



Foreword

It gives me great pleasure to present the Bupa Health Foundation Highlights Report for 2018.

As the new Chairman of the Foundation Board I am delighted to assume this role so effectively performed by my predecessor Mr John Conde.

The Bupa Health Foundation continues to build on its standing as one of Australia's leading corporate foundations dedicated to health and medical research. We are proud to be a keenly sought partner with the healthcare sector and research community. These strong partnerships are the basis of our approach to fulfil our purpose of longer, healthier, happier lives.

To ensure the Foundation is well positioned to respond to the rapidly changing needs of the community, and the health research sector, it was timely to ensure our own approach and focus were clear. This led us to revise the Foundation's strategic themes to ensure they are appropriate and contemporary.

They are: Health System Sustainability, Healthy Populations and Data & Digital Technology.

This year's Highlights Report demonstrates how these strategic themes have informed our research investments and while they each address a distinctive component of the health system, collectively they have the potential to bring about significant improvement for individuals and the overall system.



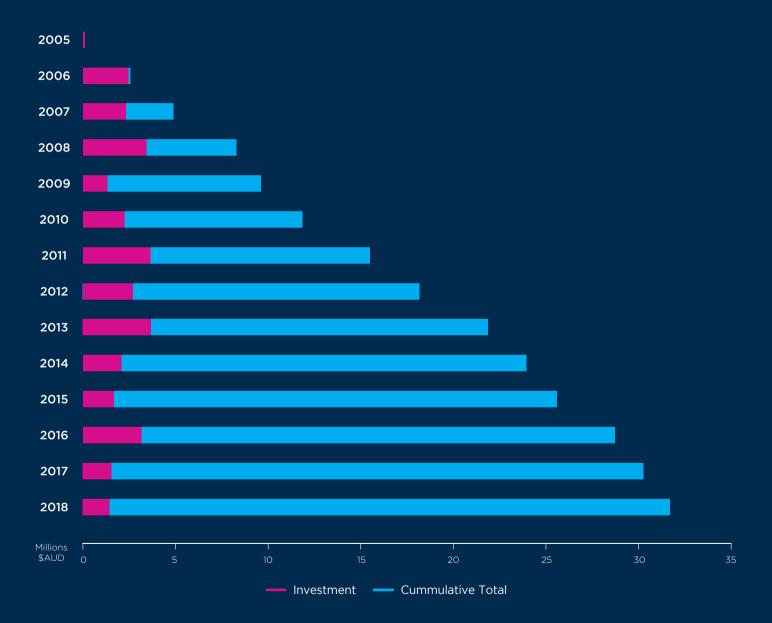
Our total investment has now grown to more than \$31 million. This figure is already set to increase following the announcement of our competitive funding round and the commitment of \$1 million to research focused on Mental Health Models of Care.

I would like to acknowledge our Foundation partners and those who contribute to the work of the Foundation. This includes the Board, Bupa Executive Team and the funding commitment from Bupa ANZ. I would also like to recognise the Foundation team for another successful year, the Foundation Steering Committee, chaired by Bupa's Chief Medical Officer, Dr Paul Bates and Annette Schmiede the Executive Leader.

Mule

The Hon. Nicola Roxon Chairman

We have invested over \$31 million in projects that aim to improve health outcomes for all Australians.



Bupa Health Foundation Investment to date



Introduction

The Bupa Health Foundation has built a strong legacy over the last thirteen years. We've achieved this by investing in research that supports individuals to make better choices for their health and partnering with leading organisations to drive policy reform and support advocacy.

After several years of consolidating our research portfolio it was timely to clarify our strategic themes and how these would guide our research investments and partnerships. It was also time to align our purpose to be consistent with that of Bupa - to help people live longer, healthier, happier lives.

Delivering on this purpose will be through stronger partnerships with the health care sector and the research community to address the highest priority health needs of the Australian community.

On the following pages you will see how we approach our partnerships and funding and the principles that guide these decisions.

Three strategic themes guide the Foundations work: Sustainable health systems, Healthy populations and Data and digital technology. Our Report this year highlights our work and partnerships across these three themes.

This year we have also announced the return of The Foundation Grants
Program. The competitive funding round will invest more than \$1m in two projects that aim to improve mental health models of care in Australia.

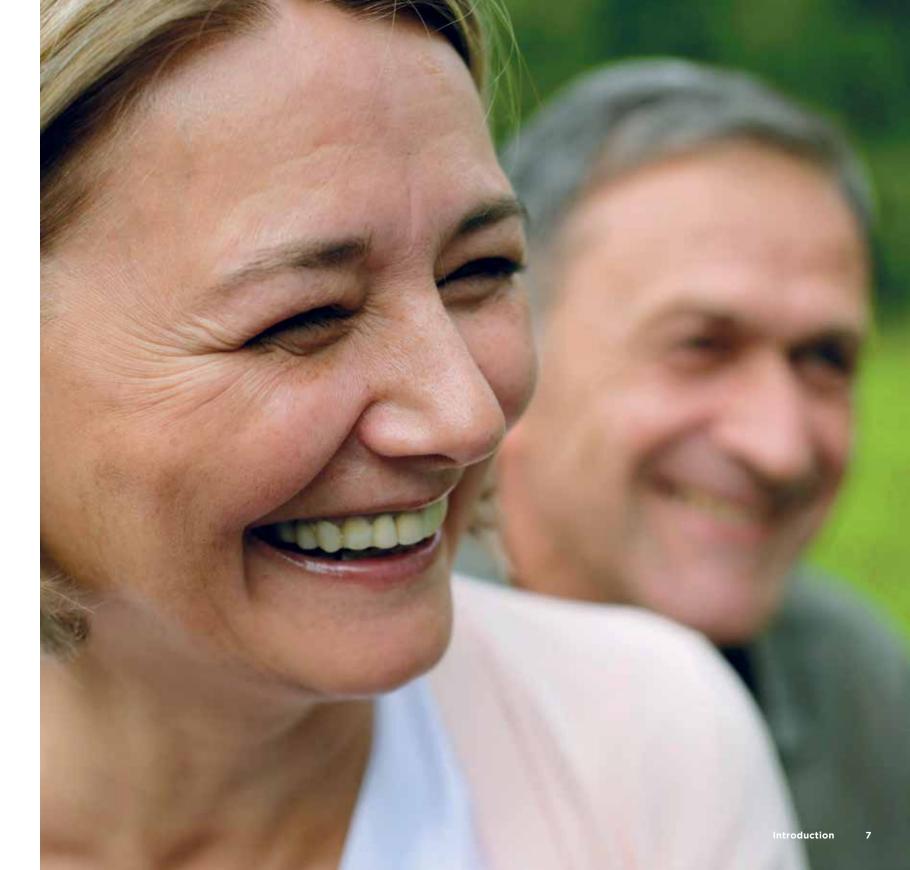
Moving forward with this improved process, we hope that by directing the funds to one or more projects we will be able to maximise the impact on health outcomes for all Australians.

I'd like to welcome Nicola Roxon as our Foundation's new Board Chair and acknowledge the retirement of John Conde. The Bupa Foundation was well served by his stewardship from its beginning. His enthusiastic support for the work of the Foundation was unwavering and strongly contributory to its position as one of Australia's leading corporate foundations dedicated to health.

I would also like to acknowledge the worth and assistance of the Bupa Health Foundation team and the wider Bupa community in supporting the work of the Foundation.

A Schniede

Annette Schmiede Executive Leader



Foundation Overview



Longer, healthier, happier lives

Our purpose

Our role

To partner with health and medical researchers to address the health needs of the Australian community.

Our approach to partnering includes four core activities:



Invest in research that improves health through changes to policy, practice and behaviour.



Collaborate with those doing health and medical research across academic, industry and healthcare communities.



Advocate for health and medical researchers, organisations and initiatives that are improving health.



Capacity-build by developing the capabilities, skills and networks of the health and medical research community.

Our partnership principles

Consumer-centred - Consumers are always in mind in the development and delivery of research and its outcomes.

Innovative - Thinking imaginatively and pushing the status quo.

Translational - Moving beyond solely evidence creation so that evidence informs health policies, practice, and behaviour change.

Cross-disciplinary - Bringing together the right people, with the right skills to deliver the right health and care outcomes.

Our focus

Sustainable health systems - Research to better understand the characteristics of efficient and effective healthcare which is essential to ensuring a sustainable and equitable health system.

Healthy populations - Understanding the health status and needs of the population, including specific sub-populations, to best develop and implement prevention and early intervention initiatives for greatest health impact.

Data and digital technology - How to best utilise available data sources and digital technologies to improve health outcomes through improved access, consumer engagement and system efficiency.

Sustainable health systems

Thanks to modern medicine, we have a lot to be grateful for.

Research breakthroughs happen at a rapid pace, new treatments are being created, and people are living longer. However, this also means within 50 years almost a quarter of Australia's population will be over 65 years of age. Combined with rising costs of healthcare and limited resources, the overall population growth raises the question – how will we maintain affordable healthcare at the level and quality that we are used to?

Research to better understand the characteristics of efficient and effective healthcare systems is essential in future proofing the Australian health system and ensuring sustainable and equitable healthcare.

"It's a big challenge. But that's what we are here for." "Our aim is to develop evidence-based strategies to cut waste and build a more sustainable system that's better for the patient, easier on limited resources, and workable for clinicians, policy makers and funders, in the long term."

Building a sustainable healthcare system

Professor Jeffrey Braithwaite, Founding Director of the Australian Institute of Health Innovation, is leading a nation-wide team of experts at the Partnership Centre for Health System Sustainability.

To address the complex challenge of building a sustainable health system, the Partnership Centre's focus is on three main areas:

- Using analytics, technology and shared data
- Reducing waste and low-value care
- Promoting better value for the health dollar

Commencing operations in January 2018, the Centre is a collaborative of Australia's best research minds who have joined forces to tackle interventions that will significantly improve the sustainability of our healthcare system. The Centre is jointly governed and funded to the value of \$10.75 million over five years by the National Health and Medical Research Council, Bupa Health Foundation, NSW Health, Department of Health Western Australia and the University of Notre Dame Australia.

The Centre is drawing on the combined expertise of Australia's foremost experts in health economics and financing; implementation and translational research; healthcare quality and safety; waste and low-value care; consumer engagement and strategy; telehealth; health informatics; and case-mix classification and costing.

During the first year of operation, the Partnership Centre is producing Australia's first ever comprehensive review into healthcare that is of little benefit and may even harm patients. This is known as wasteful and low-value care, the consequence of this being that some patients may receive unnecessary care, while others may miss out on the care they truly need.

The Partnership Centre has already published research in this area of low value care with a focus on low back pain and defining hypertension. Reducing interventions and tests for low back pain is a focus for Professor Rachelle Buchbinder from Monash University one of the lead investigators of the Partnership Centre. Another lead investigator, Professor Paul Glasziou, is examining the impact of changing the thresholds for certain conditions such as hypertension. He warns that doing so may result in people being labelled as unwell even if they have low risk of the disease and of the potential harm that could be caused by prescribing medication to patients who do not need it.

Another area of work is measuring the cost effectiveness of lower cost health interventions such as in-home aged care services compared to institutional care. Professor Jon Karnon and his team have developed a framework to assist in the choice of services which will provide the best outcomes for patients and their families.

With innovative research well underway in all three focus areas, Professor Braithwaite said that, "our aim is to develop evidence-based strategies to cut waste and build a more sustainable system that's better for the patient, easier on limited resources and workable for clinicians, policy makers and funders, in the long term."

"We will look at alternative models of care to support people at home longer and assess how shared information and technology can help. A big challenge. But that's what we are here for."



Healthy populations

It is now well known that our health is influenced by our environment. From our relationships and the level of stress we feel, to the places where we work, live and play - these factors can play a role in our health. They might determine what we eat and how much sleep we get, to how we find and access health advice and treatments.

As more research is done on understanding the complexity of social determinates of health, it is essential that we ensure our population is healthy, and that prevention is prioritised.

This is particularly evident with obesity. With almost 2 in 3 Australians being overweight or obese, researchers and health professionals alike recognise the urgent need for action on obesity prevention, which also will reduce burden of other chronic illnesses such as diabetes, cardiovascular disease and cancer.



is a major risk factor for chronic disease. 16 Obesity Collective

The Knowledge Hub Using evidence to tackle obesity

Jane Martin. Executive Director of the Obesity Policy Coalition, is part of the newly established Obesity Collective, a pioneering group of committed individuals who have come together to collaborate and help drive more action on obesity and improve the health of all Australians.

The Bupa Health Foundation is one of the many organisations involved in the Collective, whose ultimate vision is to transform the way society thinks, speaks and acts on obesity to reduce the impact it has on everyone in the community.

Ms Martin said that when it comes to tackling obesity. "evidence is a crucial base for all our work, particularly around advocacy, policy change and programs". However, there was no central resource which combined the key information in one place.

That's how The Knowledge Hub came about. As a website, The Knowledge Hub was identified as a foundational component to support the progress of the Obesity Collective's mission. Once complete, this online resource will serve as a platform for future obesity policy development in Australia.

The project is being undertaken by the Obesity Policy Coalition in collaboration with Professor Stephen Simpson, Executive Director of Obesity Australia. The first phase was to develop the wireframe for The Knowledge Hub - that is. the structural design of the website.

Now that this stage has been completed, Ms Martin's team has turned to coordinating the content for the website. This includes writing chapter materials, consulting with key experts in the field, and identifying and collating all the important information.

"The Knowledge Hub is a comprehensive, authoritative website which synthesises the key evidence. I think it will increase the effectiveness and the efficiency of those who are working in the field of obesity and act as a tool and evidence base for advocates and decision makers". Ms Martin said.

A range of groups will benefit from having access to The Knowledge Hub, including government agencies, health professionals, political advisors, policy makers, academics, and journalists. By building knowledge and capacity among these target audiences, the Knowledge Hub will inform the development of obesity policies. It will also support governments in taking evidence-based action to prevent and treat obesity, and the number of deaths and illnesses associated with it.

The Bupa Health Foundation has been a long-term supporter of efforts to reduce obesity in Australia and is a key member of the Obesity Collective.

"With their support, we have been able to kick off this important initiative, which will help deliver sustainable action and sustained pressure in taking action on obesity, and have a real impact on the health of the Australian community" Ms Martin said.



Data and digital technology

Technological innovation is an important enabler of health care improvement.

Advances in information and communications technology, eHealth, as well as medical technology hold great potential to deliver health care more efficiently and effectively.

Along with these technology enhancements Australia is embarking on a new era of health data collection and utilisation. Important research is underway on how to best collect high quality health data and how to fully utilise this data whilst ensuring protection and privacy.

The opportunity lies in bringing together disconnected data to strengthen the understanding of the patient journey and ultimately improve the health of individuals and the community.





Data linkage

Pathways to improving cancer care

A ground-breaking research project is tapping into the power of linked data to enhance cancer care and improve patient outcomes.

Supported by the Bupa Health Foundation, Professor Jon Emery and his team at the Victorian Comprehensive Cancer Centre (VCCC) are undertaking the first large-scale, comprehensive data linkage which connects primary care with hospital data for cancer patients. Upon completion, this resource will be unparalleled in Australia, and will have a profound impact on research, policy and clinical practice across all cancer health services nationwide.

The initial step in the project was to link general practice data, drawn from the National Prescribing Service (NPS), with data from hospitals within Melbourne Health and Western Health. "We were able to obtain data on 1.8 million unique patients from general practice. By creating linkages, we could identify 15% of the patients in the NPS general practice data who had attendances at Western Health or Melbourne Health", Professor Emery said.

Having now proven that it is possible to effectively and securely link general practice and hospital data together, Professor Emery and his team are now excited to expand the amount of data they have and use this to closely examine different facets of cancer care.

"Together, VCCC and Bupa have invested further work to bring in additional data sets, particularly the Cancer Registry. Over the next 6-12 months we will gradually grow this linked data set to include six hospitals who contribute to the care of 40% of cancer patients within Victoria.

"This will allow us to obtain definitive data on the patients, within this large data set, who had a type of cancer."

Ultimately, harnessing the power of 'big data' can create big insights – and insight underpins improvements in healthcare.

"We'll be able to look at the date of diagnosis, and the diagnostic tests being used in primary care which contribute to cancer being detected sooner. We'll be able to look at what occurs during cancer treatment, and then explore what happens after treatment."

"We're particularly interested in identifying the potential gaps in the delivery of care to cancer survivors, and how well their other chronic conditions get managed."

Professor Emery said that exploring these care patterns will help direct strategies to improve cancer detection and cancer outcomes.

"We are using this linked data to potentially inform the design of certain tests or decision tools to help GPs diagnose cancer earlier."

He said this would be particularly important for cancers which are harder to diagnose, such as pancreatic and ovarian cancer.

While the focus of this data linkage has been around cancer, the approach has the potential to be applicable to all sorts of other health conditions.

Professor Emery said that thanks to the Foundation's support, his team has been able to launch a data linkage initiative which will give unprecedented insight into the heath journeys of Australians and shed light on how we can enhance the care they receive.

Health Insight Study

Using data insights to improve the healthcare system

To make sure that Australians can live longer, happier and healthier lives in the future, we need to collect and analyse detailed data to understand the factors and health services contributing to positive outcomes. The Bupa Health Foundation is supporting an innovative project at The Sax Institute which is making this a reality.

Led by Professor Emily Banks, the Health Insight Study is designed to generate new knowledge on the health and healthcare of Australians, across both the public and private health sectors. The project focuses on outcomes which are of importance to individuals and the community, which include remaining able-bodied, maximising psychological wellbeing, and maximising social and economic engagement.

These are outcomes that often are not visible from data that are routinely collected in health and healthcare. "We need to get first-hand information from individuals to get the insights we need to improve healthcare for the future", Professor Banks said.

"We want a healthcare system that is really centred around what people need and what they want most. And what we've found is that those elements of wellbeing and being able to do the things you want to do are what people care about the most. They are often missing from these kinds of studies, so that's what we're aiming to focus on."

Professor Banks said that her team is looking for people who are willing to share their experiences about what happens to them and the things they're exposed to. "We're then going to put those things together to guide us about the best health services, the best health systems, and the best way that people can live rich and fulfilling lives for as long as possible."

Taking part in this study is entirely voluntary. All information collected study will be kept in strict confidence according to current legislation. When researchers analyse the data to look for health insights, none of the participants' identifying details are included.



Building a healthy future for Australia



The Bupa Health Foundation is proud to support the future leaders of health and medical research. Now in its seventh year, the Emerging Health Researcher Award celebrates the achievements of the early career researchers, who are not only undertaking important research but are also focused on making sure their results have a real impact on the health of Australians.

The recipient of the 2018 award was Dr Jennifer Huynh from the Olivia Newton-John Cancer Research Institute (ONJCRI) for her work focused on identifying new therapies for colorectal cancer using the immune system.

She has discovered that a molecule produced in our bodies called IL-11 can prevent the immune system from attacking and killing colorectal cancer cells.

"I have a keen interest in understanding how the immune system works, in a cancer setting, and understanding how cancer cells are able to evade detection by the immune response", Dr Huynh said.

With colorectal cancer being among the deadliest cancers, Dr Huynh's work has the potential to have lasting impact on the survivorship of Australian's suffering from colorectal cancer.

"I am working actively with clinicians, basic researchers as well as industry to develop drugs that are able to stop IL-11 and therefore releasing this brake on the immune system and allowing it to do its work."

Dr Huynh was nominated by Professor Matthias Ernst, Scientific Director, ONJCRI who said Dr Huynh has a bright research career ahead of her.

"It's quite clear Jennifer is an outstanding scientist and I think she would stand out as one of the people that eventually will go on to run her own independent research lab," said Professor Ernst.

Click here to watch
Dr Jennifer Huynh's video

The Bupa Heath Foundation also acknowledged four researchers with a commendation award of \$1,000.

Dr Natalie Bradford Queensland University of Technology

Dr Annmarie Hosie University of Technology, Sydney

Dr Bridget Kelly School of Health and Society and Early Start, University of Wollongong

Dr Jing Jing Wang Flinders University of South Australia

Dr Huynh was awarded \$25,000 to further her research career, with the remaining three finalists each receiving a \$5,000 prize

Dr Katrina Champion

Dr Katrina Champion, from the Matilda Centre for Research in Mental Health and Substance Use at the University of Sydney is looking at using technology to improve the physical and mental health of Australian adolescents. She has been working with a range of professionals and young people across Australia to develop a digital intervention that uses computers, smart phones and interactive cartoons to educate young people about six key risk behaviours that are associated with chronic disease. The big six risk behaviours are identified as: alcohol use, smoking, inactivity, poor sleep, poor diet and excessive recreational screen time.

Dr Champion is leading a trial to evaluate the Health4Life initiative among 8,000 Year 7 students across Australia to show if the intervention can improve both physical and mental health during adolescence and reduce their risk of chronic disease.

Dr Champion said that "by intervening early and using a holistic approach we hope to encourage young people to adopt healthy habits at a young age and to prevent these behaviours becoming entrenched and leading to disease later in life."



Dr Quan Huynh

Dr Quan Huynh from the Baker Heart and Diabetes Institute has developed a risk assessment tool to predict patients who are at greater risk of readmission and death following heart failure. With this information cardiologists can target the appropriate interventions to those at high risk which will not only improve prognosis for patients but will also reduce health care costs.

Dr Huynh has validated the tool with an Australia-wide sample of heart failure patients and his findings on the interventions are already being adopted into clinical practice. The next step for his research is to improve efficiency by integrating mobile technology into the care of heart failure patients after hospital discharge. This model of care also has promising potential to help solve the barriers of those living in rural or remote areas.

"In my opinion there is no point in doing research if we cannot translate our findings into practice. Our findings have been applied to practice by colleagues in the Nepean hospital in Sydney and they've been quite successful" Dr Huynh said.



Dr Serene Yoong

Dr Serene Yoong, is a behavioural scientist and experienced dietician from the University of Newcastle. Dr Young's background has led to her research to help prevent obesity in children by implementing effective nutrition guidelines and programs in childcare centres.

Dietary habits are established in early childhood and can persist into adulthood, so by educating the childcare centres and giving them the right tools, knowledge, resources and support, Dr Yoong aims to reduce the burden of obesity. Dr Yoong is actively applying her research by engaging with end-users to deliver effective and scalable strategies targeting an important population group.

"A lot of money goes into developing guidelines and effective programs to improve children's diets but often times they don't get translated into practice, so my research aims to bridge that gap. I'm taking guidelines and programs that have shown to be effective and getting end-users to use them – in this case childcare centres to really take those best practice principles and deliver them to the children to improve care," said Dr Yoong.



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Bupa Health Foundation Leadership

Foundation Management

Annette Schmiede, Executive Leader

Alana Fisher, Operations Manager

Melina Georgousakis, Research & Policy Manager

Donna Peek, Personal Assistant

Foundation Steering Committee

Paul Bates, Chief Medical Officer, Bupa ANZ (Chair)

Richard Bowden, CEO, Bupa ANZ

Jane Power, Chief Marketing & Customer Officer, Bupa ANZ

James Howe, Head of Media & Corporate Communications, Bupa ANZ

Adam Longshaw, Director Health & Benefits Management, Bupa HI

Foundation Board

The Hon Nicola Roxon (Chairman)

Mr Richard Bowden

Mr Hisham El-Ansary

Ms Jane Harvey

Mr John Lorimer

Mr Trevor Matthews

Mr Bryan Mogridge, ONZM

Dr Lisa O'Brien

Ms Nicola Wakefield Evans

Ms Emma Zipper (General Counsel & Company Secretary)



