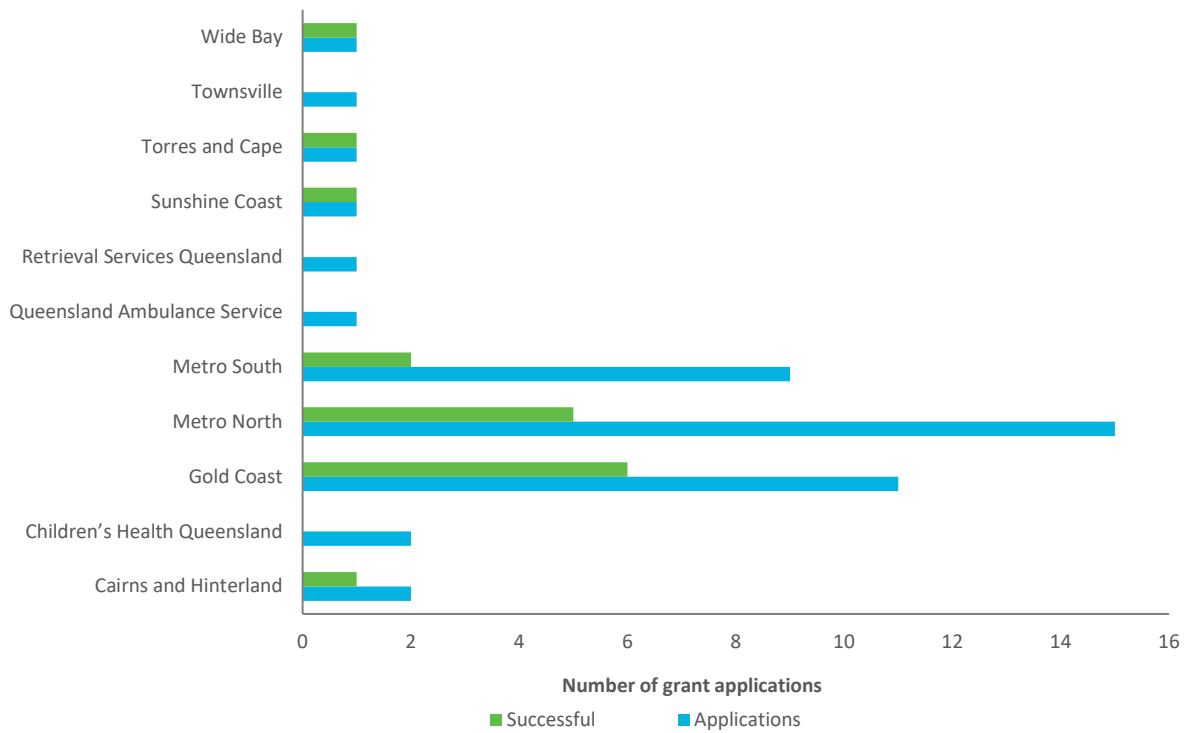
2. Breakdown of 2018-19 Queensland Research Program grant applications by grant scheme

Grant type	Applications	Successful	Requested (\$)	Awarded (\$)
JumpStart	6	1	202,199	35,329
Leading Edge	8	3	740,931	264,770
Trainee	0	0	0	0
Staff Specialist	16	4	1,043,543	243,939
Project	9	5	1,725,683	426,532
Program	1	0	738,785	0
Capacity Building	2	2	90,000	90,000
Research Scholarship	3	2	864,984	187,500
Total	45	17	5,406,124	1,248,070

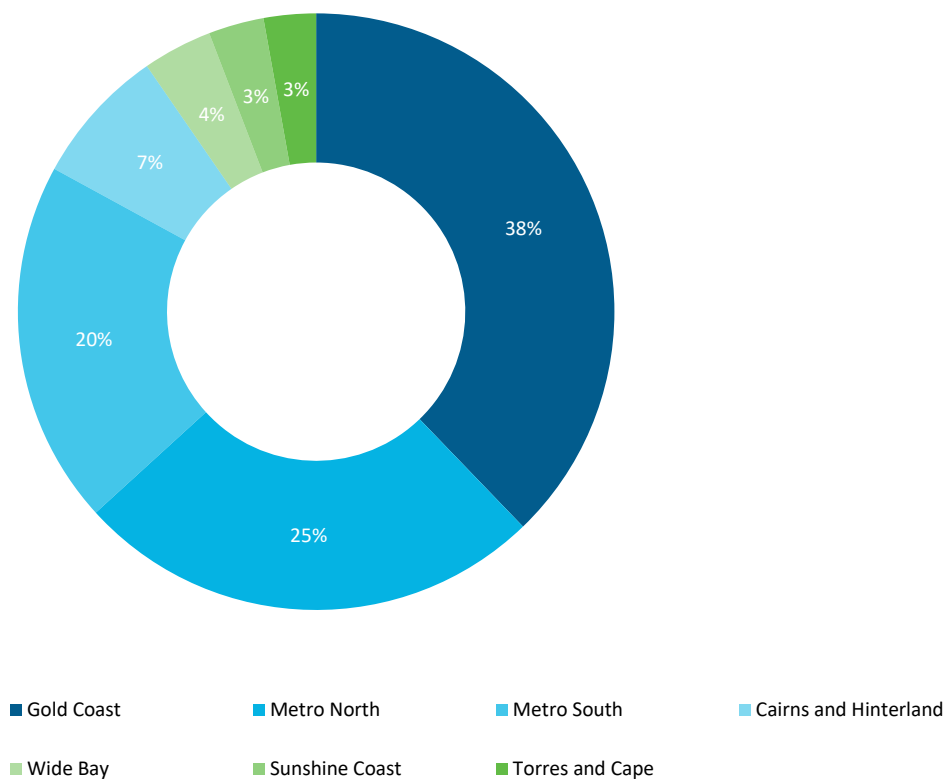
3. Grant applications and funding by HHS, 2018-19

	Requested (\$)	Awarded (\$)	Applications	Successful
Cairns and Hinterland	343,881	92,979	2	1
Children's Health Queensland	228,517	0	2	0
Gold Coast	1,634,238	471,806	11	6
Metro North	1,938,838	317,359	15	5
Metro South	832,078	246,034	9	2
Queensland Ambulance Service	34,794	0	1	0
Retrieval Services Queensland	99,969	0	1	0
Sunshine Coast	114,984	37500	1	1
Torres and Cape	35,329	35,329	1	1
Townsville	92,188	0	1	0
Wide Bay	51,308	47063	1	1
Total	5,406,124	1,248,070	45	17

Grant applications by HHS



Successful grant funding by HHS



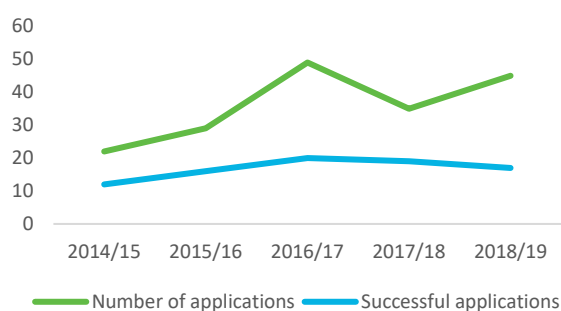
4. Five-year trends, 2014-15 to 2018-19

i. EMF Queensland Research Program applications and grants awarded

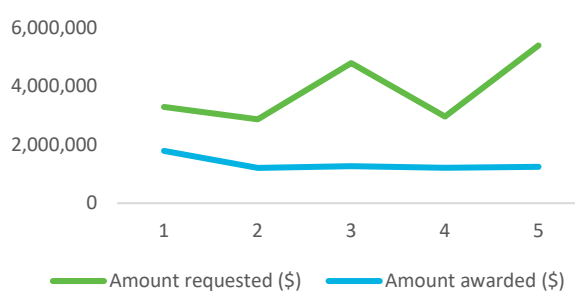
Financial year	Number of applications	Successful applications	Percentage successful	Amount requested (\$)	Amount awarded (\$)	Proportion awarded
2014/15	22	12	55%	3,294,469	1,792,706	54%
2015/16	29	16	55%	2,873,933	1,209,448	42%
2016/17 ⁺	49	20	41%	4,801,375	1,266,626	26%
2017/18	35	19	54%	2,969,697	1,214,003	41%
2018/19	45	17	38%	5,406,124	1,248,070	23%

⁺ Amount requested initially was higher than figure previously reported (\$4,801,375 vs. \$4,712,941)

ii. Total grant applications received and awarded



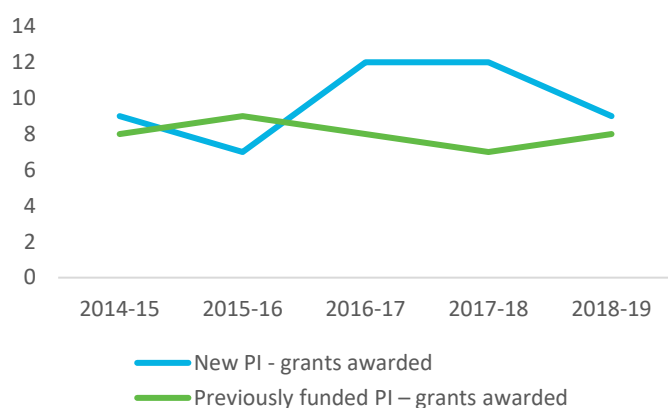
iii. Total funding requested and awarded



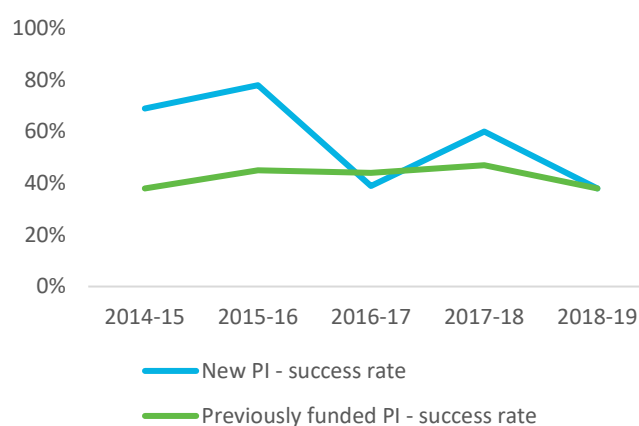
iv. Grant applications from new principal investigators (PI)

	2014-15	2015-16	2016-17	2017-18	2018-19
New PI - no. of awarded grants	9	7	12	12	9
Previously funded PI – no of grants awarded	8	9	8	7	8
New PI - success rate	69%	78%	39%	60%	38%
Previously funded PI - success rate	38%	45%	44%	47%	38%
Overall grant round success rate	50%	55%	41%	54%	38%

v. Applications from new PIs compared with previously funded PIs



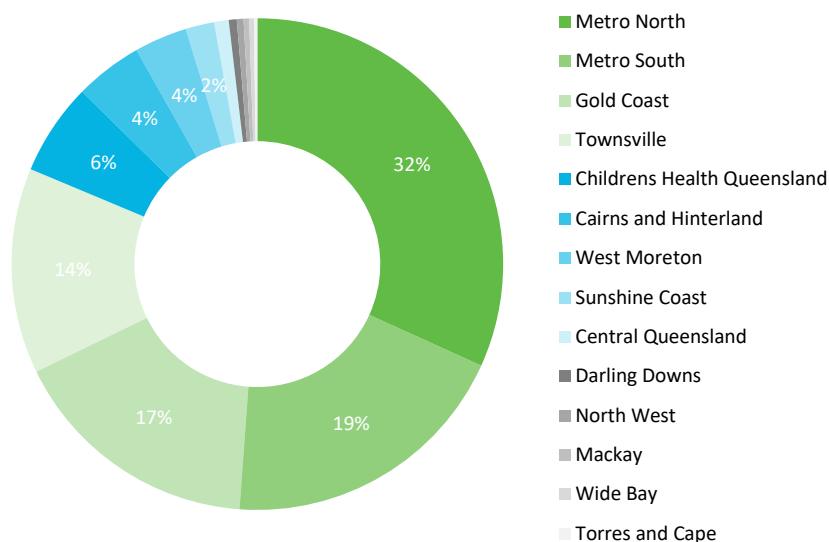
vi. Success of new PIs versus previously funded PIs



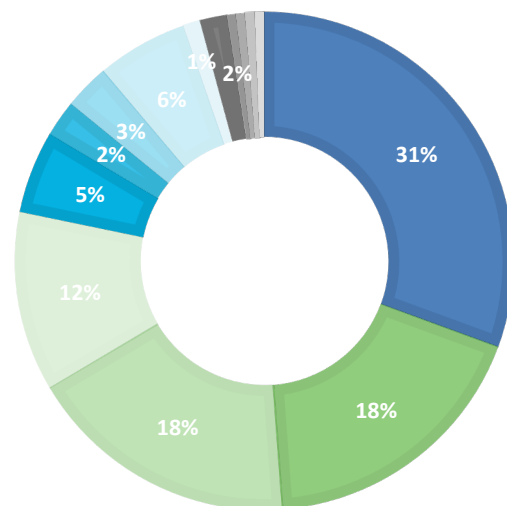
v. Allocation of EMF grant funding to the HHSs and other Queensland Health emergency healthcare providers via the Queensland research Program

Emergency healthcare provider	Amount requested (\$)	Amount awarded (\$)	Proportion funding	Number of Applications	Successful Applications	Proportion grants
Metro North HHS	4,949,747	1,358,095	20%	49	21	25%
Gold Coast HHS	4,486,905	1,599,701	24%	34	17	20%
Metro South HHS	3,286,637	1,408,718	21%	39	12	14%
Townsville HHS	1,781,889	733,860	11%	15	11	13%
Sunshine Coast HHS	877,255	222,709	3%	8	6	7%
Children's Health Queensland HHS	1,781,561	232,749	3%	15	3	4%
Darling Downs HHS	84,560	81,560	1%	3	3	4%
West Moreton HHS	384,022	298,433	4%	4	3	4%
Cairns and Hinterland HHS	696,038	437,319	6%	4	2	2%
Central Queensland HHS	400,000	150,000	2%	2	2	2%
Mackay HHS	62,093	57,093	1%	1	1	1%
North West HHS	68,224	68,224	1%	1	1	1%
Torres and Cape HHS	35,329	35,329	1%	1	1	1%
Wide Bay HHS	51,308	47,063	1%	1	1	1%
Central West HHS	0	0	0%	0	0	0%
South West HHS	0	0	0%	0	0	0%
Queensland Ambulance Service	34,794	0	0%	1	0	0%
Mater Adults Hospital (Brisbane)	265,266	0	0%	1	0	0%
Retrieval Services Queensland	99,969	0	0%	1	0	0%
Total	19,345,598	6,730,853	100%	177	84	100%

vi. Proportion of funding awarded



vii. Proportion of grants awarded



5. Additional funding associated with projects

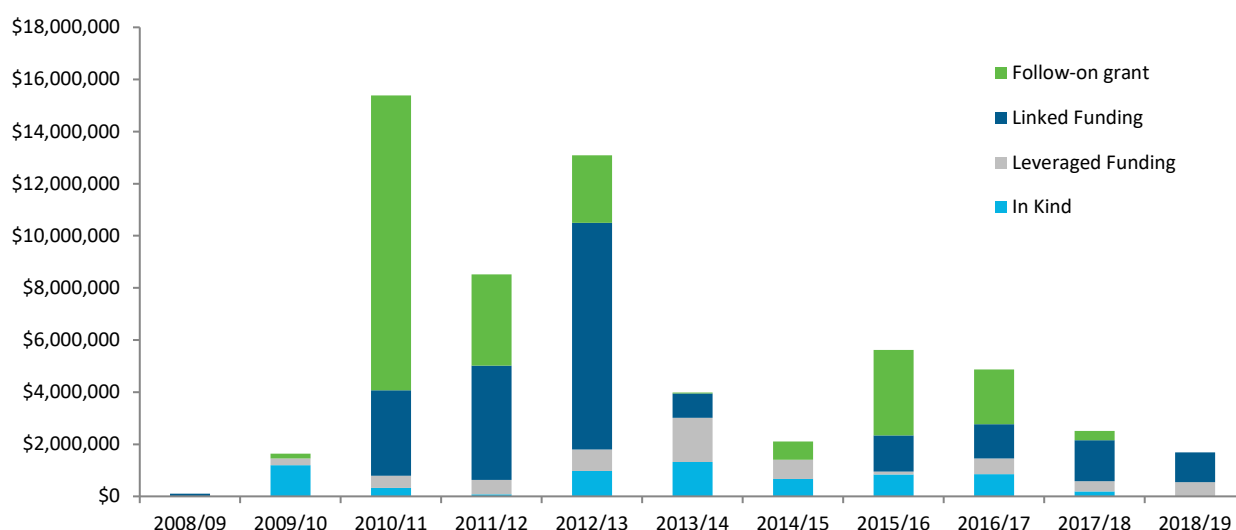
To help measure the impact of its research programs, EMF captures data on additional funding associated with research projects. This data is collected during the lifetime of projects and beyond. For consistency, EMF attributes funding data to the year EMF awarded a grant to the research.

i. New additional funding awarded in 2018-19 to EMF-funded research

New grant	Amount (\$)	Principal investigator	Original EMF grant
2018 Gold Coast Hospital Foundation Research Grant Scheme	93,000	Prof Gerben Keijzers	Fluid resuscitation in emergency patients with sepsis and hypotension (ARISE Fluids): EMPJ-202R29-2018
	99,860	Dr Megan King	Early Resuscitation in Paediatric Sepsis – A randomized controlled Pilot study: EMPJ-207R29-2018
	72,878	Dr Michael Aitken	International mass gathering impact on Gold Coast Hospitals emergency departments: EMPJ-200R29-2018
E.W. “Al” Thrasher, Thrasher Research Foundation	(US)370,000	Dr Shane George	Investigating a new method of intubation to reduce the risk of low oxygen levels in the blood and prevent low blood pressure associated with the procedure (THRIVE): EMPJ-362R25-2016
NHMRC (APP1157004); CIA A/Prof Andreas Schibler	1,600,099.40		
MRFF Next Generation Clinical Researchers Program: “Improving Paediatric Critical Care Outcome” (2019–2023)	348,495.00	A/Prof Andreas Schibler	This grant builds on several EMF funded studies instigated by A/Prof Schibler in respiratory and sepsis studies.
Queensland University of Technology, School of Nursing	82,148	Prof Louise Cullen	Capacity Building Grant
Advance Queensland Ignite Ideas	100,000	Prof John Fraser	Adrenaline Delivery through Ventilation of Aerosolised Nanoparticles in Cardiac arrEst (ADVANCE Study): EMPG-201R21-2014-STaIB
Hot North	35,328.80	Dr Allison Hempenstall	Improving the care of skin infections in the Torres Straits (EMJS-300R30-2018)

ii. Additional funding associated with EMF-funded projects, 2008-09 to 2018-19

Financial year EMF grant awarded	In kind (\$)	Leveraged funding (\$)	Linked funding (\$)	Follow-on grant (\$)	Total (\$)
2008-09	0	0	108,259	0	108,259
2009-10	1,202,334	252,691	0	182,286	1,637,311
2010-11	322,771	462,629	3,285,097	11,313,301	15,383,798
2011-12	0,000	553,500	4,379,610	3,509,900	8,523,010
2012-13	978,414	816,313	8,706,867	2,584,297	13,085,891
2013-14	1,316,138	1,700,343	927,000	40,000	3,983,481
2014-15	665,442	741,940	0	696,950	2,104,332
2015-16	835,353	113,694	1,389,359	3,285,609	5,624,015
2016-17	854,423	605,937	1,307,212	2,100,099	4,867,671
2017-18	185,252	400,113	1,574,175	348,495	2,508,035
2018-19	5,445	535,950	1,151,442	0	1,692,837
Total	6,445,573	6,183,110	22,829,021	24,060,937	59,518,641



Definition of funding:

Follow-on grant: New funding to continue an area of research building upon the EMF grant, e.g. to enable the pilot EMF grant to progress to a larger clinical trial or further investigate one of the findings of the EMF grant

Linked: Funding secured for the same research, but which is not contingent on the EMF grant, e.g. funding for the same project at other sites or countries

Leveraged: Additional funding secured for the same research project in conjunction with the EMF grant

In-kind: Goods and/or services provided at no charge

6. Awards for research excellence

Award	Date	Recipient	EMF grant
2018 Redcliffe Hospital Research Symposium: Research Excellence Award	20/09/18	Redcliffe Hospital Emergency Department	EMCB-450R27-2017 EMSS-356R28-2017 EMSS-320R26-2016
Global Sepsis Award	1/10/18	A/Prof Stephen Macdonald	REstricted Fluid RESuscitation in Sepsis-related Hypotension (REFRESH): EMSS-229R24-2015
International Conference for Emergency Nursing 2018: Research into Practice Award	12/10/18	Ms Tracey Hawkins	The Cannulation Rates in ED Intervention Trial (CREDIT): EMPJ-310R23-2015
Australasian College for Emergency Medicine: 2018 Best paper by a Fellow	22/11/12	A/Prof Stephen Macdonald	REstricted Fluid RESuscitation in Sepsis-related Hypotension (REFRESH): EMSS-229R24-2015
Australasian College for Emergency Medicine: 2018 John Gilroy Potts Award for best emergency medicine research	22/11/18	Dr Colin Page	Research Scholarship: EMRF-001R22-2014
West Moreton Health 2018 Research Award: 'Recognition and appreciation of her outstanding contribution and commitment to research'	6/9/18	Dr Kylie Baker	Multicentre randomised controlled trial incorporating bedside lung ultrasound into the diagnosis of congestive cardiac failure in breathless older patients: EMPJ103R19 2013
Bond University Sustainable Healthcare Awards: 2018 Research Award	25/11/18	Professor Julia Crilly	Delivering emergency care in the watch house: an outcomes analysis: EMPJ-305R23-2015
Metro North Hospital and Health Service Research Excellence Awards 2019: Research Support Award	22/05/19	Dr Fran Kinnear	Capacity Building grant awarded to The Prince Charles Hospital: EMCB-11-161-KINNEAR-TPCH

Research publications

In line with academic institutions, EMF includes publications as one measure of its research grant program success. EMF gathers data from final reports submitted at the completion of EMF-funded projects.

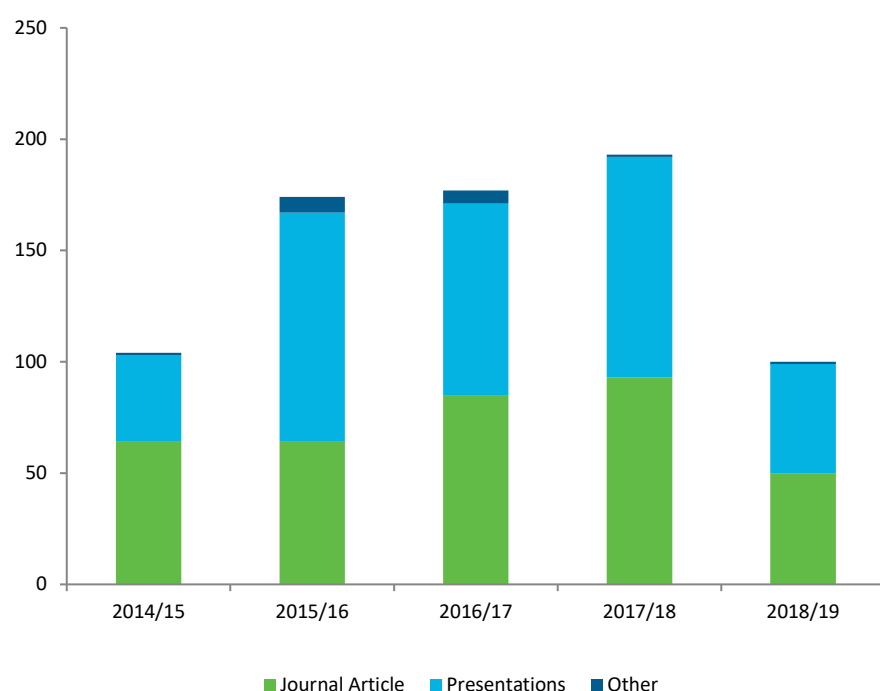
Publications captured include articles in peer-reviewed journals, medical textbooks or textbook chapters, and conference presentations and invited expert presentations.

In the last five years, there have been 748 publications relating to EMF-funded research. Since EMF's grant programs began in 2008, there have been 977 publications in total.

A substantial number of additional historical publications and presentations are reported following the publication of the EMF Annual Report as such the historical publication figures shown here vary from those reported in previous annual reports.

i. Five-year trend, research publications, 2014-15 to 2018-19

FY published	Journal Article	Presentations	Other	Total
2014-15	64	39	1	104
2015-16	64	103	7	174
2016-17	85	86	6	177
2017-18	93	99	1	193
2018-19	50	49	1	100



Stakeholder engagement

1. Media coverage 2018-19

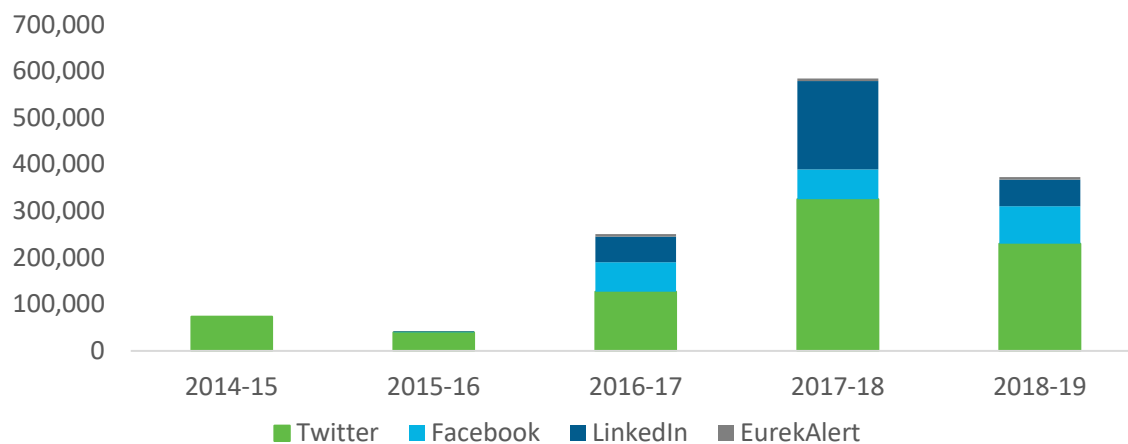
Date	Story	Media coverage
3/07/18 & 11/07/18	Nurses in hot pink scrubs are fast-tracking the care of elderly patients, who end up in the emergency department [#]	7 News Sunshine Coast Aged Care Guide Australian Ageing Agenda
4/07/18	Dr Stephen Macdonald has won an international award for his sepsis research ⁺	6PR (Perth radio), Mornings with Gareth Parker
9/07/18	Could a partnership improve Tasmania's health system? [^]	ABC Radio Tasmania
12/07/18	Point-of-Care Potential: Use of devices in Australia's remote Northern Territory cut medical evacuations by 35% [^]	American Association for Clinical Chemistry (AACC)
12/07/18	Two grieving families have united to raise awareness and money about sepsis - to prevent death [#]	News.com.au Nine News, Gold Coast 7 News, Gold Coast The Courier-Mail
8/08/18	New medical program keeps elderly aged care residents out of hospital [^]	EurekAlert News Medical Life Sciences Medical Express Assisted Living Facilities McKnight's Long-Term Care News
29/08/18	Support for domestic violence victims [#]	WIN news 9 News 7 News, Fraser Coast Wide Bay Wave (Wide Bay HHS)
11/12/18	New sepsis treatment a step closer [^]	EurekAlert News Medical Life Sciences Science Daily Infection Control Today MedIndia
11/02/19	Network driving emergency healthcare research [^]	EurekAlert! Medical Express News Medical Life Sciences
22/03/19	Torres Strait research project to study community treatment of cellulitis [#]	Torres News Queensland Health website
21/04/19	Study finds improved medication for treating epileptic seizures in children ⁺	Medical Health News New Zealand Herald Medical Xpress Science Daily News Medical Life Sciences EurekAlert!
16/05/19	Local doctor making hospital "less scary" for kids [#]	Gold Coast Bulletin
3/06/19	Fainting and a trip to the ED [#]	Radio National Health Report by Norman Sawn
27/06/19	Our ailing aged care system shows you can't skimp on nursing care ⁺	The Conversation

[^] EMF media release/media liaison [#] HHS media release ⁺ Researcher driven

2. Social media

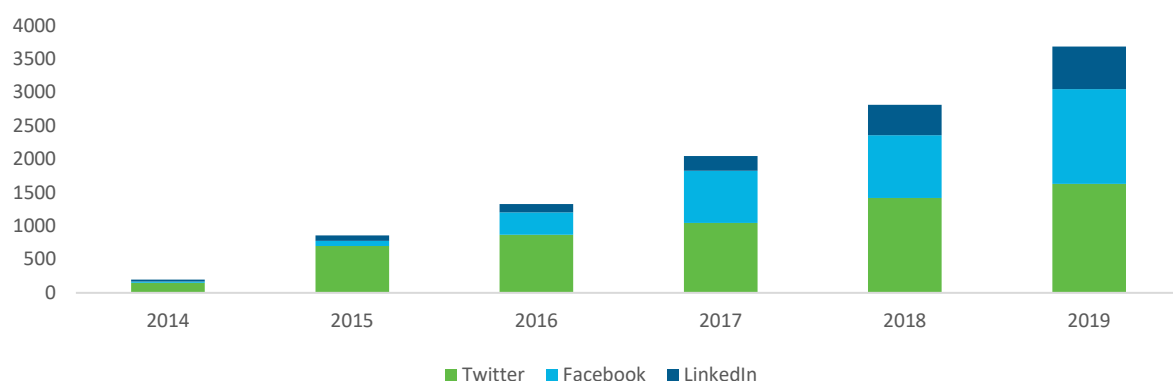
i. Five-year trend: Impressions views

Year	Twitter	Facebook	LinkedIn	EurekAlert
2014-15*	73,243	^^	^^	^^
2015-16+	39,623	1,005	1,393	N/A
2016-17	127,191	63,151	55,205	5,062
2017-18	326,000	63,862	189,133	5,855
2018-19	230,000	80,647	57,237	5,036



i. Five-year trend: Growth in followers

Year	Twitter			Facebook		LinkedIn		Total
	Month	Number	Growth (%)	Number	Growth (%)	Number	Growth (%)	
2014*	June	150	^^	20	^^	28		198
2015	June	700	367	80	300	80	186	860
2016+	June	869	24	335	319	125	56	1329
2017	June	1048	21	780	133	223	78	2051
2018	June	1419	35	942	21	454	104	2815
2019	June	1632	15	1417	50	639	41	3688

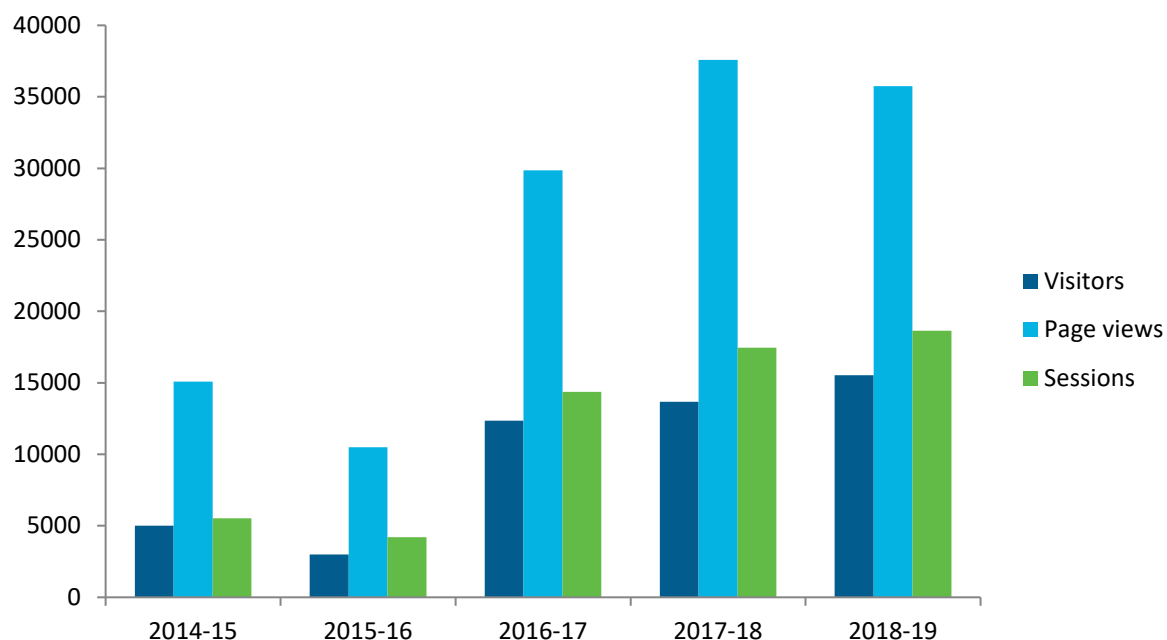


iii. Total social media posts: 2016-17 to 2018-19++

Year	Twitter	Facebook	LinkedIn	Total
2016-17	231	183	117	531
2017-18	461	265	243	961
2018-19	324	148	149	621

3. Website

Year	Visitors	Sessions	Page Views	Session duration (minutes)	Pages per session
2014-15	^^	5520	15,075	^^	^^
2015-16	^^	4200	10,500	^^	^^
2016-17	12,361	14,377	29,864	1:52	2.07
2017-18	13,677	17,461	37,581	2:07	2.15
2018-19	15,525	18,647	35,741	1:45	1.96



* EMF social media accounts launched in 2014

+ No communication or marketing staff from October 2015 to July 2016

^^ Incomplete data

++ Data only posts only available from 2016

4. Research newsletter

Year	Number of recipients (average)	Unique opens	Total opens
2014-15	472	430	1740
2015-16	556	865	4145
2016-17	1046	1213	6188
2017-18	1615	1692	5174
2018-19	1443	2440	7334

Note: The EMF newsletter database was cleansed in 2017-18, which reduced the number of recipients.

5. YouTube videos

Video	Date posted	Views (30 June 2019)
About FEISTY study (short)	April 2018	81
Older person animation	April 2018	71
Jelly fish animation	April 2018	67
About the EMF RSN (long)	June 2018	21
About the EMF RSN (short)	June 2018	45
The FEISTY trial explained in-depth	June 2018	112
RAFT project	June 2018	32
GEDi program	June 2018	99
Impact investing: why it makes sense to fund clinicians	October 2018	9
Rockhampton aeromedical research: why EMF funding is important	October 2018	22
De Motu Cordis tmcx pitch	December 2018	23
Translation benefits of EMF grants	January 2019	10
How are we treating severe asthma in Australian children?	February 2019	137
Reducing emergency department demand in regional EDs	February 2019	78
Rapid diagnostic for sepsis in Children	May 2019	56
Buddy taping (long)	May 2019	31
Buddy taping (short)	May 2019	60
Total		954

Note: These videos were also made available on the EMF website, for which it is not possible to measure views.

6. 2018-19 Podcasts

Date available on Soundcloud	Downloads 2018-19	Podcast	
March 2018 – March 2019	8	Dr Bill Lukin: Future approaches to geriatric care	EMF Research Symposium
	7	Dr Jeremy Furyk: What's next in paediatrics?	
	4	Tom Meehan: Mental health issues impacting the emergency department	
	7	Dr Julia Williams: New research in sepsis	
	9	Dr Don Campbell: New areas in trauma research	
	7	Darryl O'Callaghan: the red blanket miracle	
	16	Benefits of collaborative research on service delivery: panel discussion	
	38	Prof Kath Maitland	
April 2019 - ongoing	48	How to take a research idea and develop it into a research project	Research 101 Workshop podcasts, 2019
	7	Applying for a grant	
	13	Designing a research project	
	16	Ethics and Governance	
	12	Q&A	
Total	138		

Note: These podcasts were also made available on the EMF website, for which it is not possible to measure individual downloads.

Appendices



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Appendix 1

Queensland Research Program grant schemes

Grant scheme	Funding	About	Eligibility
Project	Up to \$150,000 per year for three years (total of \$450,000)	Whole or partial funding to run larger projects with the aim of generating data to seek further funding from alternative sources. Projects that include collaboration between multiple sites and/or disciplines, leveraged funding and in-kind support. Health economic analysis is desirable.	Principal Investigator must be a Queensland Health clinician who provides direct clinical care to patients in emergencies within: Emergency Departments or Queensland Ambulance Service or Retrieval Services Queensland.
Jumpstart	Up to \$40,000	Seed funding for innovative research involving new collaborations and research teams. Project outcomes will have potential to lead to further funding from granting bodies.	JumpStart and Leading Edge applications must have at least one Queensland Health FACEM (or FRACP PEM) co-investigator, who is providing direct clinical care to patients in pre-hospital or Emergency Department setting.
Leading Edge	Up to \$100,000	Seed funding for innovative research that may have the potential for future funding by granting bodies Funding to leverage additional funding from other granting bodies Original research that demonstrates importance to emergency care.	
Trainee (to be phased out in 2019-20)	Up to \$40,000	Funding for clinicians new to research.	Queensland Health employed emergency medicine trainees or senior medical officers supervised by an eligible FACEM (or FRACP PEM) providing patient care in Emergency Department.
Staff Specialist (to be phased out in 2019-20)	Up to \$100,000	Seed funding for innovative research that may have the potential for future funding by granting bodies.	Queensland Health employed FACEM (or FRACP PEM) providing patient care in Emergency Department as the principal Investigator.

Appendix 2

Final reports – Queensland Research Program

TRAINEE GRANTS

Project title		Effect of Buddy Taping versus Plaster in Boxer's Fractures (5thMC) –Buddy Study EMTR-156R25-2016-PELLATT	
Principal investigator	Dr Richard Pellatt	Institution	Gold Coast University Hospital (GCUH)
Co-investigators	Professor Gerben Keijzers, Dr Ezekiel Tan, Dr Michael Thomas, Professor Randy Bindra	Collaborating Institution	Robina Hospital
Amount	\$17,425	Grant Period	2016-18
Publication	Pellatt R., Fomin I., Pienaar C., Bindra R., Thomas M., Tan E., Mervin C., Zhang P., Keijzers G., "Is Buddy Taping as Effective as Plaster Immobilization for Adults with an Uncomplicated Neck of Fifth Metacarpal Fracture? A Randomized Controlled Trial", Annals of Emergency Medicine, 2019. Doi.org/10.1016/j.annemergmed.2019.01.032 [epub 8 March 2019]		
Key outcomes	This was the first Australasian study into Boxer's Fractures. The research team found that buddy taping a boxer's fracture had the similar outcome to a plaster cast at 12 weeks. They advocated a minimal intervention such as buddy taping for uncomplicated boxer's fractures. The research is expected to lead to policy changes at the Gold Coast University Hospital and potentially other hospital emergency departments.		

Project title		Will a replicable ultrasound training intervention improve the intravenous cannulation process? EMTR-201R26-2016-ARCHER-JONES	
Principal investigator	Dr Amy Archer-Jones	Institution	Gold Coast University Hospital
Co-investigators	Dr Stuart Watkins, Ms Amy Sweeny	Collaborating Institution	None
Amount	\$22,541	Grant Period	2017-2019
Additional funding	\$15,000 (in-kind)		
Key outcomes	The ultrasound guided cannulation training program trialled in this study is now ongoing in the Gold Coast University Hospital and Robina Hospital Emergency Departments. The team is also extending the program to staff Hospital-wide. To better inform patients, Dr Archer-Jones has produced a range of patient education posters and videos for use in the Emergency Department waiting room and triage area. The materials encourage patients to request ultrasound guided cannulation if they have previously experienced difficulties with the process.		

STAFF SPECIALIST GRANTS

Project title	Morale, stress and coping strategies of staff working in the emergency department: a national and international comparison EMSS-410R22-2014-THOM		
Principal investigator	Dr Ogilvie Thom	Institution	Nambour Hospital
Co-investigators	Prof Julia Crilly Prof Marianne Wallis Dr Amy Johnston A/Prof Jaimi Greenslade Prof Eric Carlström Dr Louisa Abraham	Collaborating Institution	Caloundra Hospital Gold Coast Hospital and Health Service Griffith University University of the Sunshine Coast Royal Brisbane and Women's Hospital Gothenburg University, Sweden
Amount	\$29,141	Grant Period	2015-2018
Additional funding	\$4,000 (Griffith University) \$200,000 (in-kind)		
Publication	<p>Xu, H.G., Johnston, A.N., Greenslade, J.H., Wallis, M., Elder, E., Abraham, L., Thom, O., Carlström, E. and Crilly, J., "Stressors and coping strategies of emergency department nurses and doctors: A cross-sectional study", <i>Australasian Emergency Care</i>, 2019 Sep;22(3):180-186. doi: 10.1016/j.auec.2018.10.005. [Epub 2019 May 28.]</p> <p>Elder E., Johnston A., Wallis M., Crilly J., "Emergency clinician perceptions of occupational stressors and coping strategies: a multi-site study", <i>International Emergency Nursing</i> (accepted for publication 28 March 2019)</p> <p>Abraham L., Thom O., Greenslade J., Wallis M., Johnston A., Carlstrom E., Mills D., Crilly J., "Morale, stress and coping strategies of staff working in the emergency department: A comparison of two different sized departments", <i>Emergency Medicine Australasia</i>, 2018. doi: 10.1111/1742-6723.12895</p> <p>Johnston A., Abraham L., Greenslade J., Thom O., Carlstrom E., Wallis M., Crilly J., "Staff perceptions of the emergency department working environment: an integrative review of the literature", <i>Emergency Medicine Australasia</i>, 2016; 28 (1): 7-26.</p>		
Key outcomes	In a cross-sectional study, which involved surveying medical and nursing staff from Queensland and Swedish emergency departments, the research team identified a range of stressors and coping mechanisms. In Queensland, the factors causing the most distress included: workplace violence, high workload and the inability to provide optimum care.		

Project title	Examining translation of research into improved assessment for heart attack EMSS-221R24-2015-CULLEN		
Principal investigator	Professor Louise Cullen	Institution	Royal Brisbane and Women's Hospital
Co-investigators	A/Prof Jaimi Greenslade Prof William Parsonage Prof Adam Scott Dr Jacobus Ungerer Prof Julia Crilly	Collaborating Institution	Griffith University Pathology Queensland Gold Coast University Hospital Queensland University of Technology
Amount	\$69,395	Grant Period	2015-2018

Additional funding	\$19,653 (in-kind)
Key outcomes	The IMproved Assessment of Chest Pain Trial (IMPACT) protocol was found to have been successfully translated into clinical practice. It reduced the average chest pain assessment period by 2.5 hours per patient and saved about \$300 per patient presentation.

Project title	Restricted Fluid Resuscitation in Sepsis-associated Hypotension (REFRESH) Trial EMSS-229R24-2015- KEIJZERS		
Principal investigator	Professor Gerben Keijzers	Institution	Gold Coast University Hospital
Co-investigators	Dr Stephen Macdonald Dr Frances Kinnear A/Prof Glenn Arendts Prof Simon Brown Dr Ioana Vlad Prof David Taylor Dr David McCutcheon Dr Stephen Asha Prof Daniel Fatovich	Collaborating Institution	Armada Health Service Austin Health Fiona Stanley Hospital Royal Hobart Hospital Royal Perth Hospital Sir Charles Gairdner Hospital St Georges Hospital The Prince Charles Hospital
Amount	\$54,125	Grant Period	2016-2018
Additional funding	\$115,000 (in-kind)		
Publication	Macdonald S. P. J., Keijzers G., Taylor D. McD., Kinnear F., Arendts G., Fatovich D.M., Bellomo R., McCutcheon D., Fraser J.F., Ascencio Lane J-C., Burrows S., Litton E., Harley A., Anstey M., Mukherjee A., and for the REFRESH trial investigators, "Restricted fluid resuscitation in suspected sepsis associated hypotension (REFRESH): a pilot randomised controlled trial", Intensive Care Medicine Experimental, 2018; 6(Suppl 1):21. doi.org/10.1007/s00134-018-5433-0 Macdonald S.P.J, Taylor D.M., Keijzers G., Arendts G., Fatovich D.M., Kinnear F.B., Brown S.G.A., Bellomo R., Burrows S., Fraser J.F., Litton E., Ascencio-Lane J.C., Anstey M., McCutcheon D., Smart L., Vlad I., Winearls J., Wibrow B., "REstricted Fluid REsuscitation in Sepsis-associated Hypotension (REFRESH): study protocol for a pilot randomised controlled trial", Trials, 2017;29;18(1):399. doi: 10.1186/s13063-017-2137-7.		
Key outcomes	The researchers concluded that a restricted fluid and early vasopressor regimen is feasible and clinically acceptable for treating sepsis in adults. They are starting a larger, multicentre clinical trial, 'ARISE Fluids', with 60 plus sites in Australia and New Zealand, which EMF is also co-funding. This study will involve more than 3000 patients.		

Project title	Patients transfers from rural hospitals – are we getting it right? EMSS-259R25-2016-CONROY		
Principal investigator	Dr Sheree Conroy	Institution	Toowoomba Hospital
Co-investigators	Prof Victoria Brazil Dr Dan Manahan Dr Remo Ostini	Collaborating Institution	Bond University The University of Queensland

Amount	\$5,940	Grant Period	2016-2018
Additional funding	\$8,798.61 (in-kind)		
Key outcomes	The researchers identified where improvements can be made to improve rural transfer patients. Toowoomba Hospital is changing its in-house clinician education as a result, to emphasise the importance and appropriate forms of communication in transfer situations.		

Project title	A randomised controlled trial of interventional versus conservative treatment of primary spontaneous pneumothorax EMSS-12-190-KINNEAR-PSPS		
Principal investigator	Dr Frances Kinnear	Institution	The Prince Charles Hospital
Co-investigators	Dr Stephen Macdonald Dr Greg Treston Dr Graham Simpson Prof Gerben Keijzers Dr Kylie Baker A/Prof Kevin Chu Prof Simon Brown	Collaborating Institution	Bond University Bundaberg Base Hospital Cairns Hospital Gold Coast University Hospital Ipswich Hospital James Cook University Logan Hospital Mater Hospital Nambour Hospital Redland Hospital Royal Brisbane & Women's Hospital Royal Perth Hospital The Townsville Hospital The University of Queensland The University of Western Australia Toowoomba Hospital
Amount	\$50,086	Grant Period	2012-2018
Additional funding	\$401,153.70 (NHMRC grant) \$50,000 (University of Western Australia grant) \$14,180 (in-Kind)		
Publication	Brown S.G.A., Ball E.L., Perrin K., et al., 'Study protocol, for a randomised controlled trial of invasive versus conservative management of primary spontaneous pneumothorax', BMJ Open 2016;6:e011826. doi:10.1136/bmjopen-2016-11826		
Key outcomes	The outcomes from this study will be published soon. The exciting findings will increase our understanding of Primary spontaneous pneumothorax and its optimal management; they are expected to contribute to improved patient outcomes and a reduction in the morbidity associated with current treatment.		

PROJECT GRANTS

Project title	Delivering emergency care in the watch house: an outcomes analysis EMPJ-305R23-2015		
Principal investigator	Dr David Green	Institution	Gold Coast University Hospital
Co-investigators	Prof Julia Crilly Dr Cathy Lincoln Ms Jo Timms Prof Paul Scuffham Mr Andrew Fisher Mr Ken Becker Dr Nelle van Buuren Mr Danny Murphy	Collaborating Institution	Griffith University Queensland Police Service Queensland Ambulance Service
Amount	\$116,772	Grant Period	2015-2018
Additional funding	\$9,000 (Gold Coast Hospital Foundation) \$20,000 (in-kind)		
Publication	<p>Crilly J., Zhang P., Lincoln C., Scuffham P., Timms J., Becker K., van Buuren N., Fisher A., Murphy D., Green D., "Characteristics and outcomes of patient presentations made by police to an Australian emergency department", <i>Emerg Med Australas</i>, 2019 May 6. doi: 10.1111/1742-6723.13301. [Epub ahead of print]</p> <p>Crilly J., Johnston A.N., Wallis M., Polong-Brown J.M., Heffernan E., Fitzgerald G., Young J.T., Kinner S., "Review article: Clinical characteristics and outcomes of patient presentations to the emergency department via police: A scoping review", <i>Emerg Med Australas</i>, 2019 May 21. doi: 10.1111/1742-6723.13300. [Epub ahead of print] NB: this aspect of the research was funded by Griffith University</p>		
Key outcomes	<p>The 'Watch-house Emergency Nurse' (WHEN) model supplemented in-house nurses to provide onsite, 24-hour nursing care to detainees, seven days a week. The model included stationing experienced Gold Coast University Hospital Emergency Department nurses at the watch-house for the late and night shifts. Researchers found that prior to WHEN, patients brought into the emergency department by police made up 1.1% of all presentations. These patients were more likely to have a longer length of stay in the emergency department and presented predominantly with mental health issues and other issues related to substance misuse. An economic evaluation of the WHEN model has been completed and will accompany the final evaluation of the model of care, which is yet to be published. The Southport Watch-House and Gold Coast Health continue to operate the WHEN model of care, with a slightly altered structure.</p>		

Project title	ConSEPT: Convulsive Status Epilepticus Paediatric Trial EMPJ-105R21-2014-FURYK		
Principal investigator	Dr Jeremy Furyk	Institution	The Townsville Hospital
Co-investigators	Dr Natalie Phillips Dr Shane George Prof Stuart Dalziel	Collaborating Institution	Queensland Children's Hospital Gold Coast University Hospital Starship Hospital

	Prof Franz Babl		Kidz First Hospital Waikato Hospital Princess Margaret Hospital Monash Medical Centre Westmead Children's Hospital Sydney Children's Hospital John Hunter Hospital Royal Children's Hospital
Amount	\$147,820	Grant Period	2015-2018
Additional funding	\$197,000 (Health Research Council of New Zealand, The Townsville Hospital Private Practice Research and Education Trust Fund, Eric Ormond Baker Charitable Fund, and the Princess Margaret Hospital Foundation) \$50,000 (in-kind)		
Publication	Dalziel S. R., Borland M.L., Furyk J., Bonisch M., Neutze J., Susan Donath S., Francis K.L., Sharpe C. Harvey A.S., Davidson A., Craig S., Phillips N., George S., Rao A., Cheng N., Zhang M., Kochar A., Brabyn C., Oakley E., Babl, on behalf of the PREDICT research network, "Levetiracetam versus phenytoin for second-line treatment of convulsive status epilepticus in children (ConSEPT): an open-label, multicentre, randomised controlled trial", The Lancet, April 17, 2019. doi: 10.1016/S0140-6736(19)30722-6. Dalziel SR, Furyk JF, Bonisch M et al. A multicentre randomised controlled trial of levetiracetam versus phenytoin for convulsive status epilepticus in children (protocol): Convulsive Status Epilepticus Paediatric Trial (ConSEPT) - a PREDICT study, BMC Paediatrics (2017) 17:152.		
Key outcomes	From this study, and earlier studies, clinicians were advised to consider sequential use of phenytoin and levetiracetam, or levetiracetam and phenytoin, for second-line management of paediatric convulsive status epilepticus before moving on to the next standard of care, intubation, The research has led to new guidelines in Australia and New Zealand.		

Project title	Too much of a good think: Does fluid resuscitation worsen septic shock? EMPJ-358R25-2016-CULLEN		
Principal investigator	Prof Louise Cullen	Institution	The Prince Charles Hospital
Co-investigators	Prof John Fraser, Prof Kathryn Maitland, A/Prof Kiran Shekar, Dr John-Paul Tung	Collaborating Institution	Imperial College London, Australian Red Cross Blood Service, Canberra Hospital, Sunshine Coast University Hospital
Amount	\$77,233	Grant Period	2016-2018
Additional funding	\$949,279 (NHMRC APP1061382) \$355,000 (in-kind)		
Publication	Byrne, L., Obonyo, N.G., Diab, S., Dunster, K., Passmore, M., Boon, A.C., Hoe, L.S., Pedersen S., Fauzi M.H., Pimenta L.P., Hay, K., Van Haren, F., Antsey C.M., Cullen, L., Tung J-P., Shekar, K., Maitland, K., and Fraser, J., "Unintended Consequences; Fluid Resuscitation		

	<p>Worsens Shock in an Ovine Model of Endotoxemia”, American Journal of Respirator and Critical Care Medicine, 2018 June [in press]. doi.org/10.1164/rccm.201801-0064OC</p> <p>Byrne, L., Obonyo, N.G., Diab, S., Dunster, K., Passmore, M., Boon, A.C., Hoe, L.S., Hay, K., Van Haren, F., Tung, J.P. and Cullen, L., 2017. "An Ovine Model of Hyperdynamic Endotoxemia and Vital Organ Metabolism", Shock, 2018;49(1):99-107. doi: 10.1097/SHK.0000000000000904.</p>
Key outcomes	Using a large animal model of endotoxaemic shock, which the researchers developed and validated, they found that fluid resuscitation led to a worsening of outcomes in septic shock. The findings from this preclinical trial informed development of protocols for three, large multi-centre clinical trials.

Project title SWAMPED: Linking best practice workforce models to Emergency Department (ED) funding EMPJ-12-185-BELL-SWAMPED			
Principal investigator	Dr Anthony Bell	Institution	Queen Elizabeth II Jubilee Hospital
Co-investigators	Prof Julia Crilly Dr John Burke Prof Gerry FitzGerald Prof Ged Williams Dr Sam Toloo	Collaborating Institution	Queensland University of Technology Griffith University Gold Coast University Hospital Royal Brisbane and Women’s Hospital Cairns Hospital Rockhampton Hospital Toowoomba Hospital Robina Hospital Mackay Base Hospital Caboolture Hospital The Prince Charles Hospital Redcliffe Hospital Caloundra Hospital Gympie Hospital Nambour Hospital The Townsville Hospital Ipswich Hospital Bundaberg Base Hospital Hervey Bay Hospital Maryborough Hospital Mater Public Hospital Queensland health Healthcare Improvement Unit Queensland Health Clinical Access and Redesign Unity (CARU) Abu Dhabi Health Service
Amount	\$190,172	Grant Period	2012-2018
Additional funding	\$179,110 (in-kind)		
Publication	Bell A., Toloo G.S., Crilly J, Burke J., Williams G., McCann B., FitzGerald G., “Emergency department models of care in Queensland: a multisite cross-sectional study”, Australian		

	<p>Health Review, 2019; 43: 363-370. doi: 10.1071/AH17233</p> <p>Toloo G-S., Burke J., Crilly J., Williams G., McCann B., FitzGerald G., Bell A., "Understanding ED performance after the implementation of activity-based funding", The International Journal of Health Planning and Management, 2018 Apr;33(2):405-413. doi: 10.1002/hpm.2475. [Epub 2017 Nov 29]</p> <p>Wylie K., Crilly J., Toloo G.S., FitzGerald G., Burke J., Williams G., Bell A., "Emergency department models of care in the context of care quality and cost: A systematic review", Emergency Medicine Australasia, 2015; 27(2), 95–101.</p> <p>Bell A, Crilly J, Williams G, Wylie K, Toloo GS, Burke J, FitzGerald G., "Funding emergency care: Australian style", Emergency Medicine Australasia, 2014; 26(4), 408–410.</p> <p>Wylie K., Bell A., FitzGerald G., Crilly J., Toloo G.S., Burke J., Williams G., "The Implications of Activity Based Funding for Emergency Departments: A Comprehensive Literature Review", Queensland University of Technology, Brisbane, Australia, 2014; Published Monograph.</p>
Key outcomes	<p>Led by Dr Bell, the research team undertook a retrospective study of 20 public hospital emergency departments in Queensland for 2013-2014, identifying substantial variation in resourcing service delivery, with "an extensive array of models of care". There was not enough evidence to determine the relative effectiveness of these models in achieving emergency department performance benchmarks. Nonetheless, Dr Bell recommended a more uniform approach to care delivery in Queensland emergency departments.</p>

Project title	Validation and Impact of the Four Hour Rule in the ED. A large data linkage study PROJ-2010-002-BURKE		
Principal investigator	Dr John Burke	Institution	Royal Brisbane and Women's Hospital
Co-investigators (Qld arm)	Dr Roberto Forero Prof Gerry FitzGerald	Collaborating Institution (Qld arm)	The Prince Charles Hospital Redcliffe Hospital Gold Coast University Hospital University of New South Wales Queensland University of Technology
Amount	\$50,000	Grant Period	2010-2018
Additional funding	\$687,000 (NHMRC APP1029492) \$45,500 (in-kind)		
Publication	<p>Gaming National Emergency Access Target performance using Emergency Treatment Performance definitions and emergency department short stay units", <i>Emerg Med Australas</i>, 2019 April. doi: 10.1111/1742-6723.13295</p> <p>Forero R., Nahidi S., de Costa J., Fatovich D., FitzGerald G., Toloo S., McCarthy S., Mountain D., Gibson N. Mohsin M., Man W.N., "Perceptions and experiences of emergency department staff during the implementation of the four-hour rule/national emergency access target policy in Australia: a qualitative social dynamic perspective", <i>BMC Health Services Research</i>, 2019; 19:82. doi: 10.1186/s12913-019-3877-8</p> <p>Nahidi S., Forero R., McCarthy S., Man N., Gibson N., Mohsin M., Mountain D., Fatovich D.,</p>		

	<p>Fitzgerald G., Toloo S., "A Qualitative analysis of Perceptions and Experiences of Emergency Department Staff in Relation to implementation and outcomes of the Four-Hour Rule/National Emergency Access Target in Australia", <i>Emerg Med Australas</i>, 2018; 5 September 2018. doi: org/10.1111/1742-6723.13166.</p> <p>Nahidi S., Forero R., Man N., Mohsin M., Fitzgerald G., Toloo S., McCarthy S., Gibson N., Fatovich D., "Impact of 4HR/NEAT policy implementation on Emergency Department staff: A qualitative perspective of ED management changes", <i>Emerg Med Australas</i>, 2018; 27 August 2018. doi: 10.1111/1742-6723.13164.</p> <p>Forero R., Man N., Ngo H., Mountain D., Mohsin M., Fatovich D., Toloo G.S., Celenza A., FitzGerald G., McCarthy S., Richardson D., Xu F., Gibson N., Nahidi S., Hillman K., "Impact of the four-hour National Emergency Access Target on 30 day mortality, access block and chronic emergency department overcrowding in Australian emergency departments", <i>Emerg Med Australas</i>, 2019 Feb;31(1):58-66. doi: 10.1111/1742-6723.13151 [Epub 2018 Jul 30]</p> <p>Forero R., Ngo H., Man N., Mountain D., Fatovich D., "Response to Re: Impact of the four-hour National Emergency Access Target on 30-day mortality, access block and chronic emergency department overcrowding in Australian emergency departments (Letter to the Editor)", <i>Emerg Med Australas</i>, 2019 Feb;31(1):147-148. doi: 10.1111/1742-6723.13214. [Epub 2018 Dec 4]</p> <p>Forero R., Man N., McCarthy S., Richardson D., Mohsin M., Toloo G.S., FitzGerald G., Ngo H., Mountain D., Fatovich D., Celenza A., Gibson N., Xu F., Nahidi S., Hillman K., "Impact of the National Emergency Access Target policy on emergency departments' performance: A time-trend analysis for New South Wales, Australian Capital Territory and Queensland", <i>Emerg Med Australas</i>. 2018 Jul 24. doi: 10.1111/1742-6723.13142</p> <p>Ngo H., Forero R., Mountain D., Fatovich D., Man W., Sprivulis P., Mohsin M., Toloo S., Celenza A., FitzGerald G., McCarthy S., Hillman K., "Impact of the Four-Hour Rule in Western Australian Hospitals: Trend Analysis of a Large Record Linkage Study 2002-2013", <i>PLOS One</i>, 2018; 13:3: e0193902. doi: 10.1371/journal.pone.0193902.</p> <p>Forero R., Nahidi S., De Costa J., Mohsin M., Fitzgerald G., Gibson N., McCarthy S., Aboagye-Sarfo P., "Application of Four-Dimension Criteria to assess rigour of qualitative research in Emergency Medicine", <i>BMC Health Services Research</i>, 2018; 18(1): 120. doi: 10.1186/s12913-018-2915-2.</p>
Key outcomes	<p>Overall, it was found that the NEAT policy had improved the situation in emergency departments. Nationally, the four-hour rule had a consistent effect on 'flow' measures: significantly reducing emergency department overcrowding and access block and enhancing efficiency. Contrary to policy makers' expectations, NEAT did not lead to a reduction in the number of deaths or illness (other than in Western Australia). The policy had no effect on dampening the continuing rise in emergency department attendances, but in some hospitals, there were fewer re-attendances. Of the 119 emergency department clinicians surveyed for the study, they confirmed that NEAT had imposed extra workload and stress.</p>

PROGRAM GRANTS

Project title	Adrenaline Delivery through Ventilation of Aerosolised Nanoparticles in Cardiac arrEst (ADVANCE Study) EMPG-201R21-2014-STaIB		
Principal investigator	Dr Andrew Staib	Institution	The Prince Charles Hospital
Co-investigators	Professor John Fraser Professor Kim Chan Dr Shaun Gregory Dr Dylan Flaws Dr Dave Seaton	Collaborating Institution	The University of Sydney Royal Brisbane and Women's Hospital
Amount	\$250,000	Grant Period	2014-2018
Additional funding	\$100,000 (Advance Queensland) \$250,000 (Biomedical Assistance Fund)		
Key outcomes	The team developed a prototype of the platform inhaler technology, called 'Epihaler', and ran two pre-clinical trials in an animal model. They looked at whether it was possible to deliver a powdered form of adrenaline via the lungs and if they could deliver the required dosage for a cardiac arrest. At the completion of this project, the intellectual property and feasibility data was used as the basis for capital raising for De Motu Cordis Pty Ltd (DMC), a Queensland based start-up company founded by Professor Fraser to commercially develop this emergency medicine product platform. After conducting thorough market research, DMC redefined its primary indication to be anaphylaxis, a \$3 billion market in the United States.		

Appendix 3

Captured research publications 2018-19

- Alshyyab, M. A., FitzGerald, G., Dingle, K., Ting, J., Bowman, P., Kinnear, F. B., & Borkoles, E., "Developing a conceptual framework for patient safety culture in emergency department: A review of the literature", *The International journal of health planning and management*, 2019;34(1), 42-55. doi: 10.1002/hpm.2640
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- Crilly, J., Johnston, A.N., Wallis, M., Polong-Brown, J., Heffernan, E., Fitzgerald, G., Young, J.T. and Kinner, S., "Clinical characteristics and outcomes of patient presentations to the emergency department via police: A scoping review", *Emergency Medicine Australasia*, 2019 Aug;31(4):506-515. doi: 10.1111/1742-6723.13300 [Epub 2019 May 21]
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Appendix 4

Board and Committee meetings

Key: Y - In attendance, N – Not in attendance, A – Apology received prior to meeting

 Not a member at this time

Table A4.1: Board members meeting attendance 2018-19

Name	24/07/18	18/09/18	14/11/18	12/03/19	7/05/19	Total
Chair: Dr Kim Hansen				Y	Y	2/2
A/Prof Anthony Bell (Retired Chair)	Y	Y	Y	Y		4/4
Mr Jason Currie	Y					1/1
Dr Michael Sinnott	A	A				0
Dr David Spain	Y	A	A			1/3
A/Prof Ed Oakley	A	Y	Y			2/3
Dr John Wakefield	Y	A	Y			2/3
Dr Peter Isdale AM	Y	Y	Y	Y	Y	5/5
Ms Cathy Montesin		Y	Y	Y	A	3/4
Dr Jeremy Furyk				Y	Y	2/2
Dr Shane George				A	Y	1/2
Dr Andrew Spiller					A	0

Table A4.2: Strategic Grants Committee members and attendance

Name	23/07/18	9/11/18	Total
Chair: Ms Jane Schmitt	A	A	0
Dr Peter Isdale AM	Y	Y	2/2
Dr Andrew Spiller	Y	Y	2/2
Adjunct Professor Gerry FitzGerald	Y	Y	2/2

Table A4.3: Finance, Risk and Audit Committee members and attendance

Name	11/09/18	30/10/18	26/02/19	16/04/09	18/06/19	Total
Chair: Ms Cathy Montesin	Y	Y	Y	Y	Y	5/5
Dr Peter Isdale AM	Y					1/1
Mr Paul Monaghan	A	Y				1/2
Ms Susanne Le Boutillier	Y	Y	Y	Y	Y	5/5
Mr Scott Bryant	Y	Y	Y	Y	Y	5/5
Jacqueline Keller					Y	
Martin Head					Y	
Ms Beth Chapman (EMF Company Secretary)	Y	Y	Y	Y	Y	5/5
Dr Sonj Hall (EMF General Manager)			Y	Y	Y	3/3

Table A4.4: Scientific Advisory Committee members and attendance

Name	23/08/18	18/10/18	06/12/18	14/02/19	11/04/19	27/06/19	Total
Chair: Dr Ellen Burkett	Y	A	Y	Y	Y	Y	5/6
A/Prof Ed Oakley	A	Y	A	Y			2/4
Dr Amith Shetty	A						0
A/Prof Stephen Macdonald	A	Y	Y	Y	Y	Y	5/6
Dr Diann Eley	Y	Y	Y	Y	Y	A	5/6
A/Prof Jamie Seymour	Y	A	Y	Y	A	Y	4/6
Prof Marianne Wallis	Y	Y	Y	Y	Y	Y	6/6
Dr Jeremy Furyk					A	Y	1/2
Ms Lisa van den Berg (Former EMF Research Manager)	Y	Y					2/2
Dr Angie Nguyen Vu (EMF Research Manager)	Y	Y	Y	Y	Y	Y	6/6

Table A4.5: Research Evaluation Panel members 2018-19

Name	Qualifications	Position
Chair: Dr Peter Isdale AM	PhD, BA (Hons), MAICD	See profile in Volume I, page 22.
Prof Peter Aitken	MBBS, FACEM, EMDM, MClinEd, DrPH	Senior Director, Health Disaster Management Unit, Queensland Health
A/Prof Glenn Arendts	MBBS, FACEM, MMed, PhD	Emergency Physician, Fiona Stanley Hospital; Clinical Research Fellow, Centre for Clinical Research in Emergency Medicine, Harry Perkins Institute for Medical Research; Associate Professor and Senior Lecturer, Emergency Medicine, University of Western Australia (UWA)
Dr Kylie Baker	MBBS, FACEM, CCPU	Director of Emergency Medicine Training and Senior Staff Specialist Ipswich Hospital
Dr Lauren Ball	GCertHigherEd, PhD, MNutrDiet, BAppSc, APD, AN	NHMRC and Senior Research Fellow, Co-Lead, Patient-Centred Health Services, Menzies Health Institute Queensland, Griffith University
Dr Emma Ballard	PhD, Mbiostats, BAppSc (Hons)	Senior Biostatistician, QIMR Berghofer Statistics Unit; Senior Lecturer, School of Nursing, Midwifery and Social Work, The University of Queensland (UQ)
Dr Daniel Bodnar	MBBS, FACEM, BSc	Deputy Medical Director, Queensland Ambulance Service; Emergency Medicine Staff Specialist, RBWH and QCH; Senior Lecturer, UQ
Dr Erika Bosio	BSc (Hons), PhD	Research Fellow (Laboratory Head), Centre for Clinical Research in Emergency Medicine, Royal Perth Hospital, Harry Perkins Institute for Medical Research, UWA
A/Prof Marc Broadbent	RN, PhD, MEd, Cert Critical Care, GDip Adult Ed & Training, GCert Adult Ed & Training, MACMHN, FACON	Associate Professor in Nursing, University of the Sunshine Coast
Dr Simon Bugden	MbChB, DipPaeds, FACEM, AFACHSM, MHA	Senior Staff Specialist, Emergency Department, Caboolture Hospital
A/Prof Emily Callander	BA, PhD	Associate Professor, Centre for Applied Health Economics, School of Medicine, Griffith University
Dr Jason Chan	MBBS, FACEM	Staff Specialist, Emergency Department, Redcliffe Hospital
Dr Simon Craig	MBBS, FACEM, MPH, MHPE	Paediatric Emergency Physician, Paediatric Emergency Department, Monash Medical Centre; Adjunct Clinical Professor Adjunct Clinical Associate Professor, School of Clinical Sciences, Monash University; Medical Advisor, Electronic Medical Record (EMR) Program, Monash Health
Dr Joel Dulhunty	FRACMA, MBBS, PhD, Master of Tropical Health, BSc (Hons)	Director of Research & Medical Education, Redcliffe Hospital

Name	Qualifications	Position
Dr Mark Edwards	MD, PhD, Dip. ABEM, FACEP, FACEM	Director of Clinical Services and Governance, LifeFlight Retrieval Medicine; Senior Staff Specialist, Rockhampton Base Hospital, Department of Emergency Medicine
A/Prof Richard Franklin	BSc, MSocSc, PhD, GCertAustRurLeadership, GradCertEd	Associate Professor, James Cook University; Senior Research Fellow, Royal Life Saving Society Australia
Dr Vinay Gangathimmaiah	MBBS, MPH, FACEM	Emergency and Retrieval Physician, Darwin Hospital
A/Prof Bamini Gopinath	PhD, BBiomedSci	Associate Professor (Northern) and Principal Research Fellow Sensory Loss Epidemiology, Westmead Clinical School, The Westmead Institute for Medical Research
Dr Adam Holyoak	MBBS, BSc, BA, MPH(Aeromed), GradCertClin USS, FACEM, FCICM	Staff Specialist, Emergency Department and Intensive Care Unit, Townsville Hospital
Dr Andrew Janke	PhD	NIF Informatics Fellow, Senior Research Fellow, Centre for Advanced Imaging, UQ
Dr Lisa Kalisch Ellett	PhD, BPharm	NHMRC-ARC Dementia Research Development Fellow, Senior Research Fellow, School of Pharmacy and Medical Sciences, University of South Australia
Prof Jonathan Karnon	BA(Hons), MSc, PhD	Professor in Health Economics, School of Public Health, University of Adelaide
Prof Justin Kenardy	PhD (Psychology), BSc (Hons)(Psychiatry)	Clinical Psychologist; Professor of Psychology, UQ
Dr Michelle Krahe	BBiomedSci(Hons I), PhD	Senior Research Fellow, Health Group, Griffith University
Dr Sanjeewa Kularatna	PhD, MD, MSc, BDS	Senior Research Fellow, Australian Centre for Health Services Innovation, School - Public Health and Social Work, Queensland University of Technology
Dr David Lim	DrPH, GCert in Academic Practice, MMedSc, LLB	Senior Lecturer, Rural Interprofessional Education Team Leader, s Rural Health, Flinders University
Dr Robert Meek	MBBS, FACEM, MCLinEpi, PhD	Emergency Physician and Emergency Research & Medical Student Teaching Coordinator, Dandenong Hospital; Adjunct Clinical Associate Professor, Medicine Monash Health, Monash University
Prof Biswadev Mitra	MBBS, MHSM, PhD, FACEM	Head of Clinical Research, National Trauma Research Institute; Director of Emergency Medicine Research, Alfred Health; Professor, Critical Care Division, School of Public Health and Preventive Medicine, Monash University
Dr Amy Mullens	BA, MSc, PhD	Associate Professor (Psychology), University of Southern Queensland

Name	Qualifications	Position
Dr Ziad Nehme	BEmergHlth(Pmed)(Hons), PhD	Senior Research Fellow and Advanced Life Support Paramedic, Ambulance Victoria; Research Fellow, Epidemiology and Prev Med, Alfred Hospital, Monash University
Dr Amanda Neil	BSc (Hons), Grad Dip Ec. PhD	Select Foundation Senior Research Fellow, Menzies Institute for Medical Research, University of Tasmania
Dr Son Nghiem	PhD (Econ)	Senior Research Fellow, Centre for Applied Health Economics, Griffith University
Dr Bill Nimo	MBBS, FACEM, FACRRM	Deputy Director, Emergency Department, Epworth Hospital; Clinical Associate Professor, The University of Melbourne, Faculty of Medicine, Dentistry and Health Sciences; Associate Dean (Ambulatory) Epworth Clinical School; Senior Retrieval Specialist, Retrieval Services Queensland (RSQ); Deputy Chair, Critical Care Institute, Epworth Hospital; Australasian College for Emergency Medicine Spokesperson on Clinical Issues in Toxinology
Prof Greg Peterson	BPharm (Hons), PhD, MBA, FSHP, FPS, FACP, ACCCN, ARPharmS, GAICD	Professor of Pharmacy, University of Tasmania; Adjunct Professor of Pharmacy, University of Canberra; Director of Primary Health Tasmania
Dr Natalie Phillips	MBBS, FRACP, MPhil	Paediatric Emergency Physician, Senior Staff Specialist, Queensland Children's Hospital
Prof Anu Rammohan	MA, PhD	Associate Dean (International) Faculty of Arts, Business, Law and Education, University of Western Australia
Dr Stephen Rashford ASM	MBBS, FACEM	Specialist Emergency Physician and Medical Director Queensland Ambulance Service; Adjunct Professor, QUT
Dr Bernice Redley	RN, BN (Hons), PhD	Associate Professor, Centre for Quality and Patient Safety Research - Monash Health Partnership, School of Nursing and Midwifery, Deakin University Burwood
Dr Eric Richman	MBBS, FACEM, BBiomedSc	Senior Medical Officer and Staff Specialist, Ipswich Hospital Emergency Department
Prof Elizabeth Roughead	PhD, MAppSc, DipHealthEd&Prom, BPharm	Research Professor, School of Pharmacy and Medical Sciences University of South Australia
Dr Alison Ryan	MBBS, FACEM	Deputy Director, Emergency Department QEII Jubilee Hospital; Supervisor, Training for Medical Education Registrar
Dr Mark Scott	MBBS, FACEM	Senior Staff Specialist, Emergency Department, Caboolture Hospital

Name	Qualifications	Position
Dr Andrew Staib	MBBS, FACEM, Grad Dip Aviation Medicine, FACHI	Deputy Director/Senior Staff Specialist, Emergency Medicine, Princess Alexandra Hospital; Co-Director, Healthcare Innovation and Technology Excellence Collaboration , Clinical Excellence Division; Medical Lead for Digital Health, Clinical Excellence Division, Queensland Health; Co-Chair, Queensland Emergency Department Strategic Advisory Panel, Clinical Excellence Division; Co-Chair, Statewide Digital Healthcare Improvement Network, Clinical Excellence Division; Chair Queensland Digital Hospital Program Clinical Advisory Group, Clinical Excellence Division
Distinguished Prof Patsy Yates	PhD, MSocSc, BA, DipAppSc RN, FACN, FAAN	Head, School of Nursing, Queensland University of Technology; Director, Centre for Palliative Care Research and Education, Queensland Health



Glossary

A

A/Prof	Associate Professor
AACPA	Australian Association of Consultant Pharmacy
ABN	Australian Business Number
ACA	Associate Chartered Accountant
ACCCN	Australian College of Critical Care Nurses
ACEM	Australasian College of Emergency Medicine
AFACHSM	Associate Fellow Australian College of Health Service Management
AM	Order of Australia, Member of the Order
AN	Accredited Nutritionist
APD	Accredited Practising Dietitian
ARPharmS	Associate of the Royal Pharmaceutical Society

B

BA	Bachelor of Arts
BAppSc	Bachelor of Applied Science
BBiomedSc	Bachelor of Biomedical Science
BBus	Bachelor of Business
BDS	Bachelor of Dental Surgery
BEmergHlth	Bachelor of Emergency Health
BN	Bachelor of Nursing
BPharm	Bachelor of Pharmacy
BSc	Bachelor of Science
BScAgr	Bachelor of Science, Agriculture

C

CCPU	Certificate in Clinical Performed Ultrasound
CONSEPT	Convulsive Status Epilepticus Paediatric Trial
CPA	Certified Practising Accountant
CREDIT	Cannulation Rates in the Emergency Department Intervention Trial
CSE	Convulsive status epilepticus
CSIRO	Commonwealth Scientific Research Organisation

D

DGR	Deductible Gift Recipient (Australian tax exemption)
DipAppSc	Diploma of Applied Science
DipHealthEd&Prom	Diploma of Health Education and Promotion
DipPaeds	Diploma of Paediatrics
Dr	Doctor
DrPH	Doctor of Public Health

E

Econ	Economics
ED	Emergency Department
EMDM	European Master in Disaster Medicine
EMF	Emergency Medicine Foundation

F

FAAN	Fellow American Academy of Nursing
FACEM	Fellow of the Australasian College of Emergency Medicine
FACHI	Fellow Australasian College of Health Informatics

FACHSM	Fellow of the Australasian College of Health Service Management
FACN	Fellow of the American College of Nutrition
FACP	Fellow of the American College of Physicians
FACRRM	Fellow of the Australian College of Rural and Remote Medicine
FCICM	Fellow of the College of Intensive Care Medicine of Australia and New Zealand
FEISTY	Fibrinogen Early In Severe Trauma study
FPS	Fellow of the Psychonomic Society
FRAC	Finance, Risk and Audit Committee
FRACP	Fellow of the Royal Australian College of Physicians
FSHP	Florida Society of Health-System Pharmacists
FTE	Full time equivalent

G

GAICD	Graduate of the Australian Institute of Company Directors
GCert	Graduate Certificate
GCertAustRurLeadership	Graduate Certificate of Australian Rural Leadership
GradCertClin USS	Graduate Certificate of Clinical ultrasound
GCPA	Graduate of CPA Australia
GEDI	Geriatric Emergency Department Intervention
GradDip	Graduate Diploma
GradDip AppFinInv	Graduate Diploma Applied Finance and Investment
GST	Goods and service tax

H

HHS	Hospital and Health Service
HiNH	Hospital in Nursing Home program
Hons	Honours

I

ICEN	International Conference of Emergency Nurses
IV	Intravenous

L

LLB	Bachelor of Laws
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M

MA	Master of Arts
MACMHN	Member of the Australian College of Mental Health
MAICD	Member of the Australian Institute of Company Directors
MAppSc	Masters Applied Science
MBA	Master of Business Administration
MBBS	Bachelor of Medicine, Bachelor of Surgery
MBChB	Bachelor of Medicine, Bachelor of Surgery
Mbiostats	Master of Biostatistics
MClinEd	Master of Clinical Education
MD	Doctor of Medicine
MEd	Master of Education

MHA	Master of Healthcare Administration	Q	
MHPE	Master of Health Professions Education	QCH	Queensland Children's Hospital
MHSM	Master in Health Systems Management	QERC	Queensland Emergency Research Collaborative
MMedSc	Master of Medical Science	QIMR	Queensland Institute of Medical Research
MNutrDiet	Master of Nutrition and Dietetics	QLD	Queensland
MPH	Master of Public Health	QUT	Queensland University of Technology
MPhil	Master of Philosophy		
MPH&TM	Master of Public Health and Tropical Medicine	R	
MSc	Master of Science	RBWH	Royal Brisbane and Women's Hospital
MSocSc	Master of Social Sciences	REP	Research Evaluation Panel
		RN	Registered Nurse
		RSQ	Retrieval Services Queensland
N		S	
NHF	Nasal high flow	SAC	Scientific Advisory Committee
NHMRC	National Health & Medical Research Council	SGC	Strategic Grants Committee
NT	Northern Territory	T	
NZ	New Zealand	THRIVE	Transnasal Humidified Rapid-Insufflation Ventilatory Exchange
P		U	
Pmed	Paramedic	UK	United Kingdom
PhD	Doctor of Philosophy	UQ	The University of Queensland
PHO	Principal House Officer	US/USA	United States of America
PGradDip J	Postgraduate Diploma Journalism	UWA	University of Western Australia
PREDICT	Paediatric Research in Emergency Departments International Collaborative	W	
Prof	Professor	WHEN	Watch-house Emergency Nurse

In vale: Dr Colin Page



EMF joined with the Australian toxicology and emergency medicine community in mourning the death of Dr Colin Page in December 2018.

Dr Page was awarded the 2014 EMF Noel Stevenson Fellowship, in honour of eminent Queensland emergency medicine physician, Dr Noel Stevenson, to undertake a Doctor of Philosophy.

Despite remaining uncompleted, this body of research led to advances in treating prescription drug overdose, and the evaluation of a successful new sedative introduced by the Queensland Ambulance Service to sedate violent patients.

Dr Page was a passionate and caring emergency physician who undertook sub-specialty training in clinical toxicology.

Pictured: Dr Page receiving his EMF research grant from the Queensland Health Minister at the time, Lawrence Springborg.

Thank you to the following active collaborators on EMF research grants

IN AUSTRALIA

Queensland Hospitals/ Health services

Bundaberg Base Hospital
Caboolture Hospital
Cairns Hospital
Caloundra Hospital
Gold Coast Private Hospital
Gold Coast University Hospital
Hervey Bay Hospital
Ipswich Hospital
John Flynn Private Hospital
Logan Hospital
Mackay Base Hospital
Maryborough Hospital
Mater Hospital, Brisbane
Mount Isa Hospital
Nambour General Hospital
Pindara Private Hospital
Princess Alexandra Hospital
Queen Elizabeth II Jubilee Hospital
Queensland Children's Hospital
Redcliffe Hospital
Robina Hospital
Rockhampton Base Hospital
Royal Brisbane and Women's Hospital
Stanthorpe Hospital
Sunshine Coast University Hospital
The Prince Charles Hospital
The Townsville Hospital
Thursday Island Hospital
Toowoomba Hospital
Warwick Hospital
Wide Bay Public Health Unit

Interstate Hospitals/Health services

Alfred Hospital
Armada Health Service
Austin Hospital
Ballarat Health Services
Calvary Mater Newcastle

Fiona Stanley Hospital
Liverpool Hospital
Liverpool Hospital
Monash Medical Centre
Monash Health
Prince of Wales Hospital, Sydney
Princess Margaret Hospital for Children
Royal Children's Hospital, Melbourne
Royal Darwin Hospital
Royal North Shore Hospital
Sutherland Hospital
The Queen Elizabeth Hospital
The Royal Melbourne Hospital
Women's and Children's Hospital, Adelaide

Government

Queensland Ambulance Service
Queensland Police Service
Queensland Health:
• Clinical Forensic Medicine Unit
• Health Disaster Management Unit
• Retrieval Services Qld
Queensland Pathology

Universities

Bond University
Central Queensland University
CSIRO
Flinders University
Griffith University
Harry Perkins Institute of Medical Research, Centre for Research in Emergency Medicine
James Cook University
Monash University
Murdoch Children's Research Institute
PREDICT network
QIMR Berghofer Medical Research Institute

Queensland University of Technology
The University of Queensland
The University of Sydney
University of Newcastle, Australia
University of New South Wales
University of Southern Queensland
University of Sydney
University of Tasmania
University of the Sunshine Coast
University of Technology, Sydney

Industry

Adrenaline Dive
Australian Red Cross Blood Service
CareFlight Northern Territory
Gold Coast 2018
Commonwealth Games Corporation
LifeFlight Australia
Neami National Cairns

OVERSEAS

Hospitals/Health services

Auckland City Hospital, NZ
Starship Children's Hospital, NZ

Universities

Imperial College London, UK/
KEMRI-Wellcome Trust Research Programme, Kenya
University of Auckland, NZ
University of Gothenburg, Sweden
University of Hong Kong

Industry

Diver's Alert Network America, USA

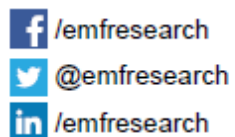
Congratulations to the 133 clinicians and researchers working on new grants awarded by EMF in 2018-19

Dr Polash Adhikari	Prof Daniel Fatovich	Dr Richard Lakeman	A/Prof Luregn Schlapbach
Dr Michael Aitken	Prof Gerard FitzGerald	Dr Benjamin Lawton	A/Prof Andreas Schibler
Dr Neil Archer	Dr Donna Franklin	Ms Kylie Lindsay	Prof Paul Scuffham
Prof Paul Arbon	Ms Katherine Fenech	Dr Paula Lister	Ms Jessica Shults
A/Prof Glenn Arendts	Prof John Fraser	Dr Elliot Long	Dr Rajesh Sehdev
A/Prof Franz Babl	Dr Vinay Gangathimmaiah	A/Prof Stephen Macdonald	Dr Ross Sellars
Prof Michael Bailey	Prof Brenda Gannon	Dr Elizabeth Marsden	Ms Christine Shaw
Ms Shannon Bakon	Dr Shane George	Prof Stephen Margolis OAM	Dr Simon Smith
Prof Rinaldo Bellomo	Dr Clinton Gibbs	Dr Philip Masel	Dr David Spain
Dr Hollie Berghofer	A/Prof Kirsten Gibbons	Prof Malcolm McDonald	Dr Richard Stone
Dr Anwar Bilal	Ms Kristy Grant	A/Prof Mark Michalski	Ms Kaylene Sutherland
Dr David Brain	A/Prof Jaimi Greenslade	Mr Gabor Mihala	Ms Vivian Tapiolas
Dr Marc Broadbent	Dr Apil Gurung	Prof Dev Mitra	Prof David Taylor
Mr Rexie Burke	Dr Josh Hanson	Dr Phillip Mondy	Dr Neale Thornton
A/Prof Joshua Byrnes	Ms Amanda Harley	Mr Brendan Mulhern	Dr Melita Trout
Miss Claudia Bull	Dr Jacquie Harper	A/Prof Vasilios Nimorakiotakis	Prof Andrew Udy
Dr Nicholas Cairns	Ms Sarah Hazelwood	Dr Chukwuemeka Nwufoh	Dr Amanda Ullman
Dr Don Campbell	Dr Allison Hemenstall	Dr Ulrich Orda	Ms Kristy Van
Dr Corey Cassidy	Ms Lisa Higgins	Dr Anthony Padowitz	Prof Bala Venkatesh
Prof Wendy Chaboyer	Ms Angela Hills	Dr Richard Parker	Prof Marianne Wallis
Ms Karina Charles	Dr Julia Hocking	Prof Sandra Peake	Dr James Walsham
Ms Brooke Charters	Dr Anthony Holley	Dr Siegfried Perez	Dr Ben Walters
Dr Arjun Chavan	Dr Jeremy Hsu	Mr Joe Petrucci	Prof Robert Ware
Dr Sean Clark	Mr James Hughes	Dr Jeff Presneill	Dr Julian Williams
Prof Alan Clough	Mr Rene Hutchins	Dr Anthony Nguyen	Ms Tricia Williams
Dr Tom Constantine	Prof Alison Hutton	Mr Chris Raftery	Dr James Winearls
Prof Julia Crilly	A/Prof Peter Jones	Dr Jamie Ranse	Dr Greg Wiseman
Prof Louise Cullen	Dr David Johnson	Mrs Mercedes Ray	Ms Sally West
Dr Sandi Dawson	Dr Amy Johnston	Dr Michael Reade	Prof Martin Wullschleger
A/Prof Janet Davies	Dr Faye Jordan	Ms Bernadine Romero	Prof Ian Yang
A/Prof Anthony Delaney	Prof Gerben Keijzers	Dr David Roxby	Dr Peta-Anne Zimmerman
Ms Mel Dixon	Dr Alex King	Dr Glenn Ryan	
Ms Jill Duncan	Dr Megan King		
Dr Wayne Dwyer	Dr Frances Kinnear		
Senior Constable Angela Evans	Ms Tricia Kleidon		



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