

Our organisation



Our strategy

RESEARCH GOALS

-  **Better Treatments**
Finding better treatments for the world's biggest health problems
-  **Better Care**
Transforming primary health care to support better health for more people
-  **Healthier Societies**
Harnessing the power of communities, governments and markets to improve health

IMPACT GOALS

-  **Advocacy & Thought Leadership**
The growth of effective advocacy and a thought leadership program aligned to our research and entrepreneurship objectives
-  **Disruptive Entrepreneurship**
The growth of a disruptive entrepreneurship program aligned to our research goals

Our values

-  **Humanitarian commitment**
Spurs us to tackle the health issues affecting high-risk and disadvantaged people worldwide
-  **Focus on excellence**
Ensures we will produce scientific evidence that is ethical and of the highest quality
-  **Creativity**
Encourages us to challenge traditional thinking and provides an impetus for new and innovative solutions to the world's leading health problems
-  **Integrity**
Underpins all our work and interactions, including our collaborations with partner organisations worldwide
-  **A 'can-do' approach**
Helps produce timely, effective action, even in the face of adversity or other barriers to implementation
-  **Emphasis on impact**
Will ensure our work has real consequences for those most vulnerable to disease and injury

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ACKNOWLEDGEMENT OF COUNTRY



The George Institute acknowledges the Gadigal People of the Eora Nation as the Traditional Custodians of the land on which our Australian office is built and this report was written.

We pay our respect to Elders past, present and emerging.

The George Institute for Global Health

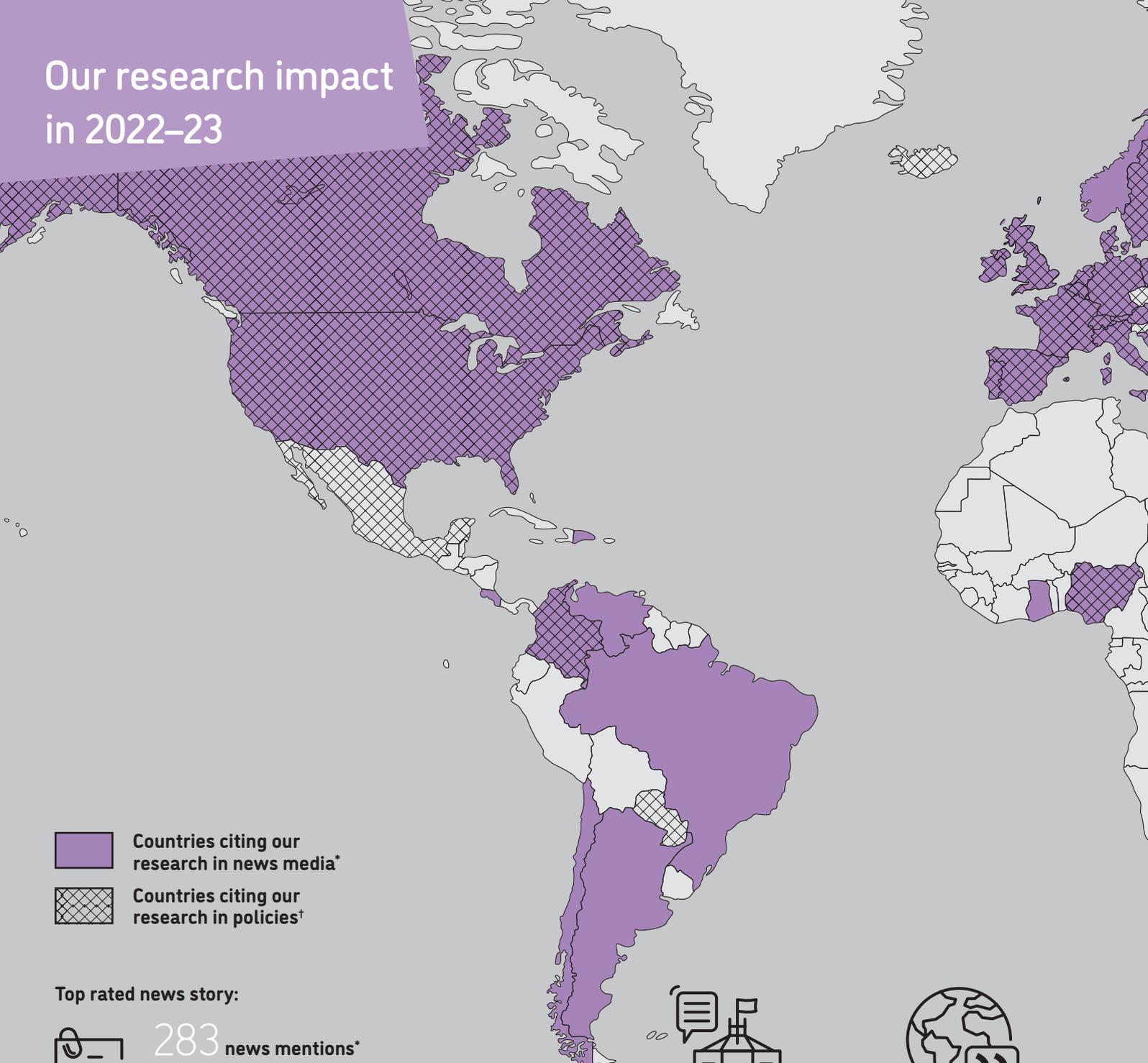
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We are a registered charity in Australia, India and the United Kingdom.
All currency is in Australian dollars unless otherwise indicated.

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Our research impact in 2022–23



-  Countries citing our research in news media*
-  Countries citing our research in policies†

Top rated news story:

 **283** news mentions*
for a study that found the loss of the male sex chromosome through ageing can lead to an increased risk of heart failure and CVD.

Most cited study:

 **124** academic citations†
for a study that found that the health risks associated with alcohol consumption vary by region, age, sex and year.

Most policy citations:

 **38** policy citations†
for a study of disease that found improvements in some conditions have led to a rise in older populations with complex diseases.



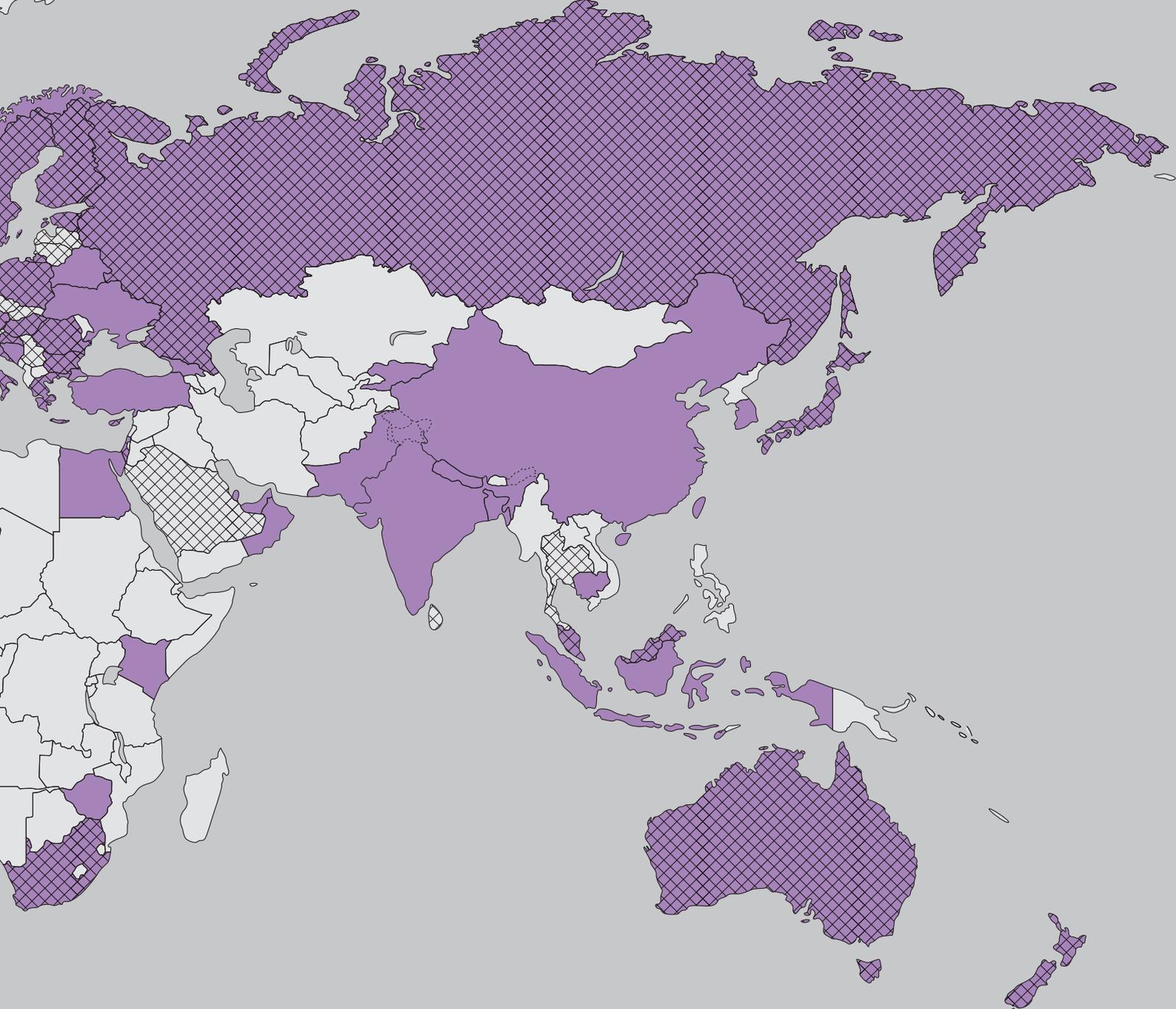
Top 10 countries citing our research in policy documents†:

- Australia
- United Kingdom
- United States
- Germany
- Sweden
- The European Union
- France
- Canada
- The Netherlands
- South Africa



Top 10 countries citing our research in news media*:

- United States
- United Kingdom
- Australia
- India
- Germany
- Spain
- France
- Canada
- China
- New Zealand



In the last year our research has been mentioned in*:



2,739

news stories



26,763

X twitter mentions



207

blogs



137

wikipedia articles



26

patents



51

videos

Top 5 organisations citing our publications were†:



- World Health Organization
- Pan American Health Organization
- World Bank Group

- AWMF – Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften
- NICE – National Institute for Health and Care Excellence

Sources: *Altmetric, †Overton, ‡Crossref; reporting period July 2022 – June 2023

A message from our Chairs



Our Annual Report provides the opportunity for a moment of reflection as we look back on the achievements of The George Institute over the previous year.

And this year gave us more reason to be grateful for our past and excited for the future as Professors Robyn Norton and Stephen MacMahon left the organisation which they founded 25 years ago and we welcomed Professor Anushka Patel into the role of CEO.

Anushka has been with The George Institute for 22 years. A cardiologist, she joined in 2001, has been Vice-Principal Director and was our Chief Scientist for 10 years. She brings a wealth of experience and is much respected across the organisation.

Her passion and vision for what we can achieve means we have high hopes for what is to come as she leads the Institute during this new phase of organisational growth.

Anushka has the full support of the Board as she steps into her new role and shapes the future of The George Institute, ensuring that we continue to deliver on our mission to improve the health of millions of people worldwide.

We wish her every success.


David Armstrong
Chair


Catherine Brenner
Acting-Chair

A message from our CEO



As I take on my new role as CEO of The George Institute, I would like to acknowledge what an immense privilege it is to be given this opportunity and convey how excited I am for the future of this incredible organisation. I have come to know The George Institute very well over the last 22 years. The continually expanding depth and breadth of our work and the constant striving of our people to improve lives around the world never ceases to amaze me.

Our mission to improve the health of millions of people worldwide will continue to be at the heart of our work and my vision is that a focus on equity, impact and resilience will drive everything we do to achieve this vital aim.

As we look back on the past year, we can be so proud of our successes. Our commitment to equity has seen us undertake research in areas such as stroke and dementia to show that non-communicable disease often impacts women and men differently, and their symptoms may be treated differently. We have continued to address the drivers of poor health, such as the tobacco industry and global food systems, generating and using evidence to call for regulation and interventions to address health harms.

We have scrutinised health systems to improve the treatment and care people receive, including enabling new protocols in the treatment of sepsis and brain health, which have the potential to save numerous lives.

Planetary Health is an emerging area of research for us, and as we explore the impact of climate change on human health, we were delighted to receive an GBP£10m grant from the National Institute for Health and Care Research (NIHR) to launch a Centre of Research Excellence in Delhi to explore evidence-based and implementable solutions to these interlinked issues.

These are just a fraction of the amazing things we have achieved this year as we continue to generate evidence around better treatments, better care and healthier societies, but none of our successes would be possible without our incredibly talented and hardworking people, and the partnerships and collaborations we have built across the globe.

The University of New South Wales has been a critical partner of The George Institute since 2017 and we are incredibly grateful for its ongoing support. We continue to enjoy the support of Manipal Academy of Higher Education in India and last year signed a partnership agreement with Imperial College London which is helping us to grow our work in the UK and across the world.

This has been a tremendous year for The George Institute and this Annual Report contains just some of the highlights across our broad range of work.

A handwritten signature in black ink, appearing to read 'Anushka Patel'.

Professor Anushka Patel
Chief Executive Officer

We're committed to advancing health equity which is at the heart of everything we do



Across the world, marginalised groups and communities experience more health issues, struggle to access health services, and have worse health outcomes than other groups.

At The George Institute for Global Health, we want everyone, regardless of their situation or location, to have access to affordable quality health treatment and care, which is why we work to improve health outcomes and to reduce health inequities within and between countries.

Among many successes this year, we have built new evidence about the sex-specific impact of non-communicable diseases (NCDs), worked to ensure sex and gender are considered in health research, reported on how countries are implementing gender equality laws, and partnered with Aboriginal and Torres Strait Islander communities to support an Indigenous approach to health and healing.

Health equality usually means treating everyone equally, giving them the same opportunities, care and services and removing discrimination based on characteristics such as gender, ethnic background or socio-economic status.

Health equity prioritises achieving health justice. Rather than receiving equal treatment, some individuals or groups may require more or different kinds of support to address disadvantage, injustice or unfairness and achieve the best possible health outcomes.

The George Institute works for both health equality and health equity. Health equity encompasses health equality but goes beyond it and we usually use this term in this report.



WORKING WITH FIRST NATIONS AUSTRALIANS

Building on a long-term relationship with the Walgett Aboriginal community, we have facilitated evidence-gathering to inform community calls for the government to address food and water security.

For the last five years, the water in Walgett, northern New South Wales, has been supplied from a bore which The George Institute found to have 15 times the amount of sodium recommended by medical practitioners for long-term consumption. A survey of community members, led by the Dharriwaa Elders Group and Walgett Aboriginal Medical Service, undertaken in partnership with University of New South Wales and The George Institute, found the water situation was having a severe negative effect on household expenses and food security. Some residents reported paying up to \$50 a week on bottled water to avoid using tap water, which in turn impacted their ability to buy food and other household essentials.

The results helped us to support community efforts to improve food and water security in Walgett, including advocating for government action to establish a multi-agency taskforce to address water issues and to support community initiatives such as installation of a safe drinking water kiosk and employment of a local food and water coordinator.

As a result of these efforts, in May 2023 Walgett successfully switched from bore to river water, which had been treated to bring it up to the appropriate standard. Unfortunately, due to other issues, the water had to be switched back to the bore in June 2023, but significant media coverage of the water crisis has led to a government commitment to find a long-term solution to water supply problems.

Keziah Bennett-Brook, Head of Guunu-maana (Heal) Aboriginal and Torres Strait Islander Health Program, said: "Community leadership and the significant advocacy efforts of Walgett residents, particularly local Aboriginal people, are really making a difference in finding innovative solutions to ongoing water issues and this project is a great example of self-determination in action."

NEW FUNDING TO ADDRESS INSTITUTIONAL RACISM IN HEALTHCARE

In November 2022, The George Institute was successful in securing major funding for a five-year project to address implicit bias and institutional racism within the Australian hospital system and to reform the development and delivery of hospital care for Aboriginal and Torres Strait Islander people. The grant comes from the Australian Government's National Health and Medical Research Council Synergy Grants round and supports a multi-disciplinary research team with \$5million in funding over five years.

WALGETT 'FOOD AND WATER FOR LIFE' FINDINGS:



46%
of the community
experienced food insecurity

This is much higher than prevalence rates reported in previous national surveys and is similar to First Nations communities in Canada and many developing countries.



44%
of the community
experienced water insecurity

This is similar to First Nations communities in Canada and worse than some communities in Bangladesh and Lebanon.



63%
of the community struggled
finding food available at markets



84%
experienced interruption of their main
water source in the last 12 months



Dr Cheryl Carcel, Head of the Brain Health Program at The George Institute, speaking to Channel 9 News Australia about Women and Stroke

WOMEN AND STROKE

Early treatment of stroke, even before hospital admission, is recognised as important in ensuring the best outcomes for patients. But new **research** published in July 2022 in the Medical Journal of Australia, indicates that women and men may receive different treatment in the early stages of an incident, even when they both arrive at hospital by ambulance.

The research looked at over 200,000 patients admitted to hospitals in New South Wales between July 2005 and December 2018 and subsequently diagnosed as having a stroke. Women under 70 were found to be more likely than men to be assessed by ambulance staff as having other conditions – such as migraine or anxiety – and women were less likely than men to receive pre-hospital stroke care during their ambulance journey.

Neurologist and Head of The George Institute’s Brain Health Program, Dr Cheryl Carcel, commented: “Greater awareness about differences in symptom presentation of stroke between women and men is crucial for early diagnosis. Effective procedures for in-ambulance stroke care ensure patients with stroke symptoms are brought to a high-level specialised facility quickly to receive life-saving treatment.”

WOMEN’S DEMENTIA RISK ASSOCIATED WITH DISADVANTAGE

New research conducted by The George Institute in partnership with Imperial College London, published in **February 2023**, showed that social and economic disadvantage may explain the higher burden of dementia in women.

Previous research had shown that women have a greater lifetime risk of developing dementia than men, but most of this research had been conducted in high-income countries. Our new study, which involved almost 30,000 people from 18 countries, found that – when adjusted for age – rates of dementia were highest among low- to lower-middle income countries and higher in women than men.

Whilst education and mentally stimulating occupations are strong protective factors for both sexes, women may experience educational and employment disadvantage (particularly in less developed countries), which may explain their greater risk of the disease.

Associate Professor Sanne Peters, Senior Lecturer at The George Institute in partnership with Imperial College London, said: “These stark new findings justify support for programs to improve sex and gender equity in brain health throughout the life-course, particularly for women in disadvantaged communities and low-income countries.”

PARTNERING WITH THE WORLD HEALTH ORGANIZATION

The George Institute has developed a strong partnership with World Health Organization (WHO) teams working on gender and chronic conditions, co-chairing WHO’s NCDs Lab on Women and Girls since March 2021.

Together we have worked to raise awareness of the fact that, in almost every country, chronic conditions and injuries are now the leading causes of mortality and morbidity for women. In March 2023, for example, we supported a high-profile **side-event** looking at digital health approaches to the prevention and control of NCDs at the UN Commission on the Status of Women in New York.

SEX AND GENDER PROJECT

In Australia, our 'Sex and Gender in Research' project, launched in 2019 and running until March 2024, has also been addressing this issue.

This year the project has contributed to the development of the National Health and Medical Research Council and Medical Research Future Fund's draft [statement on sex and gender in research](#); co-developed a [sex and gender medical research policy](#) with the Australian Association of Medical Research Institutes (published September 2023); and influenced national policy through the appointment of our founding director Professor Robyn Norton AO to the Women's Medical Health Advisory Council, which aims to address gender discrimination and improve health outcomes for women.

Dr Cheryl Carcel commented: "We want all stakeholders in the Australian health sector to support the collection, analysis and reporting of data on sex and gender – which will lead to better research, better policy and greater equity in health outcomes for all groups. Co-designing these policies with the relevant stakeholders was a vital first step to ensure buy-in and future uptake."

MESSAGE PROJECT

Our MESSAGE (Medical Science Sex and Gender Equity) project brings together research funders, researchers, patient groups, academic publishers and regulators to co-develop best practice recommendations and a sex and gender policy framework for research funders and regulators in the UK.

Two policy labs were held in May and September 2023, and the policy framework and associated educational and training materials will be published in 2024. Policy lab participants have stressed the value of the project, and many are building on their involvement to support initiatives in their own organisations. The Lancet Group and The BMJ medical publishers are stakeholders in the MESSAGE project, and The BMJ called attention to its work, calling the under-representation of women and ethnic minorities in clinical studies, "nothing short of a scandal".

Project lead Dr Kate Womersley, commented: "We're energised by the interest, expertise and commitment that stakeholders have brought to the MESSAGE policy labs. We're confident that this incredible group will co-produce a robust and impactful sex and gender policy framework. The next step will be implementing the framework in UK organisations in 2024, then establishing processes to evaluate how the research landscape changes as a result."

USING LEGISLATION TO IMPROVE WOMEN'S HEALTH

Our Redressing the Balance report, launched in February 2023 at the United Nations in Geneva, revealed how countries are fulfilling their commitments to use legislation to protect women's health under the UN's Convention on the Elimination of All Forms of Discrimination against Women (CEDAW).

The report, co-published with the Australian Human Rights Institute at the University of New South Wales, drew on data from 117 countries, finding that whilst there had been significant reforms in addressing violence against women, more action was needed on issues such as sexual harassment, prohibiting female genital mutilation and improving access to services for disadvantaged women.

The CEDAW committee congratulated us on the report and said that it would influence the way they make recommendations to national governments on how to use health-promoting legislation.

Report author Dr Janani Shanthosh, manager of The George Institute's Health and Human Rights Program until April 2023, commented: "Reforming and fully implementing gender equality laws offers a huge opportunity to achieve better health outcomes for women. This evidence about how countries are fulfilling their CEDAW commitments provides a strong advocacy lever to encourage governments to do more."



We're working to address the social and economic drivers of poor health



Australian High Commissioner The Hon. Barry O'Farrell announces DAP Grant to The George Institute for Global Health, India to implement Mental Health initiatives in Telangana

The biggest influences on health and wellbeing come from outside healthcare and treatment settings – in the environments in which people live, work, play and travel. Factors such as the global food system, harmful industrial practices (such as poor working conditions) and inadequate regulation of commercial activities (such as the tobacco or vaping industries) drive the conditions that promote ill health.

The George Institute is working with governments, NGOs, companies and communities to address the social and economic drivers of ill health and support the development of healthier societies. We build evidence about the health impacts of systems and practices, and work with partners to create and implement policies and programs to address them.

Highlights this year include publishing new research on the potential for salt substitutes to reduce hypertension globally and revealing the amount of salt in pre-packaged food in China and establishing new evidence on stroke burden in Mongolia, the health hazards of bidi work, and the potential of 'food as medicine'. We also celebrated a significant advocacy success with the Australian Government announcement of stronger regulations on vaping.

META-RESEARCH AND EVIDENCE SYNTHESIS UNIT

The George Institute's Meta-Research and Evidence Synthesis Unit conducts 'fit for purpose' evidence synthesis and meta-research (reviews of existing evidence and previously published research studies on a topic) to promote the use of evidence in health-related decision making.

Its work consistently informs guidelines and policies developed by governments and health bodies. Recent examples include informing guidance for community health workers on pandemic response, highlighting the need for revision of the International Code of Marketing of Breast-Milk Substitutes to address digital marketing, and prompting a statement on e-cigarettes from Australia's National Health and Medical Research Council.

EVIDENCE ON THE HEALTH HAZARDS OF WORK IN THE BIDI INDUSTRY

A systematic review, commissioned by the WHO India and conducted by The George Institute's 'Meta-Research and Evidence Synthesis Unit', revealed the appalling impact of the bidi industry on workers' health. Bidi is an indigenous South Asian tobacco product made by hand rolling tobacco in tendu leaves. In India, the bidi industry captures 85% of the smoking market and employs approximately five million low-waged workers, most of them women.

Our research revealed that bidi work is associated with a high prevalence of conditions including musculoskeletal, respiratory, neurological and cardiovascular disorders. For women, it was associated with cervical cancer, decreased fertility, risk of miscarriage and problems in pregnancy, whilst children born to pregnant bidi workers are more likely to be low birth weight.

Building on this evidence, we developed a [WHO India Policy Brief](#) (December 2022), recommending that bidi work be officially classified as a 'hazardous process' under India's Occupational Safety, Health and Working Conditions Code. The policy brief received widespread media attention and has been discussed at trade-union meetings and policy forums, whilst the original research has since been published in [BMJ Global Health](#).

Soumyadeep Bhaumik, Head of the Meta-Research and Evidence Synthesis Unit, commented: "India is a signatory to WHO's Framework Convention on Tobacco Control, which obliges it to protect the health of workers and support alternative employment. The evidence from our research is very clear on the health hazards of bidi work and support for alternative livelihoods must be the long-term strategy for these workers."

ADVOCACY SUCCESS ON VAPING

Research published by The George Institute has contributed to the introduction of stronger vaping restrictions in Australia, announced in May 2023. Vaping is associated with increased risk of developing chronic conditions, including cardiovascular diseases, lung disorders, and cancer.

The [research](#), published in the Australian and New Zealand Journal of Public Health (April 2023), was based on a sample of more than 1,000 Australians aged 15–30 years who completed an online survey. Almost half of respondents reported being either current users or having tried/used e-cigarettes in the past. The article concluded that despite current restrictions on availability and promotion, many young people in Australia may be exposed to e-cigarettes and additional efforts were needed to address the problem.

We drew on the findings of the research in our submission to the Australian Government's consultation on vaping in January 2023, and we were delighted when Health Minister Mark Butler announced a ban on disposable vapes in May 2023, as part of a package of measures to tackle recreational vaping.

Lead author Professor Simone Pettigrew, Director of Health Promotion and Behaviour Change, said: "The ban on disposable e-cigarettes is wonderful news and will help protect young people from the potential harmful effects of vaping. We are pleased that our research and advocacy on this issue has played a role in changing public policy."



SWITCHING THE WORLD'S SALT SUPPLY

Excess dietary salt causes high blood pressure and millions of strokes and heart attacks each year worldwide. Cutting salt intake has huge potential to save lives but has proved extremely difficult to achieve because people find it hard to change how they cook and get used to a less salty taste for their food.

Research, led by The George Institute and published in the BMJ's prestigious *Heart* journal in August 2022, confirmed the global potential of switching regular salt for a potassium-enriched salt substitute. Potassium-enriched salt looks just like the regular product, can be used as a direct switch and gives a very similar flavour, with a prior large study led by The George Institute and conducted in China showing it also lowers blood pressure and reduces cardiovascular disease.

The new study examined data from 21 clinical trials of potassium-enriched salt involving nearly 30,000 people in Europe, the Western Pacific, the Americas and South-East Asia. It found that salt substitutes achieved reductions in blood pressure irrespective of geography, age, sex and disease state, suggesting that almost everyone in the world stands to benefit from switching to potassium-enriched salt. These findings underpin a major new program of work focused on 'Switching the world's salt supply', with the potential to avert millions of strokes and heart attacks worldwide each year.



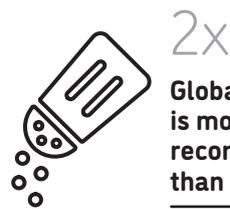
SODIUM TARGETS FOR PRE-PACKAGED FOODS IN CHINA

A study by researchers at The George Institute, the Chinese Centres for Disease Control, Queen Mary University London and WHO, published in the *Bulletin* of the World Health Organisation in May 2023, found that pre-packaged food contributes nearly one-third of the Chinese population's total sodium intake, which is more than twice that recommended by WHO.

Researchers analysed the sodium content of more than 50,000 food products, then used consumption data from nearly 16,000 Chinese adults to assess their contribution to overall sodium intake. The results showed that pre-packaged foods account for just over 30% of sodium intake, with soy and fish sauce making the most significant contribution. The study also explored the potential impact of various sodium reduction targets and proposed a 20% target which, whilst not as ambitious as WHO's 30% target, was identified as the most effective way to achieve a substantial short-term reduction.

TURNING EVIDENCE INTO POLICY

- China: Yuan Li, of The George Institute in China, contributed to the development of technical guidance for food companies on the production and marketing of pre-packaged children's foods and guidance for families on reducing domestic salt consumption. Both guidelines have been adopted as official nutrition standards by influential nutrition bodies in China.
- Globally: We contributed to the development of WHO's draft guidelines on low-sodium salt substitutes, aimed at national health authorities and public health organisations considering salt substitutes as a strategy for lowering population blood pressure. The guidelines are expected to be published in 2024 and will set the global standard for member countries.



2x
Global average salt intake is more than 2x the WHO recommendation of less than 5g/day of salt

In China, a study of over 20,000 participants in 600 villages, using a low-sodium salt substitute showed a:



14%
reduced risk of stroke



13%
reduced risk of major cardiovascular events



BUILDING EVIDENCE ON STROKE BURDEN IN MONGOLIA

New research into stroke burden in Mongolia, published in the *Lancet Global Health* journal in June 2023, found that the disease affects a much younger population than in high-income countries.

The research, a collaboration between The George Institute and the Institute of Medical Sciences in Mongolia, found stroke occurring at a mean age of 60 years – at least ten years earlier than the average in high-income countries. It also found much higher incidence of haemorrhagic stroke (caused by bleeding into the brain from a ruptured blood vessel) and poor outcomes in terms of death and disability.

Lead author Professor Chimeglkham Banzrai, from the Department of Neurology at the Mongolian Institute, said: “The results suggest high prevalence and poor management of hypertension, for which high average salt intake (double the recommended level) may be a driving factor. Collecting reliable data is the first step in planning an effective response to any health challenge and this important new evidence can help inform Mongolia’s stroke prevention and management efforts.”

‘FOOD AS MEDICINE’

A [new study](#) by researchers at The George Institute and University of New South Wales, published in the *Journal of Nutrition* in August 2022, found that fresh fruit and vegetables prescribed by doctors could be an effective way to improve the health of Australians with type 2 diabetes.

Participants received a healthy food box designed by nutrition professionals, accompanying recipe ideas and the option to see a dietitian.

On average, participants ate nearly two extra servings of fruit and vegetables a day, lost 1.7kg in body weight, and saw a 10% drop in low-density lipoprotein (LDL), the ‘bad cholesterol’ that causes heart disease.

Lead author Jason Wu, Head of Nutrition Science at The George Institute, said: “We know the importance of a good diet to maintaining health, but many Australians struggle to access healthy foods, especially those on low incomes. The study was an important first step in demonstrating the potential of ‘food as medicine’ to help doctors and patients manage diet-related diseases.” A wider randomised control trial is now underway.



WORK ON THE NATIONAL INJURY STRATEGY

In 2020, The George Institute in Australia was commissioned by the Australian Government to revise the National Strategy for Injury Prevention. Injuries are the leading cause of death for people aged one to 44 years in Australia and account for more than 8% of disease burden.

Work on the Strategy paused during the COVID pandemic but continued in 2022, when we updated the document with information about the cross-cutting themes of climate and product safety and new data and statistics throughout. The Strategy is currently with the Department of Health, awaiting final comments.

Kate Hunter, Senior Research Fellow Guunu-maana (Heal) Aboriginal & Torres Strait Islander Health Program, said: “It’s great to have had the opportunity to both develop and update the Injury Strategy, which now recognises First Nations peoples’ concepts of health and adopts a holistic approach to injury prevention. Once endorsed and implemented, we aim to see significant reductions in injury over the coming decade and to reduce the inequitable burden of injury among people experiencing disadvantage.”

We're developing innovative solutions to deliver more effective treatments and high-quality care



An informal workshop in Delhi India run by the ARTEMIS project team

NCDs cause over 70% of deaths worldwide and 85% of premature deaths from these chronic conditions occur in low- and middle-income countries. Finding better treatments for these diseases, and prioritising appropriate solutions for low-resource contexts, is one of the major strands of our work.

We are experts in conducting large-scale epidemiological studies and clinical trials, often across multiple countries. And we use this evidence to influence policy and practice and develop new approaches to diagnose, treat and manage chronic conditions. Consideration of how age, sex and gender, religion, ethnicity and socio-economic factors affect access to health services and health outcomes is central to all our work.

This year we have uncovered new evidence and devised breakthrough treatment protocols which will improve outcomes for stroke patients, celebrated the implementation of our Clinical Care Standard for sepsis in Australia, and seen the scale-up of digital health interventions in low-resource contexts. We have also worked with civil society partners to ensure the financial impact of NCDs is recognised and addressed, and joined with partners to call for social participation in health policy and planning.

BETTER MENTAL HEALTH SUPPORT FOR YOUNG PEOPLE IN INDIA

This year, the SMART Mental Health platform, which successfully improved take-up of mental health services when used with Indian adults, has been adapted and trialled for use with young people who face multiple barriers to accessing mental health support.

The results of the ARTEMIS Project, which involved 70,000 adolescents from informal settlements in two large urban areas, are currently being evaluated and will be shared once this is completed. Early indications are that the intervention has again increased the number of adolescents seeking treatment and enabled discussion about mental health in the community and among adolescents.

A NEW TREATMENT 'CARE BUNDLE' FOR BRAIN HAEMORRHAGE

In May 2023, we published data from the INTERACT3 study, demonstrating that a new combination of treatments for stroke due to intracerebral haemorrhage (ICH) significantly improves the chances of surviving without major disability. Results were presented at the European Stroke Organisation Conference in May 2023 and simultaneously published in [The Lancet](#).

ICH, commonly referred to as a haemorrhagic stroke or brain bleed, is the most serious but least treatable type of stroke, affecting approximately 3.4 million people a year with almost half dying within 30 days. The study enrolled more than 7,000 patients across 10 countries and was the first published randomised control trial to show a clearly positive outcome for the treatment of ICH. The proposed care bundle centres on the rapid control of high blood pressure, and study participants showed improved recovery, lower rates of death, and better overall quality of life for survivors.

Dr Lily Song, joint lead author and Head of Stroke at The George Institute in China, commented: "A lack of proven treatments for ICH has led to a pessimistic view that not much can be done for these patients, but our study demonstrated how readily available treatments can be used to improve outcomes in resource-limited settings. We estimate that, if universally adopted, the intervention could save hundreds of thousands of lives around the world each year."

IMPROVED TREATMENT FOR ISCHAEMIC STROKE

Research conducted in China has shown that intensive blood pressure lowering after blood clot removal in stroke patients led to higher rates of disability than less-intensive treatment, offering the opportunity to adjust clinical practice and significantly improve patient outcomes.

The randomised control trial took place in China between 2020 and 2022, recruiting 816 adults with acute ischaemic stroke and elevated blood pressure after clot removal. It found patients who received more-intensive treatment to reduce blood pressure had significantly worse scores than those treated less intensively. The results of the trial were presented at the World Stroke Congress in Singapore in October 2022 and simultaneously published in [The Lancet](#).

Professor Craig Anderson, Director of Global Brain Health at The George Institute in Australia, commented: "Medical practice had shifted towards more intensive lowering of blood pressure after clot removal, but there was no evidence to support this. Our study indicates that, lowering blood pressure compromises the return of blood flow to the affected area – leading to deterioration in surrounding brain tissue and increased disability.

"This new knowledge about the effect of aggressive blood pressure lowering in this type of stroke, offers the opportunity to improve treatment and outcomes for hundreds of thousands of patients accessing modern clot removal therapy every year."



Professor Craig Anderson, Director of the Global Brain Health program at The George Institute presenting Interact 3 results at the European Stroke Organisation Conference in May 2023



SEPSIS – A NEW CLINICAL CARE STANDARD

The year started with the announcement of a new national Sepsis Clinical Care Standard for the early identification, treatment and support of those who experience sepsis in Australia – one of the first countries to release a nationally agreed quality framework for the condition.

Sepsis affects more than 55,000 Australians each year and is responsible for nearly 9,000 deaths, with up to 50% of those who survive experiencing ongoing medical problems or disability. Rapid treatment is essential, but signs and symptoms can be hard to spot or mimic other conditions, which can delay diagnosis.

The Clinical Care Standard was developed by The George Institute and Sepsis Australia, in partnership with the Australian Commission on Safety and Quality in Health Care, building on our longstanding work to raise sepsis awareness and improve outcomes. The new Standard outlines optimal care from the onset of signs and symptoms, through to hospital discharge and follow-up.

Professor Simon Finfer AO, Senior Intensive Care Specialist and Professorial Fellow in Critical Care at The George Institute for Global Health, commented: “Sepsis is the most common preventable cause of death and disability and unfortunately young people, the elderly and Aboriginal and Torres Strait Islander peoples are disproportionately affected. The Clinical Care Standard is a game changer which will ensure health workers recognise the condition as a medical emergency and provide high-quality care to all Australians.”

To ensure the Standard results in real improvements in treatment, we hosted a national symposium in partnership with Sepsis Australia (August 2022), which was attended by representatives from health services, professional bodies and patients. And we are now working with the Australian Commission on Safety and Quality in Health Care on the next stage of the National Sepsis Program, which includes raising public awareness, education for health professionals and improved care for sepsis survivors.

Sepsis survivor and advocate, Mathew Ames. Photo: Helene Cochaud





Dr Devaki Nambiar, Program Director, Healthier Societies India

THE COST OF LIVING WITH NCDs

In 2022 we were commissioned by the global NCD Alliance to develop a major new [policy report](#) on the financial impact of NCDs, to support advocacy in the lead up to the UN High-Level Meeting on Universal Health Coverage in September 2023.

The report, which was launched at the World Health Assembly in May 2023 and has been presented in multiple other forums, showed that living with NCDs puts a significant economic burden on individuals and families in terms of additional household expenditure and loss of income. The report builds on participants' diary entries and gives a unique insight into the human cost of living with chronic conditions, showing that the economic burden – along with the disease itself – is often associated with stigma and negative mental health impacts.

Devaki Nambiar, Health Equity Program Director at The George Institute in India, who led the project, said: "Out-of-pocket treatment costs for diseases such as cancer can be 'catastrophic' (more than 40% of income), with drugs, diagnostics and travel also becoming burdens over time. This has a knock-on effect on household spending on food, education and social activities and, as ever, it is the most vulnerable who are most affected. Effective solutions such as public or social insurance do exist, but there are gaps in coverage, marginalised groups are often not included, and low-income countries have limited resources for such schemes."

The report was used by the NCD Alliance ahead of the UN High-Level Meeting to advocate for national budgets to allocate more resources to treatment and care for NCDs, and for people living with NCDs to be recognised as vulnerable populations and included as experts in the design of policies.

SMARTHEALTH SCALE UP, INDONESIA

By the end of the year, The George Institute's digital SMART*health* platform, which supports clinical decision-making in the treatment of adults with chronic heart diseases, had been rolled out to nearly 300 villages in Malang district, Indonesia.

The platform, first developed in 2009, was adapted for use in the management of cardiovascular diseases in Malang in 2016 – making it easier for health professionals to implement clinical guidelines and for patients to understand their own risk. A pilot project (2016–2018) involving eight villages and 20,000 participants found that 57% of patients assessed by the platform had received treatment to lower their blood pressure – compared to only 16% of those assessed by usual methods. These highly positive findings encouraged the local district health authority to roll out the intervention to more than 300 villages across Malang from 2020, supported by Australia's National Health and Medical Research Council (NHMRC) and The George Institute. In May 2023, the government announced plans to further extend the roll-out, taking SMART*health* to all 390 villages within the district.

Dr Praveen Devarsetty, Primary Health Care Program Director at The George Institute in India, commented: "The SMART*health* intervention has helped strengthen primary health care for risk management of cardiovascular diseases and it's wonderful to see this successful intervention transforming outcomes for some of the most vulnerable patients."

SPHERE PROJECT

2022 saw the formal launch of the SPHERE project (Social Participation for Health: Engagement, Research, and Empowerment), which is a network of practitioners and academics working to consolidate evidence on social participation for health. Social participation is the involvement of communities in developing health programs and policies and is essential to achieve Universal Health Coverage and ensure services respond to community needs, are inclusive and leave no-one behind.

The George Institute hosts the Secretariat for SPHERE. We partner with civil society and academic groups in Argentina, Kenya and Vietnam to research which tools, platforms and processes can best support civil society participation in developing, implementing and evaluating health programs and policies.

With representatives from WHO and global advocacy movement UHC2030 as SPHERE members, we ensure learning from the project is shared in relevant multilateral forums to amplify its impact. We advocated for governments to implement their commitments on social participation at the Multi-Stakeholder Hearing on Universal Health Coverage in New York in May 2023, and are working with partners to support negotiations on a World Health Assembly resolution, calling on countries to invest in regular, sustained and effective participatory processes.

We're building evidence on the relationship between human and planetary health and how to tackle these interlinked challenges



The ARISE project, 'Accountability for Informal Urban Equity' focusing on waste workers in Vijayawada, India

The climate and global health crises are inextricably linked. Rising sea-levels, increased temperatures and extreme weather events threaten lives, homes and livelihoods, resulting in poor health outcomes and widening health inequities, particularly in marginalised communities.

Planetary health is an emerging area of research for us, and we are working to build the evidence to shape our policy engagement and advocacy at the intersection of environmental and human health. All our work is informed by the views and interests of those communities most affected and draws on diverse knowledges, including those of First Nations peoples, to develop new approaches.

This year, in collaboration with Imperial College London, we launched a major new research centre investigating the links between NCDs and environmental change. In addition, we continued to build our analysis around the wellbeing economy approach which protects both human and planetary health, taking these messages into national and international forums, including COP 27.



13 million
deaths each year are due to environmental factors



11 million
deaths are due to unhealthy diets annually



3.6 million
annual deaths are due to fossil fuel pollution related CVD & chronic respiratory disease



2x
Health \$ saved by reducing carbon emissions = 2x the emissions reduction costs

NEW GLOBAL RESEARCH CENTRE TO TACKLE CHRONIC DISEASES AND ENVIRONMENTAL CHANGE

In November 2022, The George Institute and partners were awarded a GBP£10 million grant from the UK's NIHR for a new research centre.

The Centre, led by The George Institute India and Imperial College London, with partners in India, Indonesia and Bangladesh, is developing a program of research, capacity strengthening and community engagement on the health challenges at the intersection of environmental change and chronic diseases in low- and middle-income countries.

Centre priorities have been developed in consultation with stakeholder communities, who will also be working with health professionals on the design, implementation and evaluation of interventions. Key research themes include water salinity in Bangladesh, the health impacts of plastic burning in Indonesia, and improving dietary diversity in India.

In its first year, the Centre has established an independent Public Advisory Board, drawn from civil society groups representing youth, Indigenous peoples, farmers and others, to ensure the Centre's work is driven by and accountable to communities. The Centre has also started to build local research and evaluation capacity through knowledge exchange activities with less experienced researchers.

Professor Vivekanand Jha, co-lead of the Centre and Executive Director of The George Institute India, commented: "Low- and middle-income countries already face unique challenges in delivering equitable, high-quality services and their populations are highly vulnerable to the threat of environmental change, so the new research centre is hugely important. The scale and timescale of the funding, which runs for five years, positions us to develop much-needed new evidence and interventions – and crucially to support the development of the sustainable, local research capacity needed to progress this work over the long term."



From left to right: Dr D Praveen, Program Director, The George Institute India; Professor Christopher Millett, Professor of Public Health, Imperial College London; Dr Aliya Naheed; Professor Vidhya Venugopal; Professor Dr Sri Andarini; Professor Vivekanand Jha; Dr Robyn Norton and Mr David Armstrong

ENVIRONMENTAL FACTORS TAKE AROUND 13M LIVES EACH YEAR

A graphic from our #COP27 campaign focused on the impact of environmental change to health systems

GLOBAL ADVOCACY

This year we participated at the United Nations Climate Change Conference COP27, held in Sharm El Sheikh in November 2022, as part of the delegation from Imperial College London. Building on our wellbeing economy approach, we called on governments to commit to:

- Centre the voices of communities most affected by the climate crisis in setting policy agendas and allocating resources for mitigation and adaptation measures, prioritising health equity.
- Build effective, equitable and sustainable primary health care systems to reduce and respond to the twin threats of the climate crisis and growing burden of NCDs.
- Challenge commercial actors to rapidly transition away from harmful systems, practices and commodities, including the use of fossil fuels, to secure co-benefits for the health of people and planet.

We shared this messaging through participation at side events, contributions to plenary sessions, and meetings with a key actors and organisations.

We also worked with the COP2 initiative – a global network of organisations mainstreaming mental health into discussions on climate adaptation and mitigation, for which we lead the Regional Hub for South-East Asia and the Western Pacific. And we were pleased to see the importance of considering mental health in efforts to address environmental change was recognised in COP27's official 'Adaptation Agenda'.



Chhavi Bhandari, Head of Impact and Engagement (India and Multilaterals)

Our engagement with the influential Global Climate and Health Alliance (GCHA) also led to an invitation to join the WHO-Civil Society Climate and Health Working Group (co-convened by GCHA), in recognition of our expertise on chronic conditions. And we were provisionally approved for 'Observer Status' by the United Nations Framework Convention on Climate Change, which will mean we are able to send a full delegation and organise our own side events at future COPs.

Chhavi Bhandari, Head of Impact and Engagement (India and Multilaterals) said: "Participating at COP this year presented us with a valuable opportunity to share our messaging, establish important relationships and create new avenues for influence. These interactions have positioned us to effectively promote our core message – that the voices of affected communities must take a centre stage in the international discourse and action plans to tackle climate change."



Dr Alexandra Jones, Senior Research Fellow - Food Policy and Law

BUILDING A WELLBEING ECONOMY

The George Institute has continued to work with partners to support the wellbeing economy approach, which promotes sustainable economic development addressing the social, environmental and health needs of current and future generations.

This year, we built on our collaboration with health promotion agency VicHealth to co-develop a [toolkit](#) to support policymakers to adopt wellbeing economy measures. And in July 2022, we were delighted when the Australian Government declared its intention to include a wellbeing chapter in its October Budget, influenced by sustained efforts by ourselves and many other agencies and growing public interest in the approach.

Our August [Measuring what Matters](#) webinar examined how the new budget allocations could be used to support specific social, environmental and health outcomes. And in early 2023 we contributed to the development of the Australian Government’s Framework to measure the impact of its wellbeing policies, calling for the experience and beliefs of First Nations peoples to be considered, and drafting additional indicators on chronic disease, injury, healthy diets and the health of minority groups.

Senior Research Fellow Dr Alexandra Jones, commented: “This year The George Institute has seen itself increasingly recognised as a thought leader in wellbeing economy spaces, and we are delighted to see the approach gaining traction at multiple levels of governance.”



The first Wellbeing workshop led by Strathfield MP Jason Yat-sen Li MP to tackle chronic disease & improve health



#GeorgeTalks webinar: ‘Measuring what matters – What a wellbeing economy can do for all Australians’ with: Dr Katherine Trebeck, Dr Richard Denniss, Cressida Gaukroger, Dr Julieann Coombes, hosted by Chelsea Hunnisett

We're building a robust and resilient organisation which will be at the core of our success



Over the last 25 years, our organisation has grown to over 1,100 employees across eight countries, united by a mission to improve health outcomes for people everywhere.

To ensure we deliver on our mission and achieve the impact we seek, we are building resilience into every aspect of our work – from how the organisation is structured to how we do our business and how we design and implement our financial model.

Building resilience will ensure that we deliver our current research and influencing agenda and are set to meet our ambitious plans for growth, which will

allow us to do and achieve more. And it will put us in the best possible position to ensure we can deal with both the anticipated and unexpected challenges in the years ahead.

As we build a resilient organisation fit for future growth, we are proud to benefit from the partnership of some incredible academic institutions across the globe. In particular the University of New South Wales has partnered with us for several years and we are fortunate that they continue to support us. We are grateful to continue our partnership with Manipal Academy of Higher Education and our newest venture has been with Imperial College London who are helping us to establish and grow our work in the United Kingdom and around the world.

IN 2022-23:



GEORGE WOMEN REPRESENT:



“We pride ourselves in the positive and supportive culture we have developed and nurtured at The George Institute. With our new CEO sharing her vision for the organisation, this year more than ever we needed to talk to our colleagues across the globe as a healthy workplace plays a pivotal role in achieving our mission of improving the health of millions worldwide.



Sarah Bench:
Chief People Officer Global Human Resources



INVESTING IN OUR PEOPLE

Our passionate and talented people are our greatest asset, and we're committed to their well being and professional development. To this end we have spent time this year consulting all staff asking what matters to them about working for The George Institute and what they would like to change. And we've built on this feedback to co-create a range of initiatives to support a positive and healthy workplace culture.

Feedback from a workplace survey conducted in February indicated that pay equity was extremely important to staff, which led us to design our new Pay Framework around a 'fair pay for all' approach. We undertook our September 2023 pay review using these new principles. We have also started to redesign our Employee Value Proposition, anchoring this in our themes of Equity, Impact and Resilience. Our plans include a new individual learning and development wallet, demonstrating our commitment to invest in growth and potential, enhancing our benefits, policies and practices to create a more equitable and inclusive experience for our people and expanding our employee support services and introducing tools to support our mental health. Recognising the importance of effective leadership to the future success of the organisation, we are piloting a new global leadership development program, Accelerate, to help build the capability of our future leaders.

This year we also transformed our approach to Performance and Development across the organisation, using human-centred design methods and industry best practice. The process incorporated feedback from working groups in each region and across job families, who wanted to see the focus shift from an end-of-year one-off review, which was backward-looking and focused on a performance rating, to meaningful conversations about the development, learning and progression our people want to experience in their careers. The new approach will enable all our people to better deliver our organisational mission, live our values, and fulfil their individual potential.

Top left: Keziah Bennet-Brook, Program Head of the Guunu-maana (Heal) Aboriginal Health team calling for the National Injury Prevention Strategy to take on the First Nations holistic view of health at Safety 2022.
Top: Professor Christine Jenkins being awarded the Governor-General's Medallion and Life Governorship of Lung Foundation Australia.
Middle: Professorial Fellow Professor Simon Finfer AO speaking at the launch of the Sepsis Clinical Care Standard.
Bottom: Dr Ruth Peters discussing research findings that demonstrate lowering blood pressure can help prevent dementia on ABC News Australia.



#GWL
VOICES
FOR CHANGE & INCLUSION

Distinguished Fellow Justin Koonin hosts a 'fire-side chat' with María Fernanda Espinosa, President of the 73rd Session of the UN General Assembly and Scientia Professor Anthony Kelleher, Director of The Kirby Institute.

GLOBAL THOUGHT LEADERSHIP AND DISTINGUISHED FELLOWS

The Global Thought Leadership program works with internal and external experts to amplify key insights on global health, translate evidence into accessible outputs (such as blogs, podcasts and data visualisations), and works to ensure our research influences policy and practice.

Distinguished Fellows program: Established in 2019, our Distinguished Fellows program was created to strengthen our research capacity and influence through collaboration with globally respected thought leaders. Our Fellows – global health researchers, policy experts and advocates selected for their expertise in areas we would like to develop – work with us to address a range of challenges and issues.

This year we welcomed a new Fellow, Justin Koonin, co-chair of the Steering Committee of UHC2030, the international multistakeholder partnership for Universal Health Coverage and a member of multiple WHO expert panels and president of the AIDS Council of New South Wales (ACON) in Australia. In May 2023, Justin hosted the first in a series of *fireside chats* with global health leaders, intended to give civil society audiences access to high-quality insights and expertise which will inspire advocacy action.

We have also continued collaborations with our five existing Fellows, resulting in a range of activities including podcasts, roundtable discussions and policy reports. The popular *Worlds Collide* podcast series featured Distinguished Fellow Jaime Miranda from Peru and Institute collaborator, Nigerian scholar Seye Abimbola, talking about their experience of navigating the challenges of life and academia, as someone from 'somewhere else'.

Maarinke van der Meulen, Global Thought Leadership Program Head, said: "We're delighted to see our Distinguished Fellows program continue to thrive. The network significantly expands our global reach, bringing new collaborators through the Fellows' own connections. It facilitates knowledge exchange with our researchers through co-creation, mentoring and peer learning opportunities. And it brings fresh perspectives to study design and research communication – which all mean we are better placed to influence global health agendas."

EMERGING THOUGHT LEADERS PROGRAM

Our Emerging Thought Leaders program works to develop early-mid career researchers' ability to influence policy and practice, with participants selected from across the Institute for their subject matter expertise and desire to create change. This year we received twice as many applications for the program as in 2021–22 and were able to select 14 researchers for our second cohort.

The program started in February 2023 and ran for seven months, with each participant developing their own 'impact plan' of activities to increase the reach and uptake of their research. The group met monthly to develop connections and share learning on how to influence policy and practice and benefited from interaction with the Distinguished Fellows. Individual coaching and practical support were provided in developing accessible outputs to communicate research findings to different audiences. The cohort produced numerous podcasts, blogs and other content on topics as diverse as indigenous health, the importance of data in improving health care, and reducing the stigma of mental health.

Maarinke van der Meulen comments: "Our emerging thought leaders are passionate about making a difference in the world and it's fantastic to be able to help them start planning for impact – thinking about how their research will be used from the outset. It's great to be able to help them develop the skills they need to engage with policy makers and communicate their subject matter beyond academic audiences. We look forward to working with the new cohort next year."



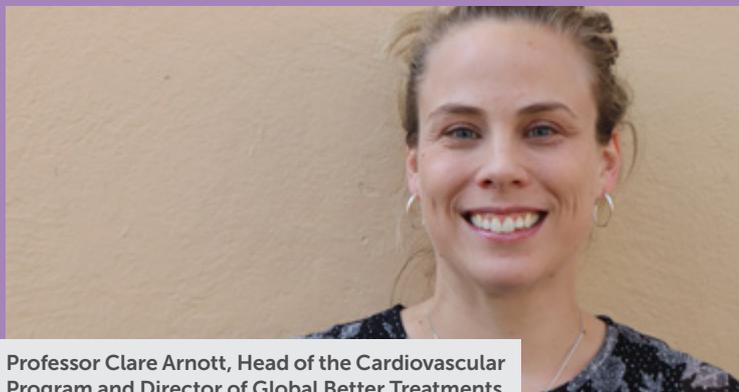
Distinguished Fellow Jaime Miranda at the United Nations High-Level Political Forum in NY discussing 'Building back better & advancing sustainable development goals

GEORGETHINK!

Our staff are our most important asset and their views and opinions on the future of the Institute are crucial to long-term planning and success. Held in July 2022, GeorgeThink! was an opportunity for staff to share their thoughts, explore and reflect on progress, and develop new ideas and collaborative processes to help us achieve our goals.

More than 200 speakers, panellists, facilitators, notetakers and other support staff contributed to 15 regional and global sessions over three days. With a focus on equity, impact and accountability throughout, the event stimulated discussions and recommendations to inform future strategy, not only around research and engagement but on key workplace-related issues relevant to all job families and offices.

Recommendations were developed for future action on our sustainability obligations, the challenges of working across global time zones and the ways in which our research can engage with communities. We committed to monitor progress against these recommendations and to publish an update in the next financial year.



Professor Clare Arnott, Head of the Cardiovascular Program and Director of Global Better Treatments

APPROACH TO SUSTAINABILITY

In August 2022, we received the findings of a sustainability audit of our operations in Australia, commissioned from KPMG. The report showed that most of our greenhouse gas emissions were 'Scope 3' – indirect emissions from purchased goods and services, business travel, commuting etc – and made recommendations to help us accelerate our decarbonisation efforts across the Institute.

The results were discussed during GeorgeThink! and staff expressed their commitment to making progress in this area. A working group, set up to take forward the discussion, is now developing a comprehensive global sustainability plan, which incorporates the KPMG findings and will set out a strategy to ensure that our internal practices and processes do not contribute to harmful environmental change.

DECARBONISING CLINICAL TRIALS

Over the last year, we have developed new approaches to clinical trials and other research studies, which reduce their environmental impact whilst maintaining scientific rigour.

New approaches build on innovations developed during the COVID pandemic and include remote and pragmatic study designs, risk-based computer modelling to reduce the need for travel and site visits, digital rather than in-person consent, and the use of wearable devices enabling participants to collect their own data. These practices not only reduce the carbon footprint of trials but increase the diversity of trial populations and overall efficiency.

Professor Clare Arnott, Head of the Cardiovascular Program and Director of Global Better Treatments, comments: "If the health sector were a country, it would be the fifth largest global carbon emitter, so it is essential that we reduce our footprint. I'm passionate about answering important research questions with robust study design whilst ensuring minimal environmental impact, so I am delighted to have been able to develop our practice in this area. I think we have a great opportunity to innovate in this space and lead the world in decarbonising our medical research."

OUR SOCIAL ENTERPRISES

George Health commercialises the research of The George Institute through its businesses – George Medicines and Ellen Medical Devices. With exclusive access to the research, intellectual property and scientific expertise of The George Institute, George Health can execute a profit-with-purpose strategy to reduce the inequitable social and economic burden of NCDs globally.

GEORGE MEDICINES

George Medicines is a late-stage drug development company, focused on improving the management of NCDs with innovative, single-pill combinations of existing medicines.

The past year has been one of significant growth for the business, with the successful completion of phase III clinical trials of GMRx2, George Medicines' lead candidate for treating hypertension, which combines three existing best-in-class treatments at lower than standard doses into a single once-daily pill. The two pivotal trials enrolled approximately 1,700 patients across over 700 sites in seven countries, including the US, UK, Sri Lanka and Australia. George Medicines plans to launch GMRx2 with commercial partners globally, with the first likely market being the US.

GMRx2 is also being tested in other important clinical studies that can further demonstrate its benefits in treating high blood pressure and in the prevention of major cardiovascular risks. The VERONICA trial is investigating whether this single-pill treatment could improve blood pressure control in Nigeria, while also improving cost-effectiveness. The TRIDENT clinical study is investigating GMRx2's potential in the prevention of recurrent stroke.

Over the same period, with the support of CUREator grant funding in Australia, promising progress was made around George Medicines' second fixed-dose combination therapy, GMRx4, as a first-line treatment for type 2 diabetes. As with GMRx2, this next combination candidate combines three best-in-class type 2 diabetes treatments at lower than standard doses into a single formulation, with the aim of being a more effective, simpler and safer treatment regimen than existing therapies. The global patenting process for both products is ongoing, with two secured for GMRx2 in Europe in the past year.



ELLEN MEDICAL DEVICES

Ellen Medical Devices is aiming to develop an affordable dialysis system to bring treatment to patients with kidney disease, when and where they need it. Expected to cost under AU\$500 to build and just a few dollars a day to run, the Ellen Medical Dialysis System will represent a breakthrough in low-cost technology.

Over the past year, Ellen Medical Devices completed its first pilot study with dialysis system prototypes installed in the homes of three adults with kidney failure in Sydney, Australia. The study confirmed the safety, efficacy and usability of the system with large-scale testing in different contexts planned to confirm these results. The business is now seeking capital so it can secure regulatory approval in key markets.



Professor Stephen McMahon giving the closing address at the 2019 launch of Health10x

HEALTH 10X

2023 marked five years since the establishment of Health 10x, our partnership with UNSW Founders to support innovators and entrepreneurs working on affordable and accessible health solutions which address significant unmet medical needs.

In 2023, Health 10x formed a partnership with Virtus Health, one of the top five providers of assisted reproductive services in the world, with a presence in Australia, Singapore, Ireland, the UK and Denmark. This partnership is creating opportunities for start-ups focused on unmet medical needs in women's health, making Health 10x the first accelerator in Australia to do so.

Health 10x also partnered with Australian Medical Angels, the nation's largest medical and health specific angel investment syndicate of over 650 clinicians, for further start-up support and to create the 'Health 10x Fund'. This Fund allows investment into the entire cohort of Health 10x start-ups, allowing new and experienced healthcare investors to engage with, and participate in, the health innovation ecosystem of Australia. The Fund also enables follow-on investment opportunities to further build Health 10x startups.

Across the partners, 2023 saw the largest investment amount to date of AU\$500K towards promising health and medical technologies. This early investment, plus significant in-kind and infrastructure support, will give Health 10x start-ups the best chance for success.

In recognition of our partnership and support over the last five years of Health 10x, UNSW Founders formally awarded The George Institute Partner of the Year in 2023.

Dr Parisa Glass, Director of Innovation and Enterprise, The George Institute for Global Health and Cydonie Greenaway, Genovate Project Manager at the 2023 UNSW Founders Health10X awards



Our finances

REVENUE

The George Institute's total revenue declined by 4% to \$60.6 million. However, this was largely due to infrastructure grants (approximately \$9m) for the current financial year being received in FY22. After accounting for these timing issues, underlying research revenue increased strongly by 9% in FY23. George Health revenue, excluding George Clinical, stayed similar to last year. George Clinical revenue for FY23 amounted to \$112 million (representing 57% growth) – this is not shown in the schedules below since it is treated as 'Held for Sale'. The rationale for this treatment is noted below.

OPERATING RESULT

The net result for the consolidated entity was a loss before income tax of \$50.8 million (30 June 2022: loss before income tax of \$10.1 million). No donations were made by the commercial segment to the research segment in 2023 (No donations were made in 2022). Since formation, over \$50 million has been successfully raised, using a combination of equity and debt in order to fund the pre-revenue businesses of George Health. During the fiscal year, the commercial segment incurred a loss before income tax of \$41 million. The loss, funded by the capital raised, was driven by the acceleration of clinical trials for GMRx2 (an antihypertensive fixed dose combination which is due for FDA submission in calendar year 2024). This is the reason for the Net Liability position as pre-revenue costs are funded by the capital raised so far and are classified as liabilities. As per the Profit and Loss Statement, the Balance Sheet table is also impacted by George Clinical being 'Held for Sale'. George Clinical's balance sheet position is reflected on a single line item as opposed to be represented across the categories.

GEORGE CLINICAL

In line with the organisation's strategic plan, the Board approved the initiation of the sale process of George Clinical late in FY22 with the transaction finalised on 7 July 2023.

The Company has relied on donations from its commercial subsidiaries (including George Clinical) to partially address the shortfall between the costs of conducting research and the grants received. With the proceeds of the transaction, estimated to be approximately \$180 million after distributions, an endowment will be established to generate returns that will address the operational deficit. The Company has appointed an investment committee, reporting to the Board, to manage its funds to provide greater financial stability and security. This is an outstanding result, ensuring that the George can continue to fund research that goes beyond the grant funding it receives. Note that as the sale completed in July 2023, it will only be reflected in FY24 accounts.

PEER REVIEWED AND GOVERNMENT FUNDING

Across the many divisions of the Institute, researchers have continued to receive highly sought-after peer reviewed grants in Australia, the UK and India. The Australian Government and NSW State Government also contributed crucial funding for ongoing research projects and infrastructure support for the Institute.

DONATIONS AND SPONSORSHIP

Donations and sponsorships are becoming an important source of funding for the Institute. As in previous years, we received donations from a valuable number of local and overseas supporters.

CONSOLIDATED¹ PROFIT AND LOSS ACCOUNT BY SEGMENT FOR YEAR ENDING 30 JUNE 2023

	2023				2022
	<i>The George Institute</i> ³ \$k	<i>George Health</i> ² \$k	<i>Eliminations</i> \$k	<i>Consolidated</i> ¹ \$k	<i>Consolidated</i> ¹ \$k
Operating Revenue	54,305	1,920		56,225	58,499
Other Income	4,375	0		4,375	5,299
Intersegment Revenue	413	0	(413)	0	-
Total Revenue	59,093	1,920	(413)	60,600	63,798
Employee Benefits Expense	(46,574)	(3,886)		(50,460)	(42,620)
Share Based Payment Expense	-	(325)		(325)	(2,175)
Depreciation and Amortisation Expense	(2,658)	(41)		(2,699)	(2,356)
Rental Expense	(371)	(106)		(477)	(569)
Administration Expense	(2,771)	(606)		(3,377)	(2,522)
Study Contract Fee	(1,123)	0		(1,123)	(376)
Patient Recruitment Expense	(1,353)	0		(1,353)	(2,403)
Consultants and Sub-Contractors Fee	(3,606)	(16,172)		(19,778)	(7,349)
Finance Costs	(118)	(6,296)		(6,414)	(4,565)
Travel/Accommodation Costs	(2,754)	(500)		(3,254)	(1,313)
Other Expenses	(7,589)	(22,337)		(29,926)	(11,777)
Share of loss of jointly controlled entity	-	(309)		(309)	(274)
Held for sale profits in the year ⁴	-	9,431		9,431	651
Loss on acquisition of EMD		(6,620)		(6,620)	0
Intersegment Expense	0	(413)	413	-	0
Fair value gain on derivatives		5,261		5,261	3,730
Surplus before Income Tax	(9,824)	(40,999)	0	(50,823)	(10,120)

CONSOLIDATED¹ BALANCE SHEET

30 JUNE 2023	2023 \$k	2022 \$k
ASSETS		
CURRENT ASSETS		
Cash and Cash Equivalents	28,335	59,829
Trade and Other Receivables	5,161	5,427
Other Assets	2,485	1,301
Accrued Income	3,684	138
Assets Classified as Held for Sale	71,856	62,583
TOTAL CURRENT ASSETS	111,521	129,278
NON-CURRENT ASSETS		
Other Assets	0	840
Other Financial Assets	9,489	8,677
Plant, Fitting and Equipment	2,541	3,161
Goodwill	0	0
Intangible Assets	142	142
Right-of-use Assets	1,858	6,966
Deferred Tax Asset	19,183	11,525
Investments Accounted for using Equity Method	0	593
TOTAL NON-CURRENT ASSETS	33,213	31,904
TOTAL ASSETS	144,734	161,182
LIABILITIES		
CURRENT LIABILITIES		
Trade and Other Payables	6,622	5,496
Deferred Income	38,438	42,705
Lease liabilities	2,193	1,642
Provisions	6,648	6,265
Other Liabilities	3,489	302
Liabilities Directly Associated with Assets Classified as Held for Sale	65,379	43,797
TOTAL CURRENT LIABILITIES	122,769	100,207
NON-CURRENT LIABILITIES		
Provisions	775	618
Lease Liabilities	63	6,293
Other Liabilities	53,419	44,880
TOTAL NON-CURRENT LIABILITIES	54,257	51,791
TOTAL LIABILITIES	177,026	151,998
NET ASSETS	(32,292)	9,184
TOTAL EQUITY	(32,292)	9,184

Notes

The Statement of Financial Position provided above, together with the attached Income Statement, have been extracted from the audited general purpose financial statements of The George Institute of Health and its controlled entities. The summary financial information does not include all the information and notes normally included in a statutory financial report. The audited general purpose financial report can be obtained on www.georgeinstitute.org/annual-reports-and-financial-statements.

These financial statements (from which the summary financial information has been extracted) are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards - Reduced Disclosure Requirements, including the Australian Accounting Interpretations and other authoritative pronouncements of the Australian Accounting Standards Board and the Australian Charities and Not-for-profits Commission Act 2012 as appropriate for not-for-profit oriented entities.

Consolidated¹ = Consolidated Entity consisting of The George Institute for Global Health and the entities it controlled for the financial year ended 30 June 2023

George Health² = George Institute Ventures Pty Ltd and the entities it controlled for the financial year ended 30 June 2023

The George Institute³ = The George Institute for Global Health and the Research Entities it controlled for the financial year ended 30 June 2023.

Held for sale profits in the year⁴ = In line with the organisation's strategic plan, the Board approved initiating the sale process of George Clinical. Launched in Q4 FY22, the process was completed on 1H FY24. The accounts were prepared treating George Clinical as Held-for-Sale-Asset where the Profit and loss line items have been consolidated under "held for sale profits in the year" line.

*The Net liability position as of 30 June 2023 was mainly driven by commercial business' pre-revenue costs using the capital raised so far and classified as liabilities. However, in line with the organisation's strategic plan, the Board approved the initiation of the sale process of George Clinical late in FY22, with the transaction finalised on 7 July 2023. As is common with many medical research institutes (MRIs), the costs of conducting research exceeds the grants received. MRIs rely on philanthropy and other revenue streams to compensate for this gap. To date, the Company has relied on donations from its commercial subsidiaries (including George Clinical) to partially address this shortfall. With the proceeds of the transaction, an endowment will be established to generate returns that will address the operational deficit. The Company is appointing an investment committee, reporting to the board, to manage its funds to provide greater financial stability and security.



At a glance:



Raised more than **\$1.1 billion** for research since 1999

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1,100+ people globally



245+ active projects across **50+** countries

Established in **Sydney**, with major centres in **China, India** and the **UK**



Our academic partners: Imperial College London, Manipal Academy of Higher Education, The Chinese University of Hong Kong and UNSW Sydney

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