Ten years ago, Monash Partners was established with a clear vision to embed research into healthcare to deliver impact for our community and beyond.

Monash Partners is a member of the Australian Health Research Alliance (AHRA), encompassing Australia’s NHMRC-accredited Research Translation Centres. The Centres are recognised for their excellence and collaboration in health and medical research, research translation, research-infused education and training, and outstanding healthcare.

For more detailed information about the work of AHRA, please visit AHRA.org.au

This publication outlines the work of Monash Partners activities during 2021 and is not an annual report. If you are viewing this online and would prefer a hard copy, please email info@monashpartners.org.au

Monash Partners acknowledges the traditional custodians of the land and waterways on which our Australian Partners stand. We pay our respects to these cultures, their Elders past, present, and future, and continue to uphold their ongoing relationship to the land.

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Monash Partners Academic Health Science Centre (Monash Partners) gratefully acknowledges funds received from the Federal Government. Projects supported by the Australian Government’s Medical Research Future Fund (MRFF) are part of the Rapid Applied Research Translation program through Monash Partners. We also gratefully acknowledge the support of the Victorian State Government.

Our work would not be possible without the generosity of our philanthropic and community Partners.

For more detailed information about our work, please visit monashpartners.org.au

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Ten years ago, Monash Partners was established with a clear vision to embed research into healthcare to deliver impact for our community and beyond.
Monash Partners holds a unique position, as the bridge or glue bringing together researchers, clinicians and the community to innovate for better health. Our focus is one of understanding priorities and of responsive research and translation that delivers meaningful and direct impact above and beyond traditional research grants and publications. Monash Partners is an organisation which is committed to cross sector, interdisciplinary solutions to some of our greatest challenges and to showcase that, through collaboration and partnership, real impact can be made.

Over the past decade, all of us within the healthcare research space have witnessed transformational change in terms of engagement of, and with, health services, clinicians and our community in research. There have been real strengths surrounding the involvement of stakeholders in research and translation. This has been only too evident during the recent COVID-19 pandemic where the link between research, health services, policy makers and the community was crucial.

The aim of Monash Partners is to embed research in healthcare at all levels and across all regions. When research is embedded into healthcare it can truly make a difference within the community and have real impact. And again, this was further highlighted during the past two years when dealing with the pandemic.

Since its inception, Monash Partners has had the potential to be a pivotal driving force within the healthcare research landscape. Over our first decade we have realised this potential. Through deeply embedded partnerships with the research community and by utilising the broad and diverse capability that its research Partner, Monash University brings, we have seen partnership, responsiveness, innovation and impact flourish. Our partnerships have ensured responsiveness, innovation and impact flourish. These are detailed within this Impact Report.

To, as we close out the first decade of Monash Partners and look to the next, I look forward to adding to the work that has already been done in an effort to further our reach and impact and to continue to drive better health through research.

Professor Christina Mitchell AO
Chair
Monash Partners

When research is embedded into healthcare it can truly make a difference within the community and have real impact.

Ten years ago, Monash Partners was established with a clear vision to embed research into our health system and deliver health impact.

Despite initial challenges and barriers, Monash Partners has evolved to meet the shared purpose developed by our Partners: connecting researchers, clinicians and the community to innovate for better health.

Navigating and balancing the overarching purpose of the NHMRC accredited Research Translation Centres, with international and national policy trends, the purpose and values of our partnership and our Medical Research Future Funding, we have focused on the challenging task of ‘flipping the paradigm’ from competition to collaboration.

In applied research, we have driven cultural change, leveraging that excellence for collaborative co-production with stakeholders. We have focused on meeting sector priorities and have delivered research and translation with impact including reducing diabetes mortality and optimising critical care recovery.

We have co-developed our strategic plan and moved away from being yet another funding entity, to focus on partnerships and collaborative funding in prioritised areas across our partners. Large scale partnerships are in place across all NHMRC accredited Centres nationally and have attracted funding. We have diversified and expanded Monash Partners funding streams including community partnerships supporting collaboration, priority setting, research and translation with consumer groups. Our philanthropic partnerships focus on research integration into healthcare and on impact. We have strengthened partnerships with state government and secured state government funding in the Learning Health System and in facilitating clinical research. NHMRC funding has been obtained in priority areas as well as MRFF competitive funding in data infrastructure and supporting the Learning Health System. Since 2015 we have attracted over $16M in funding directly into Monash Partners and we have funded 48 research projects. In 2021, we reached $16M in funding directly into Monash Partners and we have funded 48 research projects. In 2021, we reached $16M in funding directly into Monash Partners and we have funded 48 research projects. In 2021, we reached 3,424 people through our education, training and events.

This past decade has seen Monash Partners address key gaps and priorities identified in the McKeon Review of Health and Medical Research, to deliver better health through research, yet this is challenging and curtailed without incentives and broader system level change to address enablers and barriers.

Moving forward, the Monash Partners team is committed to supporting our Partners to leverage our research excellence and strengthen existing collaborative efforts to respond to health service and community priorities and needs. This will drive culture change to integrate research and translation into healthcare to deliver impact.

This report seeks to showcase the work we have achieved together as Monash Partners including our policies, processes, training and funding strategies, which reflect our focus on system level, organisational and cultural change.

If you think competition is hard, you should try collaboration.

Professor Helena Teede AM
Executive Director
Monash Partners

Dr Angela Jones
Chief Operating Officer
Monash Partners
Health leadership and impact through COVID

An introduction

As this publication reflects on Monash Partners’ 10-year journey, it would be remiss not to highlight the biggest impact on the health of our community, healthcare and research over the past two years – COVID-19 and the role research and translation has played in this critical part of our history.

The public health response we have all contributed to and witnessed in Victoria these past two years has been a remarkable success with COVID related deaths 15-20 times lower than in Europe and the Americas.

Whilst we are now afforded increasing freedoms thanks to our vaccination status and significant reduction in hospitalisations, we understand that this time has been particularly hard for the community and for the health and academic sectors.

Our health services and workforce have worked tirelessly, putting themselves at risk for the health and safety of others. They have rapidly adapted and transformed care including remote, virtual care. Our researchers have been pushed to their limits delivering new innovations whilst dealing with insecurity and austerity in the university sector and managing dramatic funding limitations and major changes to the way we research and teach. We have pivoted, zoomed and socially distanced, to keep our community and staff supported and as safe as possible.

While the pandemic has presented many challenges, it has also provided an unprecedented window of opportunity for reform. These include retaining and building on pandemic-driven innovations in service models and system design, and the opportunity to leverage the learnings from the COVID-19 emergency response to inform future emergency responses.

Research and translation also continues to play a crucial part with vaccine development and old/new treatments having emerged as vital. Public health promotion/prevention was also key as the community and government came to value research more than they ever have before.

After a long two years at the helm of this crisis, we spoke to each of our leading health service, research and academic Partners and Associate Partners to understand how they supported research and translation, how COVID transformed their operations, their key learnings and reflections and what they will take from this pandemic going forward.

COVID statistics in Victoria

- 975K COVID overall cases
- 930,381 COVID total people recovered
- 14,018,105 COVID total vaccines administered
- 2,333 COVID total lives lost
- 1,229 COVID cases in hospital at peak

Rapid transformations in care
- telehealth
- virtual care
- hospital supported COVID pathways.
The whole organisation came together and thought about the importance of good communication and inclusion. From a leadership point of view, we learnt that we needed to plan, monitor and support governance structures, thus also strengthening our governance and governance structures, keeping them up-to-date on things which were happening. Consultation along with diverse views and feedback really helped us consider where we might improve our governance structures.

**Key innovations and transformation**

As a research-intensive health service, the rapid translation of research into clinical care and organisational decision making has been crucial to Alfred Health’s response during the pandemic. Alfred Health took on a central role in keeping the community safe from COVID-19. Partnering with the Victorian Government, we assumed clinical responsibility for the health and complex hotels in the State’s hotel quarantine program using an evidence-based approach to safety systems that became the standard for Alfred Health.

Our clinician researchers led surveillance and clinical trials in COVID-19 and new antivirals, and sat on key advisory committees, driving evidence into practice and policy. With academic and industry partners, we led the Victorian Healthcare and Aged Care Workers (COVID-19) cohort study, monitoring the health of more than 1500 Victorian frontline healthcare workers across hospital, ambulance, aged care and primary care settings. The findings of this study informed organisational responses to safeguard the health and wellbeing of our staff.

Rapid translation from excellence in research into frontline practice was unprecedented, taking evidence-based, quality, outreach care to our community. Our community care pathway became critical, as well as implementing new workforce models, and developing new ways to communicate with people at all levels across the organisation to gain a real richness and connectedness, and engaging in telehealth.

**Key learnings**

What has ultimately positioned Alfred Health during this time was teamwork and exceptional buy-in from our leaders. Our response to the pandemic has been planned and organised and supported by a strong governance framework.

**Moving forward**

Going forward, our organisation will need to find a way to balance the demands of COVID with our business as usual work. We will keep the advances we have made in communicating with and engaging with people across all levels of the organisation. We will maintain and expand the role of telehealth, supporting out of hospital care and in our support for local/Regional partners. We will continue to work across our health service partnerships to find more capacity to meet the demand of postponed and deferred care and restructure systems to make out of hospital care as efficient as in hospital care. Moving forward, we would also like to maintain high levels of leader buy-in and ownership through deep communication, consultation, and embracing diversity and feedback.

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Our response to the pandemic has been planned and organised and supported by a strong governance framework. It was about thinking outside of the box and being agile, flexible and leading from the front.

**Ms Simone Alexander**

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The pandemic created an opportunity for Monash Health to innovate, not just in how we responded to COVID but how we approached many of our day-to-day operations, which have become embedded into our workflows. During the past two years, there has been an enormous number of COVID research and quality improvement studies undertaken by Monash Health, including many with our Partners having national reach. One example is the surveillance of both adult and paediatric cancer patients Australia-wide after they received their COVID vaccinations. Another important research focus has been on pregnant women and their babies. Monash Health is Victoria’s leading streamer service for COVID positive pregnant women and has allowed some really exciting and important research. Clinician researchers in our Maternity Service have been looking at how COVID is transmitted vertically between mum and baby as well as various treatments that are safe for both the mum and the baby. Our maternity facility have also set up a registry for women Australia-wide who have been affected by COVID, to respond to the rapidly evolving landscape of antenatal care. These studies are changing the healthcare response in relation to COVID.

In March 2020, the Monash Health CEO supported establishment of the Clinical Trials Strategy and Governance Group to help manage change and the continuation of our clinical trials through the uncertainty of the pandemic. Thanks to this group’s engagement and pragmatic approach, we were able to review many of our operating practices and maintain the safe continuation of most of our research and clinical trial activity. In fact, throughout 2021, we actually saw an increase in research activity.

One of the most important things to come from this newly formed group was that we were able to engage an active community with all of the clinical trial leads which created a platform to start considering the actions of the National Clinical Trials Governance Framework. This group, which had been in planning for some time, only really got momentum as a result of the pandemic and has had a positive impact on many aspects of our research operations, including many long-standing, persistent issues that are now being addressed.

Another area of transformation was in the protocols and operating procedures we put in place as a result of COVID. This enabled us to develop a home visits protocol, establish remote monitoring procedures for trial monitors in commercial studies and look at electronic options for informed consent for research participants. These practices have allowed us to be more efficient and provide flexible options that benefit our researchers, clinical trials teams and, of course, our patients.

**Key learnings**

Our academic partnerships and the ability of our leaders, clinicians and researchers to come together as a community have been essential to adopting an evidence informed approach to some of our most complicated problems. Many pandemic-related restrictions have forced us to be innovative and find opportunities for healthcare improvement. Many of the changes made will remain after the restrictions have been lifted.

**Moving forward**

During COVID, the Monash Health Foundation was able to raise almost $100,000 for COVID related research. This has shown fantastic involvement from major donors and the community in our research and has started important conversations about how we incorporate fundraising into our planning and research promotion. This is something that will certainly continue into the future.

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The pandemic created an opportunity for Monash Health to innovate, not just in regard to how we responded to COVID but how we approached our day-to-day operations.

**Ms Debbie Dell**

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The pandemic created an opportunity for Monash Health to innovate, not just in regard to how we responded to COVID but how we approached our day-to-day operations.
Professor Christina Mitchell, Academic Vice-President and Dean of the Faculty of Medicine, Nursing and Health Sciences at Monash University reflects on the COVID-19 pandemic from an organisational and personal perspective.

Key innovations and sustaining research

Throughout the pandemic, Monash University maintained that research was a priority. We had to keep working and we did. This is a tribute to the Vice Chancellor and all the leaders within the medical faculty and embedded in the hospitals. Keeping our research going was essential and it couldn’t be shut down.

Sustaining our research was made easier due to two major factors. The first was having pre-existing research excellence and expertise, whether it was for the basic sciences and understanding the actual virus itself, to our knowledge on vaccines and mRNA technology, and how this can be used in the design of new vaccines or in public health approaches to fighting viral spread.

Secondly, Monash University has a wonderful public health team, both within and outside the Faculty, who worked collectively to undertake research, inform policy and provide advice to government. An example can be seen in the COVID Living Guidelines produced by Associate Professor Julian Elliot from the School of Public Health and Preventive Medicine at Monash University.

Key learnings

Two of our key learnings have been communication and the importance of partnership. Our health services were under immense pressure, and continue to be so, facing and responding to rapid changes to serve their community. Being able to communicate and have good relationships with our health service partners, including through Monash Partners, was essential for Monash University during this difficult period. The strength of our partnership model allowed us to be responsive to health and community need and facilitated development of new programs and support of our research and students during the pandemic.

From a personal viewpoint, I believe a key learning which can be seen in the COVID Living Guidelines produced by Associate Professor Julian Elliot from the School of Public Health and Preventive Medicine at Monash University.

Moving forward

There have been many innovations in many areas that Monash University and our partnerships want to, and will, retain. However, I think we will only know in time which ones were really critical. Some of the learnings we have had with respect to communication and being able to connect virtually is great, however we do not want to purely rely on this technology. There needs to be a point when some face-to-face communication is reintroduced. We want to be able to take the best from what we have learned, whilst recognising those areas which are crucial to be reinstated.

Associate Professor Dr Luis Prado, Chief Medical Officer of Epworth HealthCare reflects on the COVID-19 pandemic from an organisational and personal perspective.

Key innovations/ transformation and sustaining research

Pre-admission testing was critical at Epworth. In 2021, we had more cases of asymptomatic positive and mildly symptomatic positive cases for elective procedures with the Delta variant of COVID than the whole country had with the Alpha variant in 2020. Without the implementation of our testing regime, we would have had a large number of very difficult to manage outbreaks within the system. Pre-admission testing for an infectious disease is not something we have done routinely before in healthcare. We have tested for people’s individual clinical risk, but never for community-based risk. It is a key innovation that we see being in place even with the vaccinated community.

Another key innovation was the introduction of portable HEPA filters into our clinical areas (e.g. emergency departments and maternity units) which allowed us to treat COVID positive patients. It has also been imperative for us to understand the importance of hospital ventilation and to develop key relationships between clinicians and engineers to be able to manage outbreaks.

In terms of our clinical trials and research, these continued, despite our initial thinking, under appropriate risk management and our working from home model. We were still able to provide a considerable amount of research funding and maintain our relationships with our partners, including Monash Partners.

Key learnings

In March 2020, Epworth made two very important decisions. The first was that we would not allow any patients to die alone no matter the circumstances. Regardless of the risk, we believed that we had to be true to our values and this is consistent today. This was held true when providing care for those COVID patients who died of the condition, many of whom were from the aged care outbreak.

The second was that we decided every decision would be framed around protecting patients, protecting staff and doctors, and protecting our facilities. We used the best evidence provided to us at the time, were agile in our responses, and used an ethical decision-making framework to make decisions. Our communication was transparent and honest, our accountability for decisions was clear and we made a commitment to operationalise our decisions as quickly as possible. This led to many ‘interim’ protocols being developed, information getting out, establishing a staff clinic and COVID Hotline. This ensured we were able to support every staff member, doctor, and patient who contraindicated COVID via clinical review and establishing medical plans for escalation. This has continued throughout 2022.

On a personal note, it has been wonderful to see the rise of the “research academic” throughout the community, and within Epworth. Hopefully this has potentially triggered a whole generation of young people to see the benefit and importance of science to the community and for our research academics to be seen as trusted experts undertaking critical roles.

Moving forward

Research that enhanced understanding of aerosol transmission as the predominant mode of COVID-19 spread has influenced policy, with Epworth embedding measures to optimise ventilation and reduce infection risk to hospital staff as part of its clinical risk management. This has included simple, cost-effective, flexibly deployed technology such as HEPA filters to protect healthcare workers.

In addition, there will be a continued focus on community health and infectious disease prevention more generally in terms of normal hospital operations.

Research was a priority. We had to keep doing research and we did.

Professor Christina Mitchell
Cabrini Health

Professor Gary Richardson OAM, Group Director of Cabrini Research at Cabrini Health reflects on the COVID-19 pandemic from an organisational and personal perspective.

Key innovations and transformation

As a private healthcare provider, Cabrini Health felt the greatest impact through the cancellation and reductions in elective surgery. As a significant revenue source, essentially the livelihood of our organisation, we effectively had an ‘emptying out’ of our service. Crisis however sometimes generates opportunities. Partnering with the State Government and Australian Government ensured our viability, and in turn we provided much needed support to our public healthcare partners, through the provision of facilities and workforce, and an expansion of our ICU. It also gave us the time to undertake much needed renovations to old multi-bed rooms, converting them into single rooms to provide better healthcare, infection control and patient experience.

We implemented as many safe mechanisms as we could for our patients, to keep their fear and the risk of COVID-19 coming into the hospital at bay. These included hospital entry requirements, home hospital services to allow for rapid discharge, safety extending follow-up visits, utilising virtual meeting technology, and the introduction of telehealth. While the changes were forced, it created a novel environment to test new processes, some of which will be implemented permanently as they have improved engagement with staff and patients and access to healthcare.

While our clinical staff took on the difficult job of frontline care, our non-clinical staff, including our research teams, had to adapt to the working from home policy. Communication was the major focus, ensuring we kept our teams engaged, feeling supported, and their wellbeing protected. The Cabrini Research Sessions, a virtual research series that was held fortnightly in 2021, effectively engaged more researchers and clinicians in information sharing and collaboration than any face-to-face event that had preceded the pandemic, often tripling the attendances. Due to its success the series will continue, making life a lot more efficient for all of us.

Despite the hardships, we also celebrated, Cabrini Research celebrated 25 years of breakthroughs and discoveries in 2021 while we opened stage 1 of the Cabrini Cancer Institute in April 2021.

Key learnings

From a personal viewpoint, the pandemic needed leaders to provide clear and consistent messaging to staff. People were worried about their jobs, infecting their loved ones, dying of COVID, about everything. So as a leader, you had to provide information that was clear, consistent and frequent. We had to ensure our people felt supported, safe and reassured. Frequent meetings needed to be held at all levels across the organisation. We had to remain positive, which was really challenging at times and show commitment to achieve favourable outcomes.

Our ability as a private organisation to be nimble, and our capacity to say that we were changing things completely at a moment’s notice was a key learning for us and enabled us to pivot and transform when and where we needed to.

Moving forward

Cabrini is keen to expand our home-based hospital services and continue with telehealth consultations for patients. Administratively, our reliance on virtual meetings will continue, making life a lot more efficient for all of us.

Eastern Health

Adjunct Professor David Plunkett, Chief Executive and Adjunct Clinical Associate Professor Alison Dwyer, Chief Medical Officer of Eastern Health reflect on the COVID-19 pandemic from an organisational and personal perspective.

Key innovations and transformation

Eastern Health were firm believers in never letting a crisis go by without actually making some change. The pandemic afforded us the ability to have diverse conversations around what is important and where we should be focusing our efforts as leaders.

We have engaged externally with our patients and families over the past two years, focusing on their experience and how we can provide care in a smart way. We have innovated, while breaking down the traditional ways of how health and care have been provided.

One of our real success stories has been our partnership with our community and our community providers. We developed a community pathway model which allows us to listen to consumers; particularly about their experiences and what was important to them. From a leadership point of view, this approach has provided a single agenda allowing everyone involved in the partnership to be focused on delivering the one vision and react and respond accordingly.

Key learnings

A key learning from a leadership perspective has been about our frameworks: we have had to change, adapt and modify, both our organisational team and frontline frameworks. During the first wave of the pandemic we established an Incident Command framework and added new structures, whereas during the second wave we were really clear about how we integrate our existing frameworks into our daily operating systems and how we build our reporting structures from the ground up. For the longevity piece, you really have to build frameworks into your existing structures.

Another has been to listen to the people with expertise within an organisation including our research clinicians, regardless of their position or power. COVID taught us to centre all our decision making around the best outcome in terms of the care and service to our community.

A further learning has been communication – the amount you need, at an organisational level, at a middle management level and at a frontline level. COVID has shown us just how important targeted communication and an integrated communications structure is.

Moving forward

During these past two years, strong partnerships with our academic partners have been key to bringing evidence into a number of key areas. These have included clinical decision making on the floor around our COVID clinical practice; our evidence-base around our organisational approach, and learning from other key businesses in regards to their approach to COVID. We have used this evidence to guide our decisions about how, as an organisation, we not only respond to COVID but also other associated factors such as physician burnout, clinician burnout, and the concepts around moral distress as clinicians make ethical decision making around resource allocation. All of this evidence base has informed how we ebb and flow and change our clinical response, as well as our organisational response.

It has been an active decision over the last 18 months, and as we look to the future, that we are integrating research into our organisational decisions, frameworks and thinking.
Key innovations and transformation

Our Positive Pathways program encouraged collaboration and integration between our teams in acute and ambulatory care, allowing us to manage patients with COVID-19 safely in the community. This program provides clinical care, monitoring and support in an appropriate setting, for people who test positive for COVID-19. It allows us to re-engage with people, and in turn, assist in ensuring we can deliver safe, high quality care across the continuum of this illness. The feedback received was positive, with shorter turnaround times reported, improved outcomes and increased patient satisfaction.

We challenged and transformed the way we delivered care in an acute setting by encouraging innovation and collaboration among senior clinicians. A new model of care within our Respiratory Observation Unit moved away from the traditional consultant-led unit structure. This saw subject matter experts involved in all levels of decision-making, allowing medical staff from different specialties, critical care nurses, educators, specialised allied health staff and dedicated nurses work together.

Two recently opened capital projects demonstrate the significance of our key strategic partnerships, which have been a significant focus for the organisation over the course of the pandemic. In March, we opened our new research and teaching building at Frankston Hospital, the Ngamarna Centre (pronounced Nun-Ran-Gah, meaning to hear and listen), in partnership with Monash University. The new facility also houses the Healthy Ageing Data Platform and researchers of the National Centre for Healthy Ageing, a further joint collaboration between Peninsula Health and Monash University, funded by the Commonwealth Government. In January 2022, we welcomed the first patients to the Cancer & Clinical Trials Hub at Rosebud Hospital, the Ngarnga Centre, (pronounced Nun-Ran-Gah, meaning to hear and listen), in partnership with Monash University. The new facility also houses the Healthy Ageing Data Platform and researchers of the National Centre for Healthy Ageing, a further joint collaboration between Peninsula Health and Monash University, funded by the Commonwealth Government. In January 2022, we welcomed the first patients to the Cancer & Clinical Trials Hub at Rosebud Hospital, the Ngarnga Centre (pronounced Nun-Ran-Gah, meaning to hear and listen), in partnership with Monash University. The new facility also houses the Healthy Ageing Data Platform and researchers of the National Centre for Healthy Ageing, a further joint collaboration between Peninsula Health and Monash University, funded by the Commonwealth Government.

Moving forward

Through the National Centre for Healthy Ageing (NCHA) and its translational research programs, we will be striving to create innovative solutions for some of the biggest challenges in healthcare faced by our ageing community. This will occur through participation and leadership of the Living Labs programs conducted by the NCHA, that aim to develop new and integrated models of care focused on consumer needs and preferences. These research programs will cover a breadth of areas that enable people to age well in their communities, and help them deal with the complexities of chronic diseases. These models will be informed and supported by the Healthy Ageing Data Platform, and by novel translational facilities being developed by the NCHA supported by state-of-the-art technology.

The Cancer & Clinical Trials Hub at Rosebud, will be another significant area of transformation moving forward. It will attract the best cancer specialists and research trials, providing access to ground-breaking treatments for our communities that often have difficulty seeking out such care and opportunities because of the tyranny of distance.

Key learnings

We have learnt that when we give people the space and the freedom to reform, they do amazing things. We gave our people the space to innovate in a safe way and the opportunity to challenge the traditional hierarchy in the delivery of care. The freedom of thinking encouraged during the pandemic has demonstrated how much can be achieved by working in partnership across the health network and inside health services, to achieve innovation and reform.

One of our most notable learnings over the last two years is that when we give people the space and the freedom to reform, they do amazing things. We gave our people the space to innovate in a safe way and the opportunity to challenge the traditional hierarchy in the delivery of care. The freedom of thinking encouraged during the pandemic has demonstrated how much can be achieved by working in partnership across the health network and inside health services, to achieve innovation and reform.

Key innovations and sustaining research

The Burnet Institute has undertaken a broad range of work during the COVID-19 response including engagement in the public health response in Australia and internationally, disease surveillance, mathematical modelling, and diagnostic, therapeutic and vaccine development. Health equity is always a key focus of our work and this has been no different during the pandemic.

Previous experience and research, including during the Swine flu epidemic 10 years ago, had shown people don’t follow independently of their social networks. Also, social and structural factors make it difficult for many people to follow public health interventions such as quarantine and isolation. Early in the pandemic we asked ourselves the question – what would happen to a single mother, with three children in the eighth floor of the North Melbourne Housing Commission flats if required to quarantine or isolate? She would (hopefully) know what she needed to do, but may be unable to due to life circumstances. What help did she need during such an event and how do we ask her?

Such questions led the Burnet Institute, together with the Doherty Institute and other collaborators to establish the Optimise Study. Optimise examines how Victorians are experiencing COVID-19 and responding to the measures introduced to reduce COVID-19 transmission. This information then informs Victoria’s approach to COVID-19 and all the public health and social responses. It enables us to build something with, rather than for the community. Importantly, it was often a struggle to convey to people that models don’t “predict” the future perfectly, but instead are just one tool to help us understand the likely impact of interventions on the outcomes.

Disease surveillance and mathematical modelling was also an important part of our work to help us understand the likely outcomes of government interventions. It was often a struggle to convey to people that models don’t “predict” the future perfectly, but instead are just one tool to help us understand the likely impact of interventions on the response. And that outcomes of models change with people’s behaviour changes.

Moving forward

There has been clear evidence that we can trust people to manage their own health when given the opportunity, whether it be engaging in telehealth, self-testing or self-maintenance therapy. I believe the more power you give somebody to manage their health, the more likely they are to manage their health well. Importantly, they need to be given appropriate agency and information to do so. As well there needs to be ongoing investment in multidisciplinary research that incorporates social and behavioural research, epidemiology, disease surveillance and modelling.
Being proactive and flexible in terms of risk mitigation is critical to stay ahead of the curve in rapidly changing conditions.

Professor Tom Marwick

Key innovations and sustaining research

Like many organisations, Baker Heart and Diabetes Institute was able to pivot and focus some research on COVID-19.

This included bioinformatics specialists developing a tool to monitor mutations that make it difficult to develop COVID-19 vaccines and drugs; and undertaking studies looking at the persistent cardiovascular effects of the virus on the heart. We were able to develop this work whilst remaining on track to deliver big-picture breakthroughs in cardiovascular disease and diabetes.

As an organisation, it was critical not only to be abreast of the latest scientific literature but ahead of the curve in terms of risk mitigation. We introduced air purifiers and rapid antigen testing to high-risk areas early; our IT Department built and introduced a Bluetooth tracking system to support contact tracing; we introduced drive-through pathology testing for our diabetes patients; and we maintained separate teams in critical support areas to keep our research moving.

The provision of strong financial support through the Institute, along with solid philanthropic support, was critical to keep our research going during the pandemic and against the ongoing backdrop of a highly competitive research environment. Lack of security remains a key issue in science, and this was compounded by the pandemic.

Key learnings

Being proactive and flexible in terms of risk mitigation is critical to stay ahead of the curve in rapidly changing conditions. A diverse COVID management group provided valuable perspectives on how to address evolving issues, and best support our research, our facilities and our people.

Supporting and sustaining the mental health of staff and students was very challenging. The provision of wellbeing days, specialist training and working 75% and being paid for 100% for staff with caring responsibilities were among initiatives that we introduced to support our people and were well received.

As an institute that undertakes both research and clinical work, we are very concerned about the long-term consequences of the pandemic and lockdowns on people with chronic disease. We are starting to understand this, through our collaboration with Alfred Health as members of the Alfred Research Alliance, and through our own studies such as the impact of the pandemic on people living with diabetes. This work aims to help inform pandemic planning in the future but there is still much more to understand. We expect to see many people with advanced disease who were not able to manage their diabetes or cardiovascular disease or didn’t seek intervention quickly enough.

Moving forward

The importance of the mental health of staff and students came into sharp focus during the pandemic. We are continuing to train managers to ensure they are equipped to provide sufficient support.

Areas like IT were put under the spotlight during the pandemic, and they demonstrated their ability to deliver creative solutions to challenging issues. These innovations will continue to shape our workplace and are particularly important in terms of the advanced technologies we use and our research in areas such as bioinformatics.

We have formalised a process to discuss and document remote work options. Whilst we already had some staff working remotely prior to the pandemic, it focused greater attention and analysis of how best to support this process.

Hudson Institute

Professor Elizabeth Hartland, Director and CEO of Hudson Institute of Medical Research reflects on the COVID-19 pandemic from an organisational and personal perspective.

Key innovations and sustaining research

Inflammation is the leading cause of death from COVID-19 and is likely driver of long-term health consequences in COVID-19 survivors (known as long COVID). Given the unprecedented number of people affected, medical and clinical research in this area has never been more critical.

With the largest grouping of inflammation researchers in Australia, Hudson Institute is using its research expertise to develop treatments to mitigate the deadly inflammation caused by the virus in this pandemic; and prepare the scientific community for the next one.

Hudson has focused on expanding funding opportunities and building a platform to sustain research. We have grown our research translation programs and opportunities, including development of close partnerships with industry and health services, to commercialise and drive cutting-edge R&D across major areas of unmet medical need.

These include infection-associated inflammatory diseases, multidrug resistant infections, women’s health, male infertility, preterm birth and cancer precision medicine.

With a large discovery and clinical translation workforce leading research, thankfully we were classed as essential workers during COVID. That said, we have faced many challenges over the past two years. Essential functions became more difficult during the pandemic, including obtaining supplies such as reagents, recruiting patients into trials and obtaining patient samples, not to mention the trials of incorporating social distancing requirements into laboratory work.

Key learnings

COVID has reminded us how crucial it is to safeguard the health of Australians through advances in science and medicine.

The ability to develop an effective vaccine so soon after being exposed to a disease is due to the science and research that has been going on for the previous two decades. It reinforces that everything we do, from discovery though to a clinical trial, is so important.

Professor Elizabeth Hartland

COVID has put research front and centre in a way that it hasn’t been before. This has not only made the government and community aware of the value of research, it has also demonstrated how pivotal it is. Hopefully the conversation we have all been having around research can continue at this same level once COVID leaves us.

Moving forward

During COVID, Hudson continued to work with a combination of virtual meetings and on-site laboratory work. Moving forward we would like to hold onto our workplace flexibility, finding the balance between working from home and coming together in person as a team.

We have been working with both the State and Federal governments on a proposal for a new building on site – the National Centre for Inflammation Research (NCIR) – a world-class research and development hub focusing on the role of inflammation in acute and chronic disease that contributes to more than 50 per cent of deaths worldwide. COVID helped us identify some of the deficiencies in our existing facilities and build a business case which will really change the direction of the Institute for the next 30 years. This new infrastructure will enable our inflammation scientists to continue their crucial work in a fit-for-purpose, state-of-the-art facility.

Professor Elizabeth Hartland

Director and CEO
Hudson Institute of Medical Research

The ability to develop an effective vaccine so soon after being exposed to a disease is due to the science and research that has been going on for the previous two decades.
La Trobe University

Key innovations and sustaining research

During COVID most of the research through our Academic and Research Collaborative in Health (ARCH) program was still relevant and needed by our health service partners and their consumers. This research addressed problems already in existence before the pandemic began – falls prevention, injury prevention, maintenance of quality and safety. COVID just meant we had to modify what we were doing, rather than completely stop.

We also made a big shift towards consumer co-production. We believe that by working with consumers from day one to set research questions and priorities, to design the research together, and to implement it together has really changed the way we do research. Not only during the pandemic, but going forward.

Key learnings

We learnt that we needed to work together and stop reinventing the wheel. We acknowledged we needed a planned, strategic approach to how we pivot from usual care, to largely digital methods of service delivery and evaluation.

For La Trobe, being a member of Monash Partners helped us work with a broad range of industry partners to use the principles of implementation science to co-produce research and rapidly implement research findings into practice. The Monash Partners platforms provided useful resources to ensure consumer involvement is considered and adopted at every stage. Through this partnership we learned about doing things at scale and in collaboration. And we learned that the impact is much greater.

Professor Meg E. Morris, ARCH Executive Director and Professor Implementation Sciences, La Trobe University

Latrobe Regional Hospital

Key innovations and transformation

In 2021 we saw a huge increase in COVID-19 within our community with an associated increase in presentations to our hospital. Workforce shortages related to staff furloughing required us to consider extended care models and adopt students as part of a surge workforce. Policy and protocol development in support of COVID-19 management of patients has supported our commitment to growing our clinical trials capacity and pharmaceutical engagement. This has supported our partnership with Alfred Health and Monash Health, driving forward oncology research.

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Key learnings

Key learnings included embracing innovation, being adaptable and being flexible to meet the needs of a changing clinical environment in order to achieve quality care and improve patient outcomes. This approach has been fostered through education in support of best practice and research including clinical trial activity.

It was remarkable to see our numbers of trials in the oncology space advance, despite the pandemic. Our partnership with Alfred Health and Monash Health, has supported our commitment to growing our clinical trials capacity and pharmaceutical engagement. This collaboration has certainly been a shining light in what has been a dark time for health services.

Innovations likely to be kept post-pandemic include telehealth as an option for our postnatal care unit for mother and baby, and digital team training and webinar sessions that support resource sharing and professional development outreach across our region.

Dr Anita Raymond, Executive Director Education, Training and Research, Latrobe Regional Hospital

Moving forward we will focus on digital innovation, digital technologies and digital literacy, providing our health workforce, researchers and consumers with ideas, education and resources to deliver digitally enhanced care in hospitals, at home and in the community.

Dr Anita Raymond, Latrobe Regional Hospital
In 2011, Monash Partners was established as Australia’s first Academic Health Science Centre.

Overseas, Academic Health Science Centres had been operating in the US and Canada for a number of years prior, before migrating to Sweden, the Netherlands and eventually to the UK. The concept became the subject of discussion in Australia after it was noted the overseas centres were helping to bridge traditional boundaries between education, healthcare and scientific research. In turn, this was enabling the discovery of innovative health improvements and new ways of providing patient care.

Of particular interest to Monash Partners was University College London’s academic health science partnership—UCLPartners, which was established in 2009 and today is the largest of its kind in Europe.

At the time of the partnership forming, UCL gave a clear and simple statement on the logic behind the innovation: “By pooling resources and expertise, the group will be able to produce more world-class research in key areas including cancer, ophthalmology, women’s and children’s health; close partnerships between researchers and health practitioners will also enable new scientific discoveries to be translated more quickly into treatments.”

Monash Partners’ historical timeline

2011
Established as Australia’s First Academic Health Science Centre
Monash University, Alfred Health, Southern Health, Burnet Institute, Baker IDI, Prince Henry’s Institute, Cabrini Health and Epworth HealthCare join as Partners

2015
Established data platform
Accreditation by the National Health and Medical Research Council (NHMRC) as a leading centre of excellence and collaboration in health and medical research, research translation, research-informed education and training, and outstanding healthcare.

2016
Peninsula Health and Eastern Health join as Partners
Joined Australian Health Research Alliance (AHRA)

2017
Federal government invests $2 million in Monash Partners to support world-leading research with direct patient benefit
Established philanthropic partnership with Equity Trustees and community partnership with Cystic Fibrosis community
Launched clinical research training program

2018
Formed collaboration with Monash Institute of Medical Engineering (MIME) to accelerate the development of new medical technologies that address significant unmet clinical needs
Delivered strategic plan with a purpose to connect researchers, clinicians and the community to innovate for better health
Progressed national data priorities through large-scale collaboration

2019
Developed Learning Health System to improve health
Developed Consumer and Community Involvement Platform

2020
La Trobe University and Latrobe Regional Hospital join as Associate Partners
Supported research and translation through COVID

2021
Supported the health and wellbeing of more than three million Australians, approximately 15 per cent of the population, and plays a leading role in the National Alliance of Centres to drive unprecedented national collaboration, deliver impact from research and drive better health outcomes

The past decade has seen Monash Partners achieve great impacts within health; data-driven healthcare improvement, the learning health system, consumer and community involvement, clinical innovation, health services research and implementation, clinical research facilitation, workforce development, clinical themes, our partnerships and our involvement in the Australian Health Research Alliance. Going forward, we will continue to harness our collective strengths and embrace innovation to provide world-class patient care.

A year later, in 2016, Peninsula Health and Eastern Health joined the partnership and in May the following year, the federal government announced it would invest $30 million in Australia’s four leading Academic Health Science Centres, including $2 million for Monash Partners to support world-leading research.

Today our current members include: Alfred Health, Monash Health, Monash University, Epworth HealthCare, Cabrini Health, Eastern Health, Peninsula Health, Burnet Institute, Baker Heart and Diabetes Institute and Hudson Institute and in 2020, we welcomed our inaugural Associate Partners La Trobe University and Latrobe Regional Hospital.

In 2021, Monash Partners supports the health and wellbeing of more than three million Australians, approximately 15 per cent of the population, and plays a leading role in the National Alliance of Centres to drive unprecedented national collaboration, deliver impact from research and drive better health outcomes.

Here in Victoria, Alfred Health and Southern Health (now Monash Health) and their associated research institutes already held a common alliance with Monash University and began to explore the possibility of establishing an Academic Health Science Centre.

Both The Alfred, through its Alfred Medical Research and Education Precinct (AMREP) and Southern Health, through its planning for the Monash Health Translation Precinct (MHTP), had moved to deepen the links between health services and research. So, in 2013, when the National Health and Medical Research Council (NHMRC) identified an interest in fostering greater links between clinical care and translational research, setting up an Academic Health Science Centre was a logical step.

In 2011, Monash University, Alfred Health and Southern Health, the Burnet Institute, Baker IDI, Prince Henry’s Institute (now the Hudson Institute of Medical Research), Cabrini Health and Epworth HealthCare, established a steering committee to successfully set the partnership’s foundations.

Four years later, Monash Partners was recognised by the NHMRC as one of four internationally leading centres in Australia, alongside the Melbourne Academic Centre for Health, The South Australian Academic Health Science and Translation Centre and Sydney Health Partners.

Of particular interest to Monash Partners was University College London’s academic health science partnership—UCLPartners, which was established in 2009 and today is the largest of its kind in Europe.
Modern health services collect and generate extensive data, with significant opportunities to improve clinical care and patient outcomes. But data alone does not result in change. An integrated approach is vital to enable the use of data to inform and improve healthcare delivery.

The past decade has seen Monash Partners prioritise Data-Driven Healthcare Improvement and create a Data Platform, leveraging the engagement of our health services and the strength in clinical registries across our network as well as Monash University’s Health Data Platform.

**Initiatives**

- **2016** Co-led the establishment of the national AHRA Data-Driven Healthcare Improvement platform.
- **2018** Progressed national data priorities through large-scale collaboration.
- **2018** Built the digital health workforce of the future via a Massive Open Online Course (MOOC), in conjunction with Sydney Health Partners.
- **2019** Addressed healthcare problems and built the next generation digital health workforce via our Digital and Data Driven Innovation in Healthcare Graduate Research Industry Partnership (CRIP), PhD program and postgraduate data Fellows.
- **2019** Co-developed and implemented a Learning Health System framework to improve health.
- **2019** Co-developed a data harmonisation road map to inform linkage of prehospital and emergency department data.
- **2020** Facilitated safe, efficient and lawful sharing of healthcare data through the Monash Partners Data Sharing Principles and Agreement based on learnings from Sydney Health Partners.
- **2020** Explored optimal approaches to clinical dashboards across our partners to better access and utilise clinical and/or registry data.
- **2020** Partnered with state government to apply the Learning Health System to COVID recovery care.

**Impacts**

- **2021** MRFF funded co-development of the innovative National Learning Health System (LHS) Data Management Platform to improve access to data in patients’ electronic health records to improve health care.
- **2021** Partnership with other Victorian centres led by Western Alliance in a $91M grant on the Learning Health System.

**Supports**

We thank those who have contributed to the Data platform over the journey, in particular our inaugural Lead, Professor Jim Buttery; and to our Steering Committee.

**Steering Committee**

- Associate Professor Susannah Ahern
- Professor Peter Cameron
- Ms Deborah Dull
- Mr David English
- Dr Joanne Enticott
- Associate Professor Michael Franco
- Dr Angus Henderson
- Ms Jennifer Irving (consumer partner)
- Ms Alison Johnson
- Mr Thomas Lew
- Mr Lachlan McBeain
- Mr Stephen McCrochie
- Ms Amy McKimm
- Mr Adam McLeod
- Ms Emily Parker
- Mr Steve Quenette
- Dr David Rankin
- Professor David Taylor
- Ms Andrea Wecke

**With consent we will now have visibility of all notes within a health record. Health services will be able to identify people that might benefit from a particular clinical trial, based on their diagnosis and test results.**
One of our most significant impacts has been the development of a framework to support our vision, ‘learning together for better health’.

Monash Partners is proud to have developed a Learning Health System (LHS) framework to capture, identify and address health service and community priorities and emergent challenges.

The Monash Partners Learning Health System presents an evidence-based framework for a sustainable approach to ‘learning together for better health’ and encouraging a network around Learning Health Systems in Australia. An LHS contains the necessary elements to enable routine health practice data, from service delivery and patient care, to contribute to iterative cycles of knowledge generation and improvement in healthcare. The LHS is enabled by partnerships across multidisciplinary stakeholders (academic, clinician, community and industry stakeholders).

**Impacts**

- Partnerships can be stimulated to utilise data to iteratively achieve better health outcomes and service improvements.
- There is a commitment, and requirement, to transcend traditional silos across individual research, education and healthcare organisations and sectors and create a systems approach for effective healthcare improvement.
- Integration of stakeholder priorities, research and best practice evidence, data analysis and benchmarking, and implementation and improvement in an iterative cycle.

**Supports**

We thank those who have contributed to the Learning Health System over the journey.

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Key learnings from this important work will inform how to drive and sustain change in hospitals to optimise best practice in other key non-urgent elective procedures.

**Reducing low value care - Supporting hospitals to optimise colonoscopy best practice**

A new project is being conducted to promote high-value use of colonoscopy in Victorian public hospitals integrating rigorous implementation methods with quality improvement.

Colonoscopies are important for detecting and treating bowel cancer, Australia’s second most common cancer. Colonoscopies can be performed unnecessarily, too frequently, or not frequently enough in those who may benefit.

Optimising the use of colonoscopies will reduce low value care and the risks related to unnecessary procedures, reduce wait times for those who would receive benefit, and promote timely detection and treatment of bowel cancer.

Monash Partners, in collaboration with the Melbourne Academic Centre for Health and Western Alliance, have been funded to implement the Learning Health System by the Victorian Department of Health and Human Services through the Victorian Healthcare Recovery Initiative.

Led by Associate Professor Denise O’Connor, this project drew on expertise from clinical leaders and involved co-design of interventions in collaboration with the people providing on-the-ground care in participating hospitals.

The project team have supported hospitals to implement interventions and monitor subsequent outcomes.

“Key learnings from this important work are informing how to drive and sustain change in hospitals to optimise best practice in other key non-urgent elective procedures,” said Associate Professor O’Connor.

Tools are being sought by government as solutions to real world problems.

**For more about our Learning Health System, please visit our website.**
Three

Consumer and Community Involvement

In 2018 Monash Partners made Consumer and Community Involvement a priority, establishing an enabling platform for education and training, undertaking research, identifying best practice, and developing strategies to prioritise and facilitate Consumer and Community Involvement to improve healthcare and outcomes for Australians. The platform has gained traction nationally and internationally with local, Australian and overseas participants engaging in our online education and training modules and event series. Through leadership and collaboration with national and international leaders, including the national alliance of Research Translation Centres, we are changing culture around the importance of embedding consumer and community involvement in research and healthcare improvement.

Initiatives

- 2018 Launched Monash Partners Consumer and Community Involvement Platform and Strategy
- 2018 Formed a Consumer and Community Involvement Advisory Committee, bringing together clinicians, health service managers, researchers and consumers
- 2019 Undertook research to understand the barriers and enable meaningful involvement of consumers and community
- 2019 Co-developed a framework to build capability and capacity and advance Consumer and Community Involvement at the system, organisation and individual levels
- 2019 Established a Monash Partners Consumer and Community Involvement advice and support service
- 2020 Co-developed and launched a series of six self-paced online education and training modules, providing practical information and strategies to meaningfully conduct Consumer and Community Involvement
- 2020 Developed guidelines to recognise the value and importance of Consumer and Community Involvement in research and healthcare improvement projects

Impacts

- 2020 Led a national co-design process for a national Consumer and Community Involvement Knowledge Hub
- 2020 Launched an online Consumer and Community Involvement event series

Supports

We thank those who have contributed to the Consumer and Community Involvement platform and to our Advisory Committee.

Advisory Committee

- Ms Annamaria Acs
- Dr Catherine Brasier
- Dr Hannah Brown
- Ms Sheila Daly
- Ms Michelle Daniel
- Ms Gina Etienne
- Professor Keith Hill
- Professor Carol Hodgson
- Mr Ken Young (consumer partner)
- Ms Lauren Lavi
- Ms Amy Lewis
- Ms Katrina Lewis
- Dr Sandra Redder
- Dr Jack Wallace
- Dr Stephanie Yiakoumi
- Mr Ken Young (consumer partner)

Leaders

Mr Ken Young
Consumer partner

Ms Coral Karen
Consumer partner

The impact

Involving consumers and the community in clinical trials

Consumer and Community Involvement has recently been recognised as a vital and necessary component of clinical trials within the recently endorsed Clinical Trials Governance Framework being implemented across health services.

Consumer input can improve trial recruitment, intervention design and implementation, results dissemination, and policy development. The inclusion of consumer and community engagement in the framework highlights the value and importance of including the perspective of all stakeholders.

The paradigm has shifted from believing clinical trials can only be delivered from the perspective of an academic or expert, to now acknowledging we must have all stakeholders in the room to really understand the problem and co-develop solutions to ensure they are fit for translation into clinical care.

Dr Angela Jones, Monash Partners Consumer and Community Involvement Lead said the acknowledgement that all views will now be included in this type of research was a welcome change.

“We welcome the Framework’s recognition of the importance of partnering with consumers and the community as a key pillar and look forward to continuing to provide education and resources to support Consumer and Community Involvement in research,” said Dr Jones.

Providing education and resources

In 2021, Monash Partners together with Sydney Health Partners hosted an online event, Consumer and Community Involvement in clinical trials: Practical strategies and lessons learned, to build capacity in this area. The event drew a large audience across Australia and internationally with more than 550 participants. The session can be accessed via the Monash Partners website.

Key themes included:

- Consumers bridging the gap between clinicians and the wider community to conduct trials that matter to the lives of people with health conditions; this makes research more relevant
- Consumers as ‘co-pilots’ not ‘passengers’ in navigating the direction of consumer engagement in clinical trials; the onus is now on researchers as co-pilots to undertake the role responsibly and professionally
- Consumers can provide inputs into clinical trials at many and multiple stages; it is not a solitary or singular process
- Examples of consumer input include: collaborating to develop community communication and lay summaries; providing feedback on policy direction and research design; identifying the health questions consumers most want answered; that might inform research; and including consumers as members of steering, data, or safety monitoring committees
- Even in clinical areas where involving consumers appears challenging (e.g. intensive care) there are opportunities for collaboration and to generate important and significant impacts for current and future patients

More on this will be explored further in the 2022 Monash Partners Consumer and Community Involvement lunchtime seminar series. Our thanks to our consumers, researchers, clinicians and health service managers who shared their knowledge, experience and learnings.

For more about our Consumer and Community Involvement Platform, please visit our website.
In 2014, the Monash Institute of Medical Engineering (MIME) was established to foster research-based, community-focused, clinician-led projects aligned with major clinical and health system needs, with the ultimate beneficiary being the Australian community.

Through unprecedented partnership and collaboration between MIME and Monash Partners, we have spent the past seven years identifying priority areas of unmet clinical need and, more importantly, establishing and accelerating evidence-based solutions. These are solutions that can – and have – translated into commercially successful endeavours that improve health.

**Initiatives**
- **2015** MIME Seed Funding: accelerating the development of new medical technologies that address significant unmet clinical needs
- **2015** MIME-supported PhD top-up awards: offering postgraduate students the opportunity to study with some of Australia’s leading medical engineering researchers and clinicians
- **2019** Integrated with Monash Partners
- **2019** Healthcare Innovation Summer Scholarships: connecting clinicians across Monash Partners who seek a technological solution to frontline health problems with high performing undergraduate and masters’ students from across Monash University, motivated to develop new medical technologies.

**Impacts**
- Created a clinical innovation pathway, bringing clinicians and researchers together to generate real-world solutions to clinical problems
- Delivering ground-breaking clinical and community-driven innovations with translation and healthcare impact
- Being the only established Australian clinical innovation platform which creates an end-to-end pipeline offering technology solutions in the form of new devices, diagnostics, therapeutics, IT, digital health, advanced analytics, delivery systems and clinical tools for urgent and unmet clinical and patient needs
- Training and mentoring the workforce of the future.

**Supports**

We thank those who have contributed to the Clinical Innovation platform and to the current Co-Directors.

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**Funding impact**

- **76** Seed Funding projects
- **$3.3M** in Seed Funding funds distributed
- **6** filed patents
- **15** MIME-supported PhD top-up awards
- **$307,000** in Healthcare Innovation Summer Scholarship funds distributed
- **66** Healthcare Innovations Summer Scholarship students funded
- **$14M+** in grants as a direct/indirect result of MIME funding

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**The impact**

Quick, low cost test to detect jaundice in infants

The Monash Institute of Medical Engineering (MIME) is supporting a fast and low cost paper test that can detect jaundice in newborns. This test is on the verge of bedside validation and commercialisation, and distribution to health practitioners across the world.

Jointly developed with Monash University’s Faculty of Engineering and Monash Health, it has the potential to be commercialised for point-of-care diagnosis of neonatal jaundice in both homecare and hospital settings.

Monash researchers, led by Professor Wei Shen and Dr Weirui Tan from the Department of Chemical Engineering, in collaboration with clinical champions Associate Professor Dr James Doery and Dr Katrina Harris, have developed a paper test for bilirubin levels, which provides results in less than 10 minutes at a cost of about 60 cents each.

The small volume of samples and reagents in a simple kit could one day mean babies in remote and regional areas, and in under-resourced poorer countries, could have their bilirubin levels easily monitored and life-changing treatment administered.

The use of this device could release the strain on hospital resources in major cities, including the pressure of bed shortages.

“Home treatment of jaundice is currently limited by expensive phototherapy equipment (biliblanket), nursing visits for invasive moderate blood volume testing, and delays in blood results being made available,” Dr Harris, Medical Lead at Monash Children’s @ Home, said.

The method developed by the research team uses ‘tape-paper sensing’ and involves blood being applied directly onto paper which is capable of separating plasma from whole blood and measuring bilirubin by a colorimetric, diazotisation method.

For more about our Clinical Innovation Platform, please visit our website.

This simple, fast, accurate, low-cost and timely point-of-care analysis of total bilirubin provides an unmet need, especially in resource-limited areas.

“The most promising aspect of the tape-paper sensing approach for neonatal blood sample measurement has been verified in comparison with the current hospital pathology laboratory method. And it can be done in the family home, anywhere in the world, with almost instant results,” Professor Shen said.

This simple, fast, accurate, low-cost and timely point-of-care analysis of total bilirubin provides an unmet need, especially in resource-limited areas.

“Such methodology is helpful to doctors and parents in determining if further clinical treatment needs to be adopted.”

“The ability to commercialise these tape-paper sensors means we can get this into the hands of hospitals and nurses so they can provide timely care and support to newborns and their families.”

This work is funded by the Monash Institute of Medical Engineering (MIME) and SPARK Oceania and is in close collaboration with the Monash Children’s Hospital to satisfy the need for developing pre-screening and home-based monitoring devices for newborns.

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**Platypus**

Platform, please visit our website.

For more about our Clinical Innovation Platform, please visit our website.

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Health Services Research and Implementation

Our Health Services Research and Implementation Platform supports a system-wide approach to implementing evidence-based change that can lead to improvements in the health and social care outcomes of Australians.

In the past decade we have provided leadership and understanding on how to translate knowledge and implement evidence-based interventions at an organisational level and across settings, working towards implementing change in clinical practice by health professionals and for a change in community health behaviours.

The aim of our Health Services Research and Implementation platform has been to gather data, evidence, and tools to make healthcare affordable, safe, effective, equitable, accessible and patient-centred and to support and build capacity via our community of practice.

Initiatives

- 2019 Built capacity to optimise pressure injury prevention and surveillance across Monash Partners healthcare services
- 2019 Integrated care via a volunteer-based patient-centred program for hospitalised patients with dementia and/or delirium
- 2020 Built workforce capacity for culturally responsive clinical practices across Monash Partners’ health services
- 2020 Research and translation on workforce capacity building for health systems improvement and sustainability
- 2021 Developed the Implementing Improvement in Healthcare Program designed to strengthen healthcare improvement through intensive coaching and training that supports the real-world application of implementation science methods in health service settings.

Impacts

- Provided leadership in health services research, implementation, science and innovation
- Increased collaboration, pace and scale of health services and healthcare improvement research
- Promoted sharing of interests, learnings and best practice
- Promoted capacity building in health services research
- Facilitated collaborative links with relevant bodies and initiatives.

**The impact**

Making pressure injury surveillance and prevention a priority

To optimise pressure injury surveillance and prevention within healthcare settings, a series of evidence-based training opportunities and resources for health professionals have been created.

Pressure injuries are a common hospital acquired complication and significant cause of preventable harm and suffering in healthcare settings. In addition to the human cost, hospital acquired pressure injury carries a high health and economic burden (AUD$983 million per annum) making preventive measures vital.

Capacity building is fundamental to optimise surveillance and prevention.

Monash Partners Wound Care Fellow, Dr Victoria Team led and established a capacity-building framework which provides widely accessible, co-designed and evidence-based training and resources for health professionals, including best-practice prevention of pressure injuries in intensive care settings.

“In 2019, Minister Greg Hunt established wound care and pressure injuries as key priorities, based on a national report. Monash Partners was asked to respond and in doing so we recognised this was also a priority for health services,” said Dr Team.

“The resources we developed will be of particular interest to clinicians who would like to improve their knowledge and practical skills in pressure injury prevention and management and include a dedicated training module for patients, carers and families.

“Throughout this work we hope to bring together and build upon existing efforts to create an integrated approach to wound management that will deliver improved patient outcomes based on evidence and reduce the economic burden of care,” said Dr Team.

For more about our Health Services Research and Implementation Platform, please visit our website.
Clinical Research Facilitation

The past decade has seen our Clinical Research Facilitation platform committed to addressing barriers and systemic issues across our network to create streamlined processes to support research. We have engaged research leaders across our network and formed a community of practice to share learnings and best practice, enabling significant achievements that would otherwise not be possible.

We have implemented a large-scale clinical research training program addressing a priority for our health and research community.

Initiatives

- **2018** Supported clinical researchers through online resources including standardised supporting department forms to facilitate streamlined governance.
- **2019** Established the Victorian Research Translation Centre Collaborative with Melbourne Academic Centre for Health and Western Alliance.
- **2019** Collaborated on state-wide harmonisation initiatives to reduce the administrative burden of conducting multi-site clinical research in Victoria.
- **2020** Co-designed an online clinical trials education and training platform with Melbourne Academic Centre for Health and Western Alliance.
- **2021** Supported implementation of the National Clinical Trials Governance Framework in Monash Partners health services.
- **2021** Supported the state-wide Hospital Research Managers and Hospital Research Director’s Forums.
- **2021** Implemented world leading cohort identification and data extraction software programs to allow rapid identification of patients for clinical trials.
- **2021** Developed a state-wide research collaboration agreement template with Melbourne Academic Centre for Health and Western Alliance.

Impacts

- More than 3,000 staff across Monash Partners have undertaken the Good Clinical Practice in clinical trials training program.
- Improved efficiency and allowed organisations to focus on core research development activities and expertise thanks to a centralised model for ethics review.
- Enabled quicker start-up of research projects and collaborations.
- Supported priority projects of the hospital research managers.

Supports

We thank those who have contributed to the Clinical Research Facilitation platform and to our current Lead.

The impact

Work continues to streamline research governance

Complex research governance processes are set to become more streamlined following a review of existing practices by the Victorian Research Translation Centre Alliance comprising Monash Partners, Melbourne Academic Centre for Health and Western Alliance. Governance processes across Victoria were reviewed, priority areas identified and working streams are underway to improve and streamline the approach.

The review engaged key stakeholders across the state focusing on governance associated with clinical trials, non-clinical trials, Quality Assurance and Quality Improvement activities. A report highlighting the findings of the review has been drafted and, once finalised, will be shared with the Victorian Department of Health and Human Services.

Clinical Research Facilitation Lead, Professor Nikolajs Zeps said this work would lead to more streamlined and efficient outcomes.

“The Research Governance and Ethics leadership and operations staff from Monash Partner sites are involved in developing and piloting a number of initiatives to create a more streamlined and efficient process for the approval of research and evaluation studies. This collaboration between the Monash Partner sites allows significant improvements to be made that would otherwise not be possible at individual sites and achieves harmonisation that provides much needed consistency for the sector,” said Professor Zeps.

Priority areas identified include:

- Proportionate and simplified pathways for Clinical Quality Registries, Quality Assurance (QA) and Low and Negligible Risk (LNR) research, including in a regional and rural context.
- Identifying and advocating for an efficient, universally accessible research submission and review platform.
- Workforce development including education and training opportunities, role clarity and definitions, capacity and capability building.
- Addressing duplication and inconsistency in forms and information sources as part of the governance process.

Co-developing and piloting initiatives will create a more streamlined and efficient process for the approval of research and evaluation studies.

For more about our Clinical Research Facilitation Platform, please visit our website.
Monash Partners ten years of impact

IMPACT

Seven

Workforce Development

For the past 10 years Monash Partners has provided a myriad of educational and professional development opportunities for staff across our network and beyond.

Our education and professional development programs are co-designed in priority areas outside existing programs, with the aim of supporting an interdisciplinary workforce embedded within or integrated with healthcare.

We pride ourselves on our courses being offered at low or no cost and aligning with the priorities of our health service partners and community, covering areas such as clinical research, data-driven healthcare improvement, consumer and community involvement, healthcare improvement and policy priority areas.

Supports

We thank those who have contributed to the Workforce Development Platform.

Monash Partners education strategy

- Large scale, low cost or no cost courses in priority area funded and delivered by Monash Partners
- Co-developed offerings, aligned with Monash Partners priorities, co-branded, offered at discounted rate across Monash Partners, delivered by members
- Education and training delivered by Monash Partners member organisations, available across Monash Partners at no cost, promoted by Monash Partners

Workforce Development offerings

- Innovation
- Introduction to health data
- Pressure injury prevention
- Consumer and Community Involvement
- Good Clinical Practice in Clinical Trials
- Women in leadership
- Implementing Improvement in Healthcare

Ways to learn

- Accredited courses
- Workshops
- Seminars
- Online training
- Face-to-face training
- Massive open online courses (MOOCs)

26 education, training and event offerings in 2021

3,424 people attended our education, training and events offerings in 2021

Clinical research training program

In 2016, Monash Partners commenced delivery of our flagship clinical research workforce development program.

Funded by our Partners, this included systems change with requirement of training to obtain ethics approvals across the partnership, alongside freely available initial and refresher courses, delivered by skilled facilitators. Since commencement, we have trained more than 3,000 staff across Monash Partners in how to safely conduct clinical trials in line with best practice.

Adoption of an agreed clinical research training policy has ensured a consistent approach across Monash Partners and enabled implementation and scale up of the training program.

The program itself has supported our research community in meeting the requirements of the Good Clinical Practice (GCP) in research guidelines, the National Statement on Ethical Conduct in Human Research, and the Australian Code for the Responsible Conduct of Research, requiring researchers to be appropriately trained and credentialed.

Course facilitator, Dr Marina Skiba said the training provides Monash Partners health services, research and teaching organisations with the ability to ensure adherence to best practice.

“Good Clinical Practice gave me a chance to engage, ask questions and hear from experts across the Monash Partners network who are leaders in the field,” said Ms Johnson.

3,000+

people attended Good Clinical Practice in Clinical Trials courses

100+

Good Clinical Practice in Clinical Trials courses delivered

For more about our Workforce Development Platform, please visit our website.

Implementation of systems to promote uptake alongside accessible, free Good Clinical Practice research training, serves to promote best-practice standards for all clinical trials to protect the rights, safety and wellbeing of participants and provides assurance that the clinical trial data are credible.

Course participant Ms Josephin Johnson from Alfred Health said the course provided an invaluable in-person professional development opportunity nuanced for an Australian audience.

“Good Clinical Practice gave me a chance to engage, ask questions and hear from experts across the Monash Partners network who are leaders in the field,” said Ms Johnson.

“Good Clinical Practice (GCP) is an internationally accepted standard for the designing, conducting, recording and reporting of clinical trials.”

“Adherence to GCP ensures that the best-practice standards are met and that all clinical trials protect the rights, safety and well-being of participants and that the resulting data are credible,” said Dr Skiba.

For more about our Workforce Development Platform, please visit our website.
Our Clinical Themes were established in 2012 based on their demonstrated research excellence nationally and internationally, leadership in the delivery of clinical care, research translation leading to improved health care and cross partnership capability and engagement.

The past decade has seen the clinical themes enhance the quality and outcomes of healthcare, strengthen interaction and collaboration across our Partner organisations and between health service clinicians and research scientists while developing and implementing initiatives and flagship projects.

Supports

We thank those who have contributed to the Clinical Themes and to our current Leads and Steering Committees.

Clinical Themes

- Cancer and Blood Diseases
- Cardiovascular Disease
- Critical, Perioperative and Emergency Care
- Infection and Inflammation
- Metabolic Medicine
- Neuroscience, Mental Health and Sleep
- Women’s and Children’s Health

Impacts

Our impacts are aligned to our strategic plan and priorities:

- Unprecedented collaboration across all stakeholders
- Improving clinical pathways and care by integrating across the care continuum
- Addressing clinical variation by driving data linkage and integration to improve clinical care and outcomes
- Implementation and scaling of innovative models of care
- Improving the health of vulnerable groups including those with chronic health conditions

New model of care improves lives of those with diabetes and kidney disease

A new model of care for those with diabetes and kidney disease, designed by those living with the conditions, is seeking to improve clinical care and offer improvements in health and management of health. The care model, named the Diabetes Kidney Service, managed by Monash Partners’ lead health services, brings together multiple health specialties, including general practitioners, endocrinologists, nephrologists, and nurse practitioners into one integrated service, with multidisciplinary staff attending to patients.

Lead researcher, Professor Sophia Zoungas said these results were significant as past data usually showed a deterioration in quality of life over time in this population. “Diabetes and kidney disease are among the top five co-existing chronic diseases in Australia. Each year, two out of every five Australians who commence kidney replacement therapy are affected by these conditions,” said Professor Zoungas.

“Current health-care models are ill-equipped for managing people with diabetes and chronic kidney disease. They have significant gaps between best practice guidelines and received care and limited patient engagement in the co-design of services. They often leave patients to navigate complex and confusing health services that are not designed for patient centred care.”

“This new model of care has been designed by patients with diabetes and kidney disease for care of this population. When designing this model, we extensively engaged key stakeholders with lived experience as well as patient advocacy groups including Diabetes Australia and Kidney Health Australia, along with carers and health professionals both within tertiary and primary care, to explore barriers and potential improvements in the existing health services.”

For more about our Clinical Themes, please visit our website.

The Diabetes Kidney Service is designed to improve patient self-management and improve communication and coordination of care between endocrinologists, nephrologists and GPs, who remain the coordinator of patient care,” said Professor Zoungas.

Further results have shown that patients who received the new model of care had a higher hospitalisation rate, but shorter length of hospital stay and fewer death rates than those who received standard care. Improvements in overall self-care, statin use, foot and eye examinations were also observed.

“Staff members, referring general practitioners and attending patients felt that a co-designed integrated diabetes kidney service improved integration of care and improved health in terms of improved all-cause mortality, kidney function, glycaemic control, self-care and management of health,” said Professor Zoungas.

One patient reported how attendance of the Diabetes Kidney Service improved health-care access by decreasing appointments “… So, they put both together and they made it the kidney and diabetic clinic for me so that I don’t have to go to two places. You know, it’s always appointments, appointments.”

Another praised the support provided by the service toward self-management of their health: “So I have to control all that. And by doing all this, I think I can achieve it. The support, what you get from the centre, is fantastic. These people are not our regular GPs but I feel that they are taking interest in our case, in whatever type of diabetes you have and however many years you have had it for.”

Given the benefits of the Diabetes Kidney Service model of care, there is scope for implementation across other health networks and settings within Australia.

This project is supported by the Australian Government’s Medical Research Future Fund as part of the Rapid Applied Research Translation program through Monash Partners.
Eight continued

Featured projects

Our Clinical Themes are currently supporting 18 Monash Partners directly funded research projects and have supported 48 research projects since 2015. Here are a few current ones:

The PRECISE assay: Personalised medicine for cancer patients using next-generation sequencing

Dr Mark Waltham

Recent advances in DNA sequencing have provided the ability to test patients for hundreds of cancer-related gene mutations at once with very high sensitivity and in a timely manner enabling treatment for cancer to be personalised. The project developed a highly sensitive gene sequencing test (the ‘PRECISE’ assay) to detect key changes within cancer patients for hundreds of cancer-related gene mutations at once with very high sensitivity and in a timely manner enabling treatment for cancer to be personalised.

Primary Aldosteronism

Dr Jun Yang

Primary Aldosteronism (PA) causes disproportionately more irregular heartbeats, strokes, heart attacks and heart failure than most other causes of high blood pressure. Effective treatments are available and PA is potentially curable with surgery, highlighting the importance of early detection. Diagnosis of PA is currently delayed and associated with significant end-organ damage. Increased awareness of PA and its screening indications in primary and tertiary care are vital to achieve earlier diagnosis and improved outcomes. To address this issue, Dr Jun Yang has developed a research program embedded in clinical service and supported by a team of committed academics, clinicians, scientists and students, enabling the integration of cutting edge science into day-to-day healthcare.

New approaches for peri menopausal depression

Professor Jayashri Kulkarni

Perimenopausal depression is a term used when symptoms of depression occur at the same time as the hormone changes occur and is a debilitating mental illness. This project tracked women over 12 weeks with fortnightly visits that assessed psychopathology, menopause specific general symptoms, cognition and medication compliance and tolerability. As part of the project’s world first clinical trial into the use of Bazedoxifene as a treatment for perimenopausal depression, a detailed protocol was designed to help better characterise perimenopausal depression and understand the mechanisms behind those who respond successfully to treatment. The findings of this trial will impact education on the treatment of women’s mental health in relation to perimenopausal depression and will guide some of the education programs being rolled out at Monash Alfred Psychiatry Research Centre (MAPrc).

Precision medicine for hypertension: early detection of Primary Aldosteronism

Dr Jun Yang

Primary Aldosteronism (PA) causes disproportionately more irregular heartbeats, strokes, heart attacks and heart failure than most other causes of high blood pressure. Effective treatments are available and PA is potentially curable with surgery, highlighting the importance of early detection. Diagnosis of PA is currently delayed and associated with significant end-organ damage. Increased awareness of PA and its screening indications in primary and tertiary care are vital to achieve earlier diagnosis and improved outcomes. To address this issue, Dr Jun Yang has developed a research program embedded in clinical service and supported by a team of committed academics, clinicians, scientists and students, enabling the integration of cutting edge science into day-to-day healthcare.

PROTECT: a new treatment to prevent cerebral palsy

Dr Kirsten Palmer

This clinical trial assesses whether the use of melatonin in pregnancy can help to protect unborn, small babies from harm, particularly for the brain, and prevent the subsequent risk of complications such as cerebral palsy. If successful, this will be the first such treatment. This large multi-centre, clinical trial is ongoing across three participating sites.

Eliminating hepatitis C among people who inject drugs enhancing testing and linkage to care from hospital to community settings

Dr Joseph Doyle

The new era of curative treatment for hepatitis C is a once in a generation opportunity to eliminate hepatitis C virus as a public health threat. However, people at risk of hepatitis C are often not able to initiate or comply with treatment without support. This project will link people into treatment which is simple and cures hepatitis C. The project team has partnered with the statewide Eliminate C partnership (Burnet Institute, Hepatitis Victoria, Harm Reduction Victoria, Victorian Department of Health and Human Services, and industry stakeholders) to ensure integration into a state response and lessons transfer to other viral hepatitis services. This project has increased the number of people being tested for hepatitis C opportunistically while in hospital, provided new pathways to cure, and is being evaluated for how lessons learned can be sustained and embedded into practice.

Data linkage to provide near real-time monitoring of cardiac surgical performance: A local pilot for a national process

Adjunct Clinical Professor David Pilcher

The measure of quality of the more than 10,000 cardiac surgeries in Australia has traditionally been reporting of mortality however this measure ignores other injuries that may subsequently impact future quality of life. This project links cardiac surgical and intensive care data to calculate and generate a risk scale at two Victorian hospitals. The contemporaneous nature of the feedback to clinicians will improve the capability to identify and intervene early. The plan is to use the pilot reporting system, built using the data presented linked to demonstrate the value of this reporting methodology to government monitoring agencies, and to both ANZICS and ANZSCTS. This will then allow for the development of a reporting system which will be used by all sites in Australia and New Zealand which perform cardiothoracic surgery.
We are proud of the partnerships we have developed over the last decade and look forward to strengthening these relationships into 2022 and beyond.

Our Partnerships

• 2017 Cystic Fibrosis (CF)

Funding provided through our partnership with the 65km for Cystic Fibrosis community event supports consumer prioritised, high quality, clinician led research, in partnership with consumers. It is focused on enhancing the quality of CF care in hospitals and improving patient outcomes and experience.

• 2018 Equity Trustees

The Equity Trustees’ Partnership Program is generously supporting a wide range of translational research projects responding directly to the needs of communities, health providers and health services. This program is designed to rapidly transform research into healthcare delivery and benefit patients directly.

Monash Partners would like to thank the following Trusts for their generous contribution to our work:

Bill Long Charitable Trust
The George Perry Fund
The Dean William Robert Winter Trust
The Appel Family Bequest
Harry Bunting Estate
The Lynne Quayle Charitable Trust
Monash Partners has partnered with the Prader-Willi Syndrome Association of Victoria in their mission to empower those living with Prader-Willi Syndrome through support, education, advocacy and awareness. Monash Partners will work with all stakeholders, including children, families, carers and front-line clinicians, to identify and prioritise elements of best care. The elements that will be explored include specific interventions and supports.

Potential options for personalised treatment for people with Multiple Myeloma

This research has given us the ability to personalise treatment for those with Multiple Myeloma and potentially avoid bone marrow biopsies for ongoing clinical management.

The impact

Defining the immune response to lung infection in young children with cystic fibrosis

This project is proudly supported by 65km for Cystic Fibrosis.

New research is investigating how lung disease develops in young children with cystic fibrosis to inform treatment options.

Lead researcher, Dr Paul King from Monash University said currently little is known about lung immune responses in young children.

“Cystic fibrosis lung disease arises from lung inflammation that causes the activation of lung white blood cells, such as neutrophils and macrophages. This results in the development of bronchiectasis, a chronic condition where the airways thicken from inflammation and infection, and over time, progressive lung destruction,” said Dr King.

“Bronchiectasis occurs in very young children with cystic fibrosis, but the processes responsible have not been well understood. In this study, we explored the role of a white cell inflammatory pathway called extracellular trap formation in the development of lung damage.”

“We clearly found very strong involvement of extracellular traps from lung samples in young children both with cystic fibrosis and also in other children with chronic airway infection,” said Dr King.

A key finding of the study is that the inflammatory response can be prevented with currently available therapeutic medications and therefore have direct implications for the treatment of young children.

“This study outlines a new paradigm which may finally explain how young children with cystic fibrosis develop lung disease,” said Dr King.

Ms Julia Noorman
Co-founder
65km for Cystic Fibrosis

Ms Jodi Kennedy,
General Manager Charitable Trusts and Philanthropy
Equity Trustees

Ms Renee Di Genova
President
Prader-Willi Syndrome Association of Victoria

Monash Partners is a major partner of the Prader-Willi Syndrome Association of Victoria, the peak body for people and families living with Prader-Willi Syndrome in Australia.

This project is proudly supported by Equity Trustees.

New research has demonstrated more effective methods to personalised treatment for people with Multiple Myeloma.

“Multiple Myeloma is an incurable plasma cell cancer manifesting at multiple sites within the bone marrow. Currently a bone marrow biopsy is undertaken to provide information about the cancer cells so that treatment can be determined. However, we now know that a bone marrow biopsy may not reflect all the variations in the cancer cells. An alternative approach is to utilise a ‘liquid biopsy’ that uses a blood test to provide information about the DNA and RNA of the abnormal cells,” said lead researcher, Professor Andrew Spencer, Alfred Health.

This alternative minimally-invasive, risk-free and robust method to investigate Multiple Myeloma is now an option for patients that is even more effective in personalising treatment for Multiple Myeloma.

“Tumour cells from all sites release DNA and RNA into the blood stream and represent genetic information from all Multiple Myeloma sites. For the first time we have demonstrated that DNA and RNA released by the cancerous plasma cells can be extracted from the blood and analysed in the laboratory,” said Professor Spencer.

“We evaluated extracellular RNA (exRNA) to determine if exRNA can be utilised to better characterise and understand Multiple Myeloma. We demonstrated that the exRNA profile of Multiple Myeloma patients is a useful test. We were also able to identify which patients had a greater chance of responding to a treatment option and other patients who would not respond well.”

“This research has given us the ability to personalise treatment for those with Multiple Myeloma and potentially avoid bone marrow biopsies for ongoing clinical management of Multiple Myeloma,” said Professor Spencer.

For more about Partnerships, please visit our website.
Monash Partners ten years of impact

Australian Health Research Alliance (AHRA)

The Australian Health Research Alliance (AHRA) provides a forum for the accredited Research Translation Centres to come together to collaborate on matters of national relevance and to provide leadership in research translation while highlighting and enriching the work being undertaken by all Centres. AHRA is uniquely positioned to make connections between research excellence and local health system need.

In 2018, Monash Partners was recognised by the NHMRC as an internationally leading Centre in Australia, and is now one of ten NHMRC-accredited Research Translation Centres.

Through our leadership and involvement with AHRA, Monash Partners contributes to unprecedented national collaborations in key areas, to deliver impact from research and drive better health outcomes.

Initiatives

- Monash Partners led
  
  - 2016 Data-Driven Healthcare Improvement
  
  - 2020 Women’s Health, Research, Translation and Impact Network

- Monash Partners support:
  
  - 2018 Health System Improvement and Sustainability
  
  - 2018 Indigenous Research Capacity-Building Network
  
  - 2018 Consumer and Community Involvement
  
  - 2019 Clinical Research Facilitation
  
  - 2019 Aged-Care Research Translation and Impact Network

- 2019 Wound Care

Impacts

- Harnessing the power of health information in electronic health records to improve healthcare quality, health outcomes and enable innovative research

- Boosting national and international collaboration on women’s health, building workforce capacity, developing leaders in women’s health, and advancing research and translation to deliver impact and better health for Australian women

- Bringing together and building upon existing efforts to create an integrated approach to wound management that will deliver improved patient outcomes based on evidence and reduce the economic burden of care

- Leading a national project to co-design a national Knowledge Hub for Consumer and Community Involvement in research and healthcare improvement.

Supports

We thank those who have contributed to AHRA and to our current Chair and Operations Lead.

AHRA is uniquely positioned to integrate and align research excellence and local health system need.

The impact

Major national women’s health research, translation and impact network

Monash Partners, together with Research Translation Centres nationally, are addressing priority areas for women and girls across physical and mental health, amplified by COVID-19, and supporting career advancement for women in health and medical research.

With the support of the Australian Health Research Alliance (AHRA), the Women’s Health Research, Translation and Impact Network (WHRTN) has been formed. The Network has received funding of $5 million over five years from the Morrison Government, The Hon Greg Hunt MP and the Medical Research Future Fund.

This national collaboration across community, health services and academic institutions is boosting national and international collaboration in women’s health, building health workforce capacity, developing leaders in women’s health, and advancing research and translation to deliver impact and better health for Australian women.

Professor Helena Teede, Inaugural Chair of the Network, and AHRA Council member, said this support enables a strong, collective and united voice, partnering with the community, health and government as well as academia, to drive, support and enable inclusive collaborative research and translation to address gaps and priorities for women.

“This initiative will change the women’s health research landscape within Australia, to ensure research aligns with policy and community needs, is co-designed and delivers tangible health impact,” said Professor Teede.

Aboriginal and Torres Strait Islander women researchers are specifically supported in capacity building through integration between the WHRTN and the established AHRA Indigenous Research Network,” said Ms Karen Glover, a member of the national Steering Committee.

The network comprises leaders including internationally recognised women, across the breadth of women’s health and is committed to:

- leveraging and strengthening large scale national collaborative effort to improve women’s health
- partnering, engaging, training and empowering women in priority setting, research and translation
- building capacity of women researchers and under-represented groups, diverse disciplines and Aboriginal and Torres Strait Islander researchers, and
- delivering research, translation and impact in agreed priority areas.

The priority health areas align with the government’s health strategy and include a focus on preconception, pregnancy, postpartum and intrapartum health, reproductive health, sexual health, healthy lifestyle, nutrition, obesity prevention, violence and abuse prevention and recovery, Indigenous health, mental health, chronic disease prevention, and healthy ageing.

The research includes clinical trials, implementation, health services and public health research and translation, with a rapid track to health impact.

For more about the Australian Health Research Alliance (AHRA), please visit ahra.org.au
2021 year in review

New collaborative endeavour in Emergency Care

In 2021 a Monash Partners Emergency Care subtheme was established under the leadership of Professor Diana Egerton-Warburton. The theme brings together a multidisciplinary group of emergency care clinicians and researchers from 13 Emergency Departments across the Monash Partners network and provides a unique opportunity for collaborative research and translation to improve healthcare for the community. The theme has focused on the problem of optimal, equitable access to emergency care and led a large scale, collaborative funding proposal to address this complex issue.

Supporting a state-wide plan for children with Prader-Willi Syndrome

Professor Katrina Williams, Monash University and Monash Children’s Hospital, and Associate Professor Tom Connell, the Royal Children’s Hospital, are leading a project in partnership with Prader-Willi Syndrome Association of Victoria and Monash Partners. The project is working toward a state-wide, evidence-based model-of-care for those living with Prader-Willi Syndrome. The aim of the model is to deliver best care to every child and their families in Victoria, regardless of where they live.

Monash Partners are working with stakeholders, including children, families, carers and frontline clinicians to identify and prioritise elements of best care. Consultation and prioritisation will be key activities to direct the outcomes of the project.

Monash Partners becomes node of national research data sharing initiative

Monash Partners became part of a national initiative to support the sharing and reuse of health research data in ways that bring value to the research community, increase the efficiency of research, and provide benefits for the health of Australia’s population.

Monash Partners along with Monash University was successful in their application to become one of nine Infrastructure Development nodes of the Health Studies Australian National Data Asset (HeSANDA) Network. The nine nodes cover 72 health research organisations in Australia, including 18 universities, 10 medical research institutes, 19 health service operators, 16 clinical trial networks, and nine other organisations.

Indigenous Network working towards better health outcomes

Monash Partners has established the Ngarru Arweet Network of health professionals, academics, researchers, hospital staff and consumer partners who all share a passion for better health outcomes for Aboriginal and Torres Strait Islander people.

The network continues to work towards enabling interactions, discussions, collaborative activities and relationships building to learn from one another, strengthen indigenous capacity and progress the priorities of our health service member organisations.

“...”

Carlton Premiership player, David Rhys-Jones with son Cooper, who has Prader-Willi Syndrome.
Funding round to support cystic fibrosis

Monash Partners partnered with the Monash Institute of Medical Engineering (MIME) to support a community driven innovation round. With funding from the Medical Research Future Fund Rapid Applied Research Translation program, Monash Partners initiated an online consultation in partnership with the 65km for Cystic Fibrosis Community group to identify the real-world problems of people living with cystic fibrosis and generate solutions.

Cystic fibrosis, a genetic disorder that primarily affects the lungs, causes a build-up of mucus, which requires interventions to prevent further lung damage. To maintain motivation and correct airway clearance technique, Professor Anne Holland, Professor of Physiotherapy and Head of Respiratory Research, Alfred Health, in consultation with representatives from the 65km for Cystic Fibrosis Community group to identify the real-world problems of people living with cystic fibrosis and generate solutions.

Cystic fibrosis is a genetic disorder that primarily affects the lungs, causing a build-up of mucus, which requires interventions to prevent further lung damage. To maintain motivation and correct airway clearance technique, Professor Anne Holland, Professor of Physiotherapy and Head of Respiratory Research, Alfred Health, in consultation with representatives from the 65km for Cystic Fibrosis Community group to identify the real-world problems of people living with cystic fibrosis and generate solutions.

Female health researchers receive financial support to advance careers

The Australian Health Research Alliance (AHRA) Women’s Health Research, Translation and Impact Network (WHRTN), led by Monash Partners, has provided financial support to women working in women’s health research and translation in a bid to facilitate early and mid-career development and advancement.

The funding will support the Monash Partners awardees in research into maternal obesity, cognition and early surgical menopause, prevention in type 2 diabetes, and cardiovascular disease in women postpartum, and polycystic ovary syndrome.

Toward a national data management platform and Learning Health System – Artificial intelligence (AI)

Electronic medical record systems contain large amounts of unstructured, inaccessible and underutilised data. Using a Learning Health System approach, Monash Partners is leading the first ever Australian pilot of AI. Named CogStack, the software is a suite of open source tools, to address this problem. Focusing on areas of health service need, the project has accelerated cycles of learning and development including organisational and joint learnings across the three use case Partners – Alfred Health, Peninsula Health/National Centre for Healthy Ageing, and Outcome Health.

Optimising patient identification and recruitment into clinical trials – Alfred Health

Currently, recruitment into clinical trials is a manual and time-consuming process. Led by Ms Amy McKinn, Mr Lachlan MacBean and Professor Meng Law, Alfred Health is piloting CogStack in a hospital setting to rapidly identify patients for clinical trials and improve patient recruitment. CogStack has been tailored and implemented at Alfred Health, with the potential for broader applications in the future including quality improvement and audit.

Identifying patients with early stages of dementia to improve outcomes – Peninsula Health/National Centre for Healthy Ageing

Dementia is often poorly documented and difficult to identify in electronic medical record systems. Professor Velandai Srikanth and Associate Professors Nadine Andrew and Richard Beare are leading a project at Peninsula Health, piloting CogStack to identify signs and symptoms consistent with early stages of dementia in an older population. The CogStack platform has been deployed in the National Centre for Healthy Ageing (NCHA) hardware within the Peninsula Health network.
Preventive Medicine and Alfred Health and includes with the findings informing organisational responses, study monitored physical and psychological health and Victorian frontline health care workers across hospital, (COVIC-HA) cohort study, enrolled more than 1,500 Leder, The Victorian Healthcare and Aged care workers Research led by Professors Allen Cheng and Karin Victorians. The first state-wide collaborative Falls Prevention was held in April 2021 with approximately 280 people attending an online webinar, highlighting the community settings, hospitals and residential aged-care research and translate evidence to improve the health falls prevention. The first state-wide collaborative Falls Prevention was held in April 2021 with approximately 280 people attending an online webinar, highlighting the consumer voice and the need to translate evidence into practice whilst disseminating in interventions that are not evidence-based.

ORDER OF AUSTRALIA AWARDED TO MONASH PARTNERS EXECUTIVE DIRECTOR

Monash Partners Executive Director, Professor Helena Teede was awarded a Member of the Order of Australia (AM) 2021 for significant service to medical education and research, endocrinology and women’s health. Professor Teede received the honour in recognition of service to the health and research sectors through leadership and impact, improving health especially with women and families. She is passionately committed to partnering with the community and stakeholders in defining problems together, finding solutions through research and innovation, and translating outcomes into practice for better health.

OPPORTUNITY TO INTEGRATE BIOMEDICAL DISCOVERY RESEARCH INTO CLINICAL CARE

Monash Partners made a renewed commitment to strengthen activities in the biomedical discovery research integration space in 2021. Over the next 12 months, we will increase our focus on the opportunity to integrate biomedical discovery research into clinical care.

Women in Leadership Program

The Women in Leadership Program is a comprehensive three-day program delivered by Monash University with support from Monash Partners. During 2021, 101 highly motivated and deeply committed women in healthcare and research from Australia and around the world, including 50 from Monash Partners organisations attended the program. Stories and solutions were shared to inspire, encourage and support women with powerful and effective strategies to help them reach their full career potential. Participants gained strategic skills, awareness and tools to advance career trajectories.
Looking to the future

When we take a step back and reflect on the last 10 years and the impact Monash Partners has supported and facilitated across our Partners and across the research, community and health sectors, we are thankful for the contributions of those around us.

Partnerships have been crucial and it is through these connections that we have been able to deliver a community of practice where all health disciplines, the community and our researchers can genuinely collaborate and innovate for better health. This document is a testament to the strength and leadership of all of our Partners and to the collective, and to the journey, we have taken together. It has not always been easy, as embedding research into healthcare requires major transitions that are difficult to drive. It was a journey that sought to disrupt well entrenched paradigms, bridge silos and change the systems we work in to make collaboration easier. It is also one that focuses on outcomes that enhance the health of our community. Here we pause to celebrate our progress together and thank those who have been a part of our first decade. That said, we believe there is more to come. Our work is not finished.

Looking to the future, Monash Partners is committed to addressing the barriers to partnership and responsive, impactful research and translation. We seek to evolve and build on our existing efforts to identify real world problems and priorities, support research to inform best practice and enable implementation of evidence-based solutions back into healthcare to deliver impact. Some of our key future initiatives will include:

▶ Evolving our key platforms
Monash Partners will build on existing efforts and initiatives within our key platforms including Consumer and Community Involvement, Data-Driven Healthcare and Informatics and Health Services Research and Implementation.

▶ Sharing our Learning Health System
Monash Partners has developed an evidence-based framework for evolving our health centres into a Learning Health System to capture, identify and address health service and community priorities and emergent challenges. The vision is ‘learning together for better health’. It contains the necessary elements to enable routine health practice data, from service delivery and patient care, to contribute to iterative cycles of knowledge generation and improvement in healthcare, whereby the whole Learning Health System is enabled by partnerships across multidisciplinary stakeholders (academic, clinician, community and industry stakeholders).

▶ Implementing Improvement in Healthcare initiative
This multi-level initiative is evidence-based and co-designed to strengthen healthcare improvement capability through education, upskilling, coaching and training that supports real-world application of implementation science methods in health service settings. Monash Partners aims to build internal capability and capacity in our health services to support a culture of improvement based on evidence informed approaches. Through the initiative, we will strengthen understanding of the principles and theories of implementation science and build capacity in effective healthcare improvement.

▶ Building workforce capacity
Monash Partners will continue to deliver educational opportunities and professional development for staff across our Partnership. We will continue to offer our courses at low or no cost and align with the priorities of our health service partners and community, covering areas such as clinical research, data-driven healthcare improvement, consumer and community involvement, healthcare improvement, and policy priority areas. Through these initiatives we hope to continue to transcend silos across organisations and bring our best people together to address health service and community need.

We thank all who have joined us over these past 10 years. It has been quite the journey and we look forward to the next 10 years and beyond to keep delivering on our purpose to ‘connect and innovate for better health’.

The community are the funders and beneficiaries of research and of healthcare and it is beholden on us to integrate these to innovate for better health.