Government of **Western Australia**
Child and Adolescent Health Service

Research Year in Review **2024-25**

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Acknowledgement of Country

The Child and Adolescent Health Service (CAHS) acknowledges the Whadjuk and Binjareb people of the Noongar Nation as the Traditional Custodians of the land, sea and waters on which we work and live. We pay our respects to the Elders past and present.
Aboriginal people, as the First Peoples, have cared for this land for at least 65,000 years. We recognise and value their continuing cultural and spiritual connections to this land. CAHS acknowledges the diversity of Aboriginal people from across Western Australia who access the health services provided within CAHS.

CAHS recognises that the colonisation of this Country has come at a great cost to Aboriginal peoples and communities and the continued effects of colonisation impact on health and wellbeing today. We pay tribute to the strength, resilience, and courage of Aboriginal people who have survived the devastation of the recent past, to stand strong and proud today.

CAHS is committed to working towards a better future, where all cultures are respected and valued, and Aboriginal people take their rightful place as the First Australians.

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Foreword

> Investing in our researchers and research infrastructure is the cornerstone to creating opportunities for our patients.

The Child and Adolescent Health Service's (CAHS) pursuit of research excellence reflects an enduring commitment to provide Western Australia's children and young people with the highest level of evidence-based care.

This includes local access to cutting-edge treatments and therapies through national and international clinical trials and clinical investigations.

Investing in our researchers and research infrastructure is the cornerstone to creating these opportunities for our patients.

Through 2024-25 we continued to find new ways of strengthening, supporting and celebrating our research community with a highlight being the announcement in June of CAHS very first Researcher of the Year.

That honour went to paediatric oncologist and haematologist Professor Rishi Kotecha and was presented as part of the inaugural CAHS Annual Excellence Awards.

We know that Rishi is one of the many talented, compassionate and hardworking researchers we are fortunate to have working across CAHS.

I invite you to join me in reading this Research Year in Review to learn more about some of the outstanding work Rishi and his research colleagues are doing at CAHS to improve the lives of children and young people everywhere.

Dr Clare Matthews
A/Executive Director Medical Services
Child and Adolescent Health Services

Research Department

From the Directors' desk

Following a program of significant reform in 2023-24, CAHS Research Department made strong progress on multiple strategic fronts during 2024–25 with key highlights including:

Launch of a Consumer and Community Involvement program

The program was introduced to strengthen researchers' ability to engage with consumers and embed consumer perspectives across research activities at CAHS.

Research Capability and Readiness Survey

This comprehensive, service-wide survey was conducted to assess the research skills, engagement levels, and interests of the CAHS workforce. Its results will guide capability building to help us sustain a vibrant research culture.

New funding for early-career researchers

Thanks to generous philanthropic support from the Stan Perron Charitable Foundation and Telethon Trust, we launched two new funding initiatives for early-career researchers.

Progress towards a strategic partnership

Finalisation of 3 key frameworks — governance, communications, and dual appointments — brought CAHS a step closer to formalising a partnership with The Kids Research Institute Australia (The Kids) that will streamline collaboration between our organisations, reduce duplication, and create greater efficiencies and more opportunities to enhance child health research in Western Australia.

Supporting industry through the trials process

With the establishment of CAHS' Research Companion, commercial sponsors wanting to conduct research at CAHS can now take advantage of a dedicated in-house support service that streamlines project applications through the regulatory landscape.

On top of these developments, we had much to celebrate during 2024-25 including:

- receiving a High Commendation in the Non-clinical Service Delivery category of the Australian Council on Healthcare Standards' 27th Annual Quality Improvement Awards.

The accolade recognised our efforts to improve children's access to novel and emerging treatments – ensuring equity of access for our patients.

- our excellent report card from our first assessment under the National Clinical Trials Governance Framework (conducted as part of the Short Notice Accreditation Assessment Pathway). We were given the rating 'developed systems' – the highest level of maturity awarded by the accrediting body.
- the Stan Perron Charitable Foundation's extraordinary commitment of $135 million over 10 years to establish the WA Comprehensive Kids Cancer Centre, a collaborative venture that will connect clinical care delivered at Perth Children's Hospital (PCH), with laboratory research expertise at The Kids Research Institute Australia. This new centre will not only change the lives of children living with cancer but also advance cancer research and treatment into the future.

As ever, we remain grateful for the generous funding provided by our key philanthropic supporters, the Perth Children's Hospital Foundation (PCHF), Channel 7 Telethon Trust and Stan Perron Charitable Foundation.

We hope you enjoy reading about the wonderful work of our research community and the impact it is having on our most precious resource – the children and young people of Western Australia.

Professor Tim Jones
Area Director of Research

Alexandra Robertson
Director of Research Operations

Research activity overview

The following graphics provide a snapshot of research across CAHS.

27 Clinical trials received CAHS HREC authorisation to participate at CAHS

95 Projects approved by the CAHS Human Research and Ethics Committee

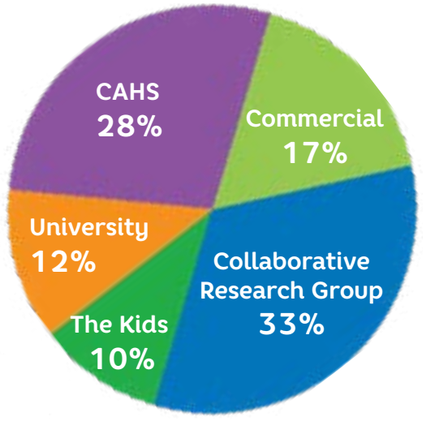
120 Projects granted governance authorisation by CAHS

410 CAHS-affiliated publications published

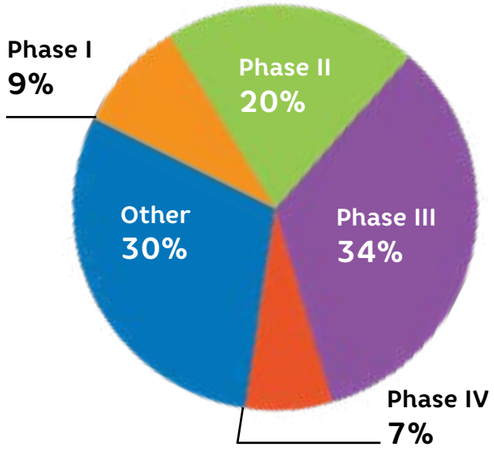
Breakdown of active research studies

656	494	611	30	15	186
Total active research studies	Active research studies with CAHS HREC approval	Active studies at PCH	Active studies at CACH	Active studies at CAMHS	Total active clinical trials

Clinical trials by sponsor



Clinical trials by phase



Funding overview

CAHS research attracted funding totalling almost $47 million during 2024-25. The total research funding outlined below includes the $9,974,982.26 of direct research funding to CAHS and funding received by the University of Western Australia Centre for Child Health Research (affiliated with The Kids Research Institute Australia), where staff are involved in research, but the funding is not directly awarded to CAHS.

Perth Children's Hospital Foundation
$5,450,038.63

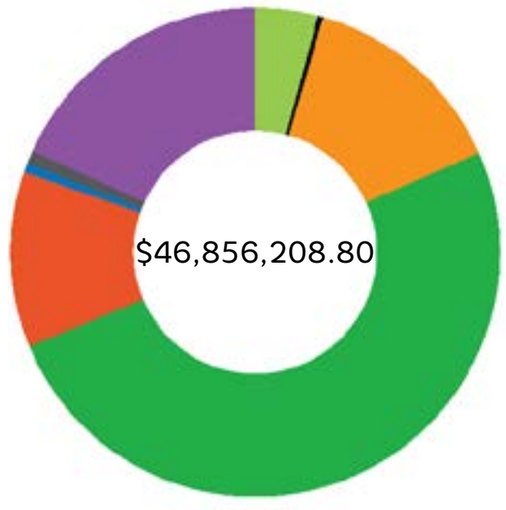
Channel 7 Telethon Trust
$1,943,520.50

Department of Health
$6,502,989.17

NHMRC
$8,511,684.90

Stan Perron Charitable Foundation
$160,000

Total funding



- NHMRC $8,511,684.90
- Channel 7 Telethon Trust $1,943,520.50
- Stan Perron Charitable Foundation $160,000.00
- WA Department of Health $6,502,989.17
- Other $23,595,292.96
- Perth Children's Hospital Foundation $5,450,038.63
- Cancer Council WA $278,324.00
- Commonwealth Department of Health $414,358.67

Support for researchers

In 2024-25 the Research Department's expanded Research Support and Development team found new and improved ways of backing CAHS researchers.

Key among these were:

- the launch of a Consumer and Community Involvement Program designed to enhance researchers' ability to recruit and engage consumers in the development and implementation of research projects.
- the establishment of a Consumer and Community Involvement Bank, giving researchers access to 15 hours of support to work with a consumer.
- the development of an online Request Research Support form that enables researchers to request support relating to their research. The form is accessible from CAHS research web pages and used for all support requests. Information collated from the forms helps the Support and Development team better understand the support needs of CAHS researchers.
- a CAHS-wide survey to gain insights into the research culture and capability of CAHS' workforce. Aimed at clinical and non-clinical staff, the research culture and capability survey will be used to help CAHS ensure it has the programs and initiatives necessary to build CAHS research community, helping to maintain a continuous stream of high-performing top-tier investigators. More than 400 staff members, responded to the survey.
- an internal review of CAHS' biostatistical support service to assess the level and type of biostatistical support currently available and whether it meets the needs of researchers.

These new initiatives build on the support the team already offers researchers which includes education and training through its Research Education Program, research facilitation, protocol development, qualitative analysis, biostatistical support and help with grant applications.

Research Education Program

The Research Education Program (REP) is an open-access resource generously supported by the Perth Children's Hospital Foundation.

It provides research education and training via a series of skills seminars and workshops covering topics of relevance to researchers. The seminars are held in the PCH auditorium. Researchers can attend in person or online or can view a recording of the session at a time of convenience.

The REP also delivers 2 workshop series that provide interactive training.

One covers general research skills, with sessions on topics such as project management and securing grant funding. Sessions in the other series are dedicated to the web-based tool REDCap, the WA Health system's preferred tool for collecting and managing data.

In 2024-25, the Research Education Program expanded to include new workshops.

REP reach

The REP reaches a wide audience. CAHS personnel represent 22% of WA health system users accessing its resources while staff from the North Metropolitan Health Service, (10%), South Metropolitan Health Service (10%), East Metropolitan Health Service (8%) and WA Country Health Service (4%) account for the rest. Outside of the health system, universities and research institutes make up 28% of users. A further 14% come from outside WA and 2% tune in from abroad.

Fast facts

3113 seminar and workshop registrations

28 seminars

13 workshops

4.6/5 average participant rating for seminars and workshops

New faces

During the year, the Support and Development team welcomed the following new staff members.

- A/Prof Paola Chivers (Research Manager)
- Dr Amanda Timler (Clinical Research Facilitator)
- Jacqui Fullam (Administration and Events Officer)
- Loughlan Weatherly (Data Analyst)
- Angela Jacques (Senior Biostatistician); and
- Dr Hannah Benschop (Medical Education Research Fellow).

A win for consumers in research

The launch of a new scholarship program gave CAHS researchers the opportunity to strengthen their ability to involve consumers in research.

CAHS' Consumer and Community Involvement Scholarship Program was created in partnership with the Western Australian Health Translation Network (WAHTN) to increase consumer and community involvement in all stages of the research process. The scholarships assist researchers by providing:

- help in recruiting consumers
- funding to support honorarium costs of up to 15 hours of consumer involvement
- training in consumer and community involvement in research, project ideation and grant development.

In 2025, 9 scholarships were awarded in 2 rounds of the program. The scholarships will continue to be offered twice a year.

Medical Education Research Fellow

The Medical Education Research Fellow plays a vital role within CAHS' Research Department, contributing to the development and delivery of the hospital's Research Education Program (REP).

Funded by the Perth Children's Hospital Foundation, the 12-month position offers an advanced trainee the opportunity to strengthen their medical education and leadership skills, while serving as a supportive and approachable contact for aspiring and early-career researchers.

In 2025, general paediatrics trainee Dr Hannah Benschop, stepped into the role, drawing on her own early experiences in research to help others take those all-important first steps into the field.

While Dr Benschop considers herself fortunate to have been involved in a qualitative research project and several clinical audits which she credits with having given her a good introduction to research, she has not forgotten how daunting it was starting out.

As Medical Education Research Fellow, she has enjoyed showing colleagues how research can be woven into their everyday clinical practice.

Dr Benschop has worked closely with the Post Graduate Medical Education team to expand opportunities for junior staff to pursue further research. She has also connected with departments throughout PCH and hospitals across WA Health to ensure that training delivered through the REP is accessible and relevant to staff.

To build the critical appraisal skills of junior doctors, Dr Benschop established a journal club for Resident Medical Officers (RMO). Each month, one junior doctor will lead discussion about an interesting journal article to foster critical appraisal skills.

As critical appraisal is the first step in applying evidence-based medicine to patients – and is a key skill for junior doctors – the Journal Club is now embedded within PCH-wide RMO teaching.

> This role has not only expanded my research and education skills tremendously but also fostered so many leadership and collaboration opportunities.

Ethics and governance

CAHS' outstanding report from our first ever assessment under the National Clinical trials framework was a highlight of 2025.

It was also important affirmation of our significant and ongoing work to strengthen CAHS' research capability and profile, the key to improving WA children's access to emerging treatments and therapies without having to leave the State.

The Ethics and Governance team has been a major contributor to these efforts through initiatives that have streamlined review approval processes, heightened our monitoring of clinical trials, and raised the profile of PCH to improve its competitiveness in the clinical trials space.

Timeliness

In the previous reporting year, we set a new standard in project approval turnarounds by creating a low-risk pathway that fast-tracked the ethical review of projects deemed a low risk to participants.

This streamlining cut the average turnaround time by more than 75 per cent – from 90 days to 22 days – with low-risk projects averaging approvals of just 10 days.

We are pleased to report that through 2024-25, our Ethics and Governance team has maintained these timely turnarounds.

The sustainment of this benchmark amid Western Australia's transition to a system of centralised ethics approval, underlines the commitment of CAHS' Human Research and Ethics Committee (HREC) – which is accredited under the National Mutual Agreement scheme – to continue to deliver quality ethics review for the benefit of prospective multi-site projects.

In 2024-25 CAHS' HREC approved 95 projects – one more than in 2023-24.

Monitoring

In other developments, the Ethics and Governance team has rolled out a compliance monitoring initiative for clinical trials at PCH.

The independent, risk-based and proportionate monitoring initiative, headed by our Clinical Trials Governance Manager, Simone Knab, adds a new layer of quality and safety assurance to our clinical trials program, setting up teams for ongoing success.

Feedback from those involved in the audits has been positive, with many describing them as important opportunities for learning and identifying potential areas for refinement. Others were appreciative of the feedback which showed they were meeting the high standards expected in a clinical trial.

Clinical trials liaison

The clinical trials liaison officer can play an important role in boosting a health service's competitiveness in the clinical trials space.

The role serves as the primary contact for sponsors (such as pharmaceutical companies) during the start-up phase of studies, supports site staff and sponsors to assess site feasibility for potential trials and can help principal investigators and site staff prepare and submit site governance applications for clinical trials.

Dr Behin Sundara Raj stepped into this role at CAHS in 2024, drawing on his own background in research and clinical trials to build PCH's reputation as an ideal site for conducting clinical trials.

Dr Sundara Raj was instrumental in launching Research Companion, a new CAHS service that takes care of the administrative work involved in applying to conduct a trial at CAHS. He also developed budget guidelines to help prospective sponsors estimate the cost of conducting a clinical trial at PCH.

Dr Sundara Raj has been active in promoting the hospital to prospective sponsors, assisting in the completion of 11 feasibility questionnaires and undertaking 3 site qualification visits, with all 3 studies being awarded to PCH.

For the year in review, more than 40 Confidential Disclosure Agreements were signed, averaging 3 to 4 a month.

A major achievement since taking on the role has been securing PCH as the site for one of just 3 clinicals trials in the world testing new therapies for Angelman Syndrome, a rare neuro-genetic disorder that affects 1 in 15,000 children.

PCH is also now in the pool to be selected for a second Angelman trial.

Research Companion

CAHS Research Companion is a new service offered by CAHS that takes care of the administrative work involved in applying to conduct a trial at CAHS.

For a fee, trial sponsors can access the service to expedite their clinical trial applications through CAHS' regulatory processes. The service provides smoother startups and competitive turnarounds.

Projects benefit from the direct involvement of the Research Companion team who maintain close contact with project sponsors throughout the approval process.

Welcome changes at Clinic D Research

Stephanie Stevenson and Catherine Miles, pictured below, are the 2 friendly faces who now welcome families to 'Clinic D Research' – CAHS' dedicated clinical research facility at PCH.

But at the start of 2025, they were the ones being welcomed. The pair joined CAHS' Research Department to job share the clerical officer role, a position that includes managing the clinic's outpatient bookings.

Clinic D Research welcomed several upgrades which have improved its utility through the:

- installation of oxygen and suction equipment which are now standard inclusion for every consultation room
- addition of display monitors which have been mounted at the entrance to every consultation room, enabling passersby to check instantly whether a room is in use, without interrupting a consultation
- introduction of a traffic light system for the allocation of rooms, enhancing both efficiency and safety. Under the new system, rooms at the front of the clinic are prioritised for the sickest patients, improving visibility and the ability to monitor higher-risk patients more closely.

Clinic D Research is a modern, well-equipped area that enables researchers from CAHS, The Kids and universities to work together. It provides the following facilities:

- 15 standard consultation rooms
- 2 purpose-built rooms – for respiratory and stress electrocardiograms (ECGs)
- 1 treatment room, adjoining a centrifuge and fridge freezer
- a laboratory
- a clinical trials pharmacy with dedicated research pharmacy staff who manage clinical trial investigative products.

Staff embrace new networking events

In October 2024, a gathering of research nurses and coordinators from across CAHS and The Kids marked the first in what has since become a regular fixture on CAHS' research calendar.

Networking events are now held monthly, providing opportunities for these important members of the research community to meet in a relaxed environment to exchange information and ideas, and discuss any issues they may be encountering.

Some of the lunch-and-learn style events are dedicated to a topic and feature guest speakers, with attendees invited to suggest topics for future meetings.

The gatherings have been helping to identify and fill gaps in research nurse and research coordinator education. They have also led to the establishment of a community of professional practice.

Saranga Senanayake and Kelly Faulkner, who job-share the role of Research Clinical Nurse Manager, organise the events. They also oversee Clinic D Research, which includes ensuring research team members have appropriate and up-to-date accreditation and training.

Celebrating World Clinical Trials Day

May 20 – World Clinical Trials Day – is a significant date on CAHS research calendar.

The day commemorates the anniversary of the world's first clinical trial which investigated the treatment of scurvy in the 1700s.

Every year, PCH marks the day with a special event that turns the hospital's foyer into a hive of activity and gives researchers the chance to showcase their work to families, colleagues and hospital visitors.

While providing insights into how research is improving care and health outcomes for children and young people, the stalls are also a source of fun family-friendly activities.

The event also includes attractions for researchers. In 2025 it included 2 free staff workshops – one about involving consumers in research, the other on setting up clinical trials.

Nurturing research talent

CAHS is committed to nurturing young researchers across all clinical disciplines.

In 2024-25 we were excited to launch 2 new initiatives that significantly boosted opportunities for our nursing and allied health investigators – the CAHS Allied Health Research Fellowship and Perron Foundation Seeding Grants program.

These initiatives build on the existing program of funding opportunities open to early-career researchers across CAHS.

Allied Health Research Fellowships

The Allied Health Research Fellowship offers a 1-year bursary to a CAHS staff member to pursue research that has the potential to benefit CAHS and the health of WA children.

It does this by freeing the recipient from some of their clinical duties, enabling them to develop clinical research skills and knowledge while pursuing research.

The inaugural fellowship was awarded to PCH dietitian and researcher Tamara Farrell who is using it to investigate whether meeting the precise nutritional needs of children in intensive care, can reduce muscle wastage and hasten their recovery.

CAHS is in discussions with Channel 7 Telethon Trust about awarding the Fellowship annually.

Perron Foundation Seeding Grants

This new seeding grants program was funded generously by the Stan Perron Charitable Foundation. It has given 8 CAHS researchers the opportunity to pursue early-stage research addressing a clinical problem or question.

It offered medical, nursing and allied health personnel, grants of $20,000 for projects of up to 12 months duration that had the potential to improve clinical care and/or outcomes for children and families.

To increase research opportunities for non-medical personnel, 6 of the grants were quarantined for nursing and allied health researchers.

The Stan Perron Charitable Foundation has committed to a further 2 rounds of funding for 2026 and 2027.

The program's 2025 recipients were:

- Cloe Benz (allied health)
- Dallas Sewell (nursing)
- Megan Jones (allied health)
- John Verity (allied health)
- Kahlia Hay (allied health)
- Gemma Patton (allied health)
- Miah Okamoto (allied health)
- Bridie Watson (nursing).

PhD Research Pathway Program

The PhD Pathway Program gives CAHS clinicians an opportunity to complete a full-time PhD embedded within their clinical work while receiving mentoring from field-leading researchers from the University of Western Australia (UWA) and The Kids.

The program is an initiative of CAHS, UWA, The Kids and Perth Children's Hospital Foundation (PCHF) that was launched in 2023.

In 2025 endocrinologists Kate Lomax and Sarah Black were awarded places in the program.

Early-career Research Award

First awarded in 2022, the Early-career Research Award, is open to CAHS early-career researchers from any of the health professions. It provides one-off funding of up to $130,000 for research that is both translational and transformational.

The award enables the successful applicant to dedicate time and resources to a project capable of improving health outcomes for WA children and adolescents.

In 2024, 2 researchers – Tamara Farrell and paediatrician, Dr Shobana Maruthayanar were awarded funding under the program.

Dr Maruthayanar will use the award to work with families referred to PCH's Aboriginal health service, Koorliny Moort to identify their health priorities. Her research will help shape programs, ensuring they provide culturally safe care that meets the needs of the children and adolescents accessing them.

The Award is funded by PCHF and the Stan Perron Charitable Foundation.

Initiative sets T1D patients on path to better future

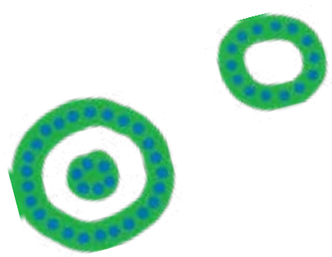
Children with Type 1 diabetes (T1D) will be the big beneficiaries of research supported by the 2024 CAHS' PhD pathway program.

The 2 clinicians awarded scholarships in this second round of the PhD program – doctors Kate Lomax and Sarah Black – are both undertaking research to improve health outcomes for children with the autoimmune disease. T1D causes the pancreas to stop producing insulin – the hormone responsible for converting glucose to energy – leading to the children's lifelong reliance on insulin injections.

Dr Lomax will use her scholarship to investigate barriers to equitable care within the current care delivery system and, explore, develop and implement new equitable models of T1D care in clinical settings.

Dr Black will use her scholarship to implement a new clinic – co-designed with lived experience consumers – that will support children who have been identified as having early T1D but who are not yet reliant on insulin injections. The clinic will provide these children and their families with access to early education, counselling and multidisciplinary care to help delay progression of the disease.

Doctors Lomax and Black follow in the footsteps of Dr Fran Germann, one of the 2 original scholarship recipients, whose research also had a T1D focus. Oncologist consultant Dr Neha Jain was the other inaugural scholarship holder.



Nursing Research Fellowship

The CAHS Nursing Research Fellowship was first offered in 2024.

A joint initiative of CAHS and Channel 7 Telethon Trust, it is awarded to a registered nurse to undertake research that aligns with CAHS nursing research priorities.

The fellowship is designed to be a first step towards a pathway as a clinician researcher and to develop nurse-led research programs with the potential to positively affect child health.

In 2025, PCH-based nurse Maria Garland became CAHS' second Nursing Research Fellow and is using her fellowship to explore links between key facets of the trait alexithymia – also known as 'emotional blindness' – and symptoms of restrictive eating.

Feelings the focus of new bid to tackle anorexia

PCH-based nurse researcher Maria Garland is hoping that a trait common in children and adolescents with anorexia nervosa, could hold the key to improving treatment outcomes for the eating disorder.

She is using her 2025 Telethon Nursing Research Fellowship to explore links between key facets of the trait – alexithymia – and symptoms of restrictive eating.

Alexithymia, also known as 'emotional blindness', is characterised by deficits in processing emotions.

'People with alexithymia can have difficulty identifying and describing their feelings,' Ms Garland explains. 'It is known to be present in people experiencing a range of mental health conditions and has a well-documented association with eating disorders. But what we don't properly understand is the nature of this relationship.

'That needs to change because alexithymia is a barrier to effective treatment across many different psychological illnesses, including eating disorders.'

Ms Garland, who works with Child and Adolescent Mental Health Services' PCH-based Eating Disorders Service, says eating disorders are notoriously difficult to treat effectively and that just 38 per cent of patients achieve full remission, even with gold-standard therapies.

'With eating-disorder rates continuing to rise and patients presenting at younger ages, it is vital we find new approaches to treating them,' she said.

Ms Garland will investigate the relationship between aspects of alexithymia and symptoms of disordered eating in a sample of university students and members of the general adult population.

She will also examine the intricate relationship between restrictive eating and alexithymia in adolescents with anorexia nervosa before collaborating with young people affected by the illness to co-design a therapeutic intervention that tackles emotional processing difficulties in this cohort.

Telethon Trust Research Fellowship

Telethon Trust Research Fellowships have been a springboard for WA clinicians in the early stages of their research careers for almost 40 years.

Many of the 100 fellows have gone on to make significant contributions to child health research, advancing care for children and adolescents here and around the world.

In 2025, advanced medical trainees Siu Min Tay, Simon Moore and Sarah Black joined that celebrated list of investigators, using their fellowships to improve the health and wellbeing of young Western Australians on three different fronts.

Dr Siu Min Tay

Dr Simon Moore

Dr Sarah Black

Study to tackle nutrition in autism

Child Development Service paediatrician, Dr Siu Min Tay, is using her fellowship to gain new insights into the eating behaviours of preschoolers with autism.

Dr Tay knows that picky-eating preschoolers can be a source of frustration for many young families but says that for those with children on the spectrum, ensuring adequate nutritional intake can be especially challenging.

‘In these children, challenging eating behaviours are more likely to endure long-term, with the potential to lead to serious health problems,’ she says.

‘Autistic children are more likely to develop malnutrition than their neurotypical peers with recent studies showing they experience higher rates of obesity and deficiency in important micronutrients.’

Dr Tay says that given early-life habits often persist into adulthood, a deeper understanding of eating behaviours in this vulnerable group of preschoolers is crucial to enhancing their dietary intake and supporting optimal growth and development.

Dr Tay’s project will incorporate 2 studies.

The first will identify patterns of malnutrition in autistic preschoolers by comparing the heights, weights and micronutrient status of autistic and non-autistic preschoolers who attended the Child Development Service.

The other will seek insights from individuals who provide care to preschoolers diagnosed with autism, including family members, early childhood educators and clinicians.

Dr Tay hopes her research will pave the way for developing evidence-based resources and novel approaches that will one day help families and caregivers improve the quality and variety of their preschoolers’ diets.

Assessing care with a home advantage

At PCH, Dr Simon Moore is using his fellowship to lead the consumer co-design of a new service that is giving WA children nearing the end of a hospital stay, the option of completing their recovery at home.

Dr Moore is also assessing the feasibility and acceptability of the service which combines remote-monitoring technology and telehealth reviews, with daily home visits from paediatric nurses, to provide hospital-level care in the home.

Only children deemed medically stable are eligible for the service that is being piloted for 12 months.

‘Under the current system, these children would be discharged with instructions to return to the emergency department if their condition worsened, or they would remain in hospital solely for a period of monitoring – occupying a bed that could otherwise go to an acute patient,’ Dr Moore explained.

‘Neither scenario is ideal for patients or their families.

‘We also want to see if continuing care for children in their own homes virtually, is an acceptable option for families and healthcare staff and whether it is cost-effective compared with current practice.’

Participants are equipped with wearable devices before they leave hospital, enabling their heart rate, temperature, and blood-oxygen saturation levels to be tracked intermittently.

Scheduled telehealth reviews give families the opportunity to raise any concerns they may have about their child’s recovery.

‘While the child’s health and well-being remain our priority, this initiative has the potential to deliver a host of additional benefits, such as convenience for families, improved hospital bed availability for PCH and lower environmental impact,’ Dr Moore says.

Fellow the leader of new diabetes clinic

Dr Sarah Black's fellowship is enabling her to lead and evaluate a new clinic established at PCH to support children and families following an early diagnosis of Type 1 diabetes (T1D).

The clinic's launch follows recent advances on the T1D front including:

- the discovery of blood markers that can identify the condition before symptoms develop
- the emergence of new therapies that can delay disease progression.

T1D is an autoimmune disease in which the pancreas stops producing insulin – the hormone responsible for converting glucose to energy.

Dr Black says children with early-stage T1D will almost certainly develop a lifelong reliance on insulin injections, entering a stage described as 'clinical diabetes, but there is no way of knowing when this will occur'.

'Until recently, people with T1D had no treatment options before reaching the clinical stage,' Dr Black explains.

'Now there are therapies that can delay progression to the clinical stage by up to 2 years and – thanks to blood tests capable of identifying early-stage T1D – we have opportunities for these individuals to access emerging treatments as they become available in Australia.

The goal of the clinic is to prevent serious complications – including the potentially life-threatening condition diabetic ketoacidosis.

Its multidisciplinary team will work with families to give them skills and confidence to manage their child's condition as it evolves.

T1D affects about 1,200 children in Western Australia. Approximately 160 children are diagnosed each year.

Symposium

A celebration of child health research

The annual Child Health Research Symposium is a highlight of Western Australia's child health research calendar, showcasing paediatric research both within and beyond CAHS.

It is presented by CAHS in partnership with The Kids Research Institute Australia and generously supported by the Perth Children's Hospital Foundation.

In 2024, its bumper program ran at PCH over 4 days in November featuring:

- nearly 200 oral and poster presentations
- 4 satellite sessions
- 3 invited keynote speakers
- panel discussions
- a poster event
- Great Debate, and
- an awards ceremony recognising the best presentations.

The event's first ever 'Great Debate' was a popular addition to the program, drawing lots of laughs as the competing teams sparred over whether artificial intelligence was revolutionising child health outcomes through research.

The symposium's theme in 2024 – Empowering futures; advancing child health – captured the breadth and diversity of research underway across CAHS that is improving the lives of children and young people here and around the world.

Study sheds light on Aboriginal views on healthy lifestyle programs for kids

In a prize-winning presentation to the 2024 Child Health Research Symposium, CACH paediatric registrar Dr Stephen Paull revealed findings of an investigation into potential barriers to Aboriginal participation in healthy lifestyle programs.

The findings contributed to the design of a larger research project, investigating the effectiveness of a family-based, multi-disciplinary program to tackle childhood obesity. That project is now being piloted with families from the East Metropolitan Health Service (EMHS) catchment.

Dr Paull said that to ensure equitable access to the program, it was necessary to understand the potential barriers and enablers to Aboriginal participation.

As part of the project, Dr Paull, fellow researchers, and partners from the Health Consumers' Council WA and EMHS, held a workshop to hear the perspectives of people from different Aboriginal communities.

The participants, most of whom were Elders, revealed a range of factors that could influence families' involvement. These included financial and food insecurity, time, location, transport, past trauma, and an inclusive and welcoming program.

Participants also offered suggestions for addressing barriers such as connecting with services that could provide food, flexible programming, familiar and comfortable venues and partnering with agencies able to provide transport, and mental health screening.

Dr Paull said the healthy lifestyle program's design was modified based on insights from the workshop and that a Cultural Advisory Group had also been established that was providing guidance and an ongoing Aboriginal voice to the larger project.

Dr Paull hoped the findings would be useful for other researchers wanting to ensure projects were accessible and culturally safe for Aboriginal participants.

Researchers ponder perceptions of pain

CAHS-led research has helped shed new light on children's perceptions of pain.

Presenting findings of the study to the 2024 Child Health Research Symposium, Dr Thomas Drake-Brockman, a member of the Pain and Anaesthesia research team at Perth Children's Hospital, said that assessing pain was crucial to ensuring the effective identification, investigation, and management of pain but that pain assessment could be challenging in children.

'Children can struggle to describe their pain or to use pain assessment scales that were developed for adults,' they said.

'But children cite pain as the worst aspect of their hospital experience, so it is imperative that more effective ways of assessing pain in children are developed.'

Dr Drake-Brockman and research colleagues conducted qualitative interviews with 27 children and their parents at PCH to better understand their experiences and perceptions of pain.

The interviews revealed a diversity of ideas, but also key themes, including that:

- pain is a familiar part of everyday life and serves an important function
- children communicate pain both verbally and non-verbally
- children relate pain to other sensory experiences, such as the colours red and black and irregular or spikey forms.

Dr Drake-Brockman says insights from the study will be used to inform the development of age-appropriate pain assessment tools.

Honouring our researchers

In 2024-25 CAHS researchers were recognised by the community and their peers on platforms locally, nationally and internationally. Below we shine a light on some of these researchers and their special accolades and achievements.

Dr Thomas Drake-Brockman

– was named Australian Medical Association (WA)'s Junior Doctor of the Year. Dr Drake-Brockman was acknowledged for their 'fearless advocacy for junior doctor peers', for being part of the Bargaining Committee that negotiated the most recent industrial agreement with WA Health, and for guiding the redesign of Hospital Health Check – the AMA's annual survey of junior doctors.

Professor Tim Jones

– endocrinologist and Director of Research at CAHS was appointed a Member of the Order of Australia in the King's 2025 Birthday Honours List. Professor Tim Jones was honoured for outstanding contributions to medical research, particularly in the fields of paediatric endocrinology and diabetes.

Professor Britta Regli-von Ungern-Sternberg

– anaesthetist researcher who was the recipient of multiple honours including 2024 Life Scientist of the Year in the Prime Minister's Science Awards, UWA Medical School 2024 Award for Research Mentorship. In the 2025 King's Birthday Honours List, she was appointed a member of the Order of Australia for her significant service to medicine as a paediatric anaesthetist and researcher.

Professor Michaela Lucas

– consultant immunologist and allergist at PCH was inducted into the WA Women's Hall of Fame in recognition of her outstanding contributions to Western Australia's health system through both clinical and research roles.

Dr Pamela Laird

– physiotherapist researcher, received several major honours during the year including Early Career Scientist of the Year at the 2024 Premier's Science Awards and was made a 'Leader in Lung Health' by the Thoracic Society of Australia and New Zealand, collecting the Chiesi Advancing Women in Respiratory Health Award and the Rob Pierce Indigenous Lung Health Award. She also won the Research Award at the WA Excellence in Allied Health Awards in recognition of her research focused on improving health outcomes for Aboriginal children.

Professor Rishi Kotecha

– paediatric oncologist and haematologist was made CAHS Researcher of the Year at the inaugural CAHS Excellence Awards. Professor Kotecha was recognised for his involvement in national and international research collaborations and for his contribution to advancing the diagnosis, treatment, and understanding of blood cancers.

Nadine Smith

– physiotherapist and researcher, was awarded the coveted Poster Prize for Excellence in Methods and Trustworthiness for her presentation to the International Paediatric Pain Symposium in Glasgow. Ms Smith's presentation was based on a study that led to the development of a 'core outcome set' for assessing pain in children with cerebral palsy.

Jemma Weidinger

– nurse practitioner and member of the FH (familial hypercholesterolaemia) in Kids research project – won the Excellence in Leadership – Established Leader award at the 2025 WA Nursing and Midwifery Excellence Awards. Ms Weidinger was recognised for her outstanding leadership and for inspiring colleagues through clinical excellence, dedication, and collaboration.

Research snapshot

PCH researcher praised for poster presentation

A PCH-led study that identified the most appropriate and effective tools for assessing pain in children with cerebral palsy was at the centre of an award-winning presentation by PCH physiotherapist and researcher Nadine Smith.

Ms Smith was awarded the Poster Prize for Excellence in Methods and Trustworthiness at the International Paediatric Pain Symposium in Glasgow.

The study was designed to improve the quality of life of children with cerebral palsy, most of whom experience chronic pain impacting multiple aspects of daily living including schooling, sleeping, recreational activities and emotional wellbeing.

'Despite this, routine assessments in the past would rarely canvass the broader impacts of pain on these children,' Ms Smith revealed.

'We hope our development of a recommended list of tools that can guide clinicians on assessment tool selection – based on the findings of our research – will help change this.'

As part of the study, clinicians, researchers, stakeholders and consumers with lived experience of cerebral palsy, reviewed a large sample of pain assessment tools to determine their feasibility and effectiveness for use in children with cerebral palsy.

At the end of the process, the reviewers reached consensus for 20 of the tools to make the list, known as a core outcome set (COS).

To cater to the wide variation of communication and cognitive abilities among children with cerebral palsy, each tool was categorised according to the reporting on which it relied (patient or observer) and the purpose for which it was designed (identify chronic pain, assess impact of activities on daily life or assess impact on emotional wellbeing).

Ms Smith said the COS enabled clinicians to choose a tool that was not only suited to the patient and situation, but that had been endorsed by both clinicians and lived experience consumers following a process of rigorous and systematic review.

PCH clinical trial earns Eric a place in vaccine history

Though too young to know it now, Eric Yap will have a special story to share with his classmates one day.

At 6 weeks of age the youngster became the first baby in the world to get vaccinated for an international clinical trial that is testing the safety and efficacy of a new pneumococcal vaccine.

Eric got the vaccine at PCH, one of 6 Australian sites taking part in the study which aims to enrol more than 1600 infants worldwide.

The new vaccine, which has shown favourable results in earlier studies, has been developed to protect against 21 types of pneumococci, bacteria that are responsible for a host of serious medical conditions including pneumonia, sinusitis, meningitis, and bacteraemia (an infection of the blood).

Under Australia's National Immunisation Program, Eric would have received a vaccine offering protection against 13 types of pneumococci.

Professor Peter Richmond, who is Head of Immunology at PCH and leads the Vaccine Trials Group at The Kids, is overseeing the study in Western Australia. He welcomed Eric's participation, saying Eric and its other young participants, were playing a vital role in improving care for children here and around the world.

'Pneumococci can cause debilitating illnesses – in some cases even death – so having vaccines that can offer protection against more strains causing these diseases is incredibly important,' he said.

CALD families the focus of new push to lift safety of children in hospital

Families from culturally and linguistically diverse (CALD) backgrounds have become the latest focus of CAHS-Curtin University-led research designed to improve the safety of children in hospital.

The Safer Care for Children in Hospital research program led to the development of an evidence-based system for recognising and responding to clinical deterioration in WA paediatric settings.

The system – ESCALATION – incorporates family input into assessments of children, an inclusion that recognises the importance of families in detecting early signs of patient deterioration.

With ESCALATION now in place across all WA Health facilities caring for sick children, the Safer Care for Children in Hospital research team, led by Professor Fenella Gill, has turned its attention to strengthening and fine-tuning the system.

The latest phase of its work is focused on helping families for whom English is not their first language, to advocate on behalf of their children.

'The goal is to develop a digital solution that will support these families to be able to communicate their concerns if they believe their child is deteriorating,' Professor Gill explained, adding that it would be developed along similar lines to a program already operating in the United Kingdom.

She hoped the local version could include an audio component to make it more accessible to non-English speaking families.

Professor Gill and her team will work closely with culturally and linguistically diverse community groups and the CAHS' cultural ambassadors to co-design the new resource.

Community groups, including those from Vietnamese, Chinese and African backgrounds, will be involved in co-designing the digital solution which Professor Gill hopes will be ready to test as a prototype in 2026, prior to implementation.

Study confirms value of crisis intervention service

A dedicated 24-hour intervention service for children experiencing a mental health crisis has been found to have reduced emergency mental health presentations to PCH by almost a third.

The study by researchers from Child and Adolescent Mental Health Services (CAMHS) also notes that the 29 per cent reduction, as well as reductions in admissions to inpatient wards (28 per cent) and re-presentations (23 per cent), are both long-term and sustained.

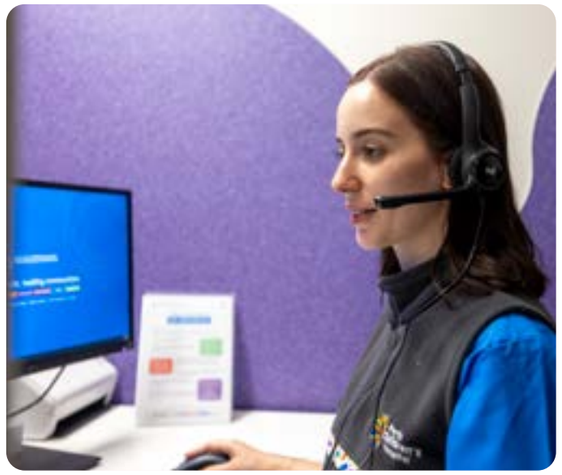
The study was designed to investigate the impact of CAMHS Crisis Connect (CCC) service on the utilisation of PCH resources.

About 20 per cent of children and young people experience mental health difficulties. The CCC was established to improve patient flow through PCH and help young people experiencing an acute mental health episode access appropriate and timely care.

It has been operating in its present form at PCH since 2021, providing a 24-hour emergency phoneline (for children, parents and health professionals), and a comprehensive mental health assessment and support service for young people presenting to the ED. The service is provided face to face at PCH, and via telehealth at other metropolitan EDs. Support can include brief psychological interventions, treatment planning and referral to appropriate services for follow-up.

CAMHS Clinical Services Director Dr Vineet Padmanabhan, said that before the CCC was established, many young people experiencing a mental health crisis would present to the ED for lack of an alternative, while some would avoid it, leading to delays in seeking care.

‘Our study found that since the CCC’s opening, many young people were choosing to bypass the ED and seek CCC assessment and referral instead, enabling them to manage their mental health with support from community and outpatient services’.



Dr Padmanabhan noted that as an added safeguard, callers to the CCC received a follow up call from a team member within 24 hours of their initial contact, enabling the CCC team to monitor each patient and – where necessary – provide alternative referrals.

Breath-taking bid to boost ICU outcomes

CAHS’ inaugural Allied Health Research Fellow, Tamara Farrell, has been using breathtaking technology to see whether meeting the exact nutritional needs of children in the intensive care unit can hasten their recovery.

The PCH dietitian is using a space-age looking device which analyses the patient’s breath to determine their energy use. This is then used to calculate their precise nutritional needs.

The research fellowship will enable Ms Farrell to test her hypothesis that tailoring feeding to each child’s energy and protein requirements will shorten their recovery time by reducing muscle wastage.

Loss of skeletal muscle mass is a significant issue in paediatric intensive care units, especially among children who are in for more than a week.

‘These children can lose more than 15 per cent of their muscle mass from just a week in the intensive care unit,’ Ms Farrell explains.

‘This can have a profound impact on their recovery – increasing their hospital stay, hindering rehab and delaying their return to everyday activities.’

Highlighting the challenges of managing nutrition for children in the ICU, Ms Farrell notes that while overfeeding is detrimental to recovery, patients commonly receive only 60 per cent of their energy and protein targets. Compounding this, reports suggest that as many as one in 4 children in ICUs are already malnourished at the time of admission.

‘That’s why it is so important we find ways of ensuring patients receive the nutrition they need,’ she says.

As part of her investigation Ms Farrell will also establish whether sedation levels impact a patient’s energy needs.

She hopes insights from her research can be used to develop evidence-based feeding guidelines for children in the ICU.

Telethon Trust has funded Ms Farrell’s fellowship while PCHF has funded 2 instruments she is using in the study – an indirect calorimetry device to measure energy expenditure, and a bio-impedance device to help calculate patient muscle mass.

Study seeking to improve care for kids with cancer

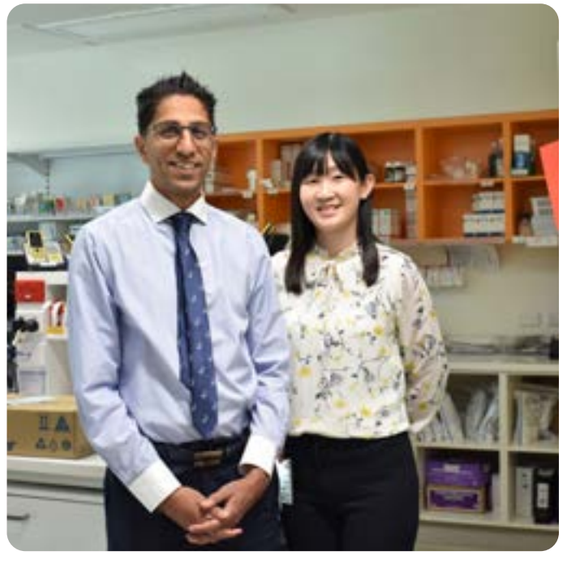
At PCH, senior pharmacist Christy Yong and paediatric oncologist and haematologist Professor Rishi Kotecha joined forces to embark on research that will determine whether prescribing medicines based on an individual's genetic make-up can reduce side effects in children undergoing cancer treatment.

The research is part of a national initiative which is also investigating the cost-effectiveness of genetically informed prescribing, potentially laying the groundwork for a more personalised and efficient approach to patient care.

The study is focussed on genetic testing to help determine the most appropriate supportive-care medications for the individual child, as well as identifying the risk of adverse events for some common chemotherapeutic agents.

Supportive medications are those that help reduce adverse effects and improve the tolerability of cancer treatment. They include antibiotics, pain relievers, and medicines used to prevent nausea and vomiting.

As children with cancer are often prescribed complex combinations of medications that can elevate their risk of adverse drug reactions, reducing side effects through personalised prescribing could significantly improve their overall treatment experience and – potentially – their health outcomes.



Special invitation

In 2024 CAHS neonatologist and researcher, Professor Tobias Strunk, accepted an invitation from the prestigious medical journal The Lancet to contribute a seminar article on neonatal sepsis.

In taking on the assignment, Professor Strunk led a team of internationally renowned scientists who collaborated with him to present some of the latest and most reputable information and developments on neonatal sepsis which – alongside pre-term birth – is the leading cause of death in the first month of life.

The paper addressed the challenges of treating and diagnosing sepsis in newborns, particularly in low and middle-income countries. It also highlighted obstacles to investigating neonatal sepsis, including the absence of a universal definition of the condition which undermined the reliability of world prevalence data. Importantly, the paper discussed different approaches to preventing sepsis in vulnerable newborns.

Professor Strunk said he was honoured to have received the Lancet invitation and the opportunity to work with such accomplished scientists. His co-authors on the paper were leading Irish neonatologist Professor Eleanor Molloy, Dr Archita Mishra, an expert on early-life microbiome from the University of Sydney, and Professor Zulfi Bhutta, an internationally renowned authority on global child health.

Pilot putting families on path to healthy lifestyle

Researchers from Child and Adolescent Community Health piloting a healthy lifestyle intervention in east metropolitan Perth, have enrolled more than 150 families into the initiative.

Led by paediatrician, Associate Professor Yvonne Anderson, the pilot involves participants – aged 4 to 16 years who are above a healthy weight and want to embrace a healthy lifestyle – attending weekly lifestyle sessions for 6 months, accompanied by at least one family member.

The sessions are designed to be fun and engaging and are delivered in the community by health professionals, covering nutrition, physical activity and psychological health and wellbeing.

Before starting the program, participants undertake health assessments which screen for health issues. These assessments have provided baseline information which, together with follow-up checks midway and at the end of the 6 months, will help the researchers determine the program's effectiveness.

Input from Aboriginal Elders and consumers with lived experience have helped shape the program which has been adapted from a successful New Zealand model of care.

Study confirms complexity of cochlear implant cohort

CAHS-led research has provided important insights into the range and prevalence of comorbidities in children undergoing cochlear implantation at PCH.

Findings of the award-winning study supported results of earlier investigations which showed that a significant proportion of children who underwent cochlear implantation had other medical conditions too.

‘But this study gives us a much clearer picture of the spread of conditions, the rates at which they occur and important demographic information,’ PCH Ear Nose and Throat Consultant Clinical Professor Jafri Kuthubutheen said.

Professor Kuthubutheen co-supervised the study which earned lead author, Dr Emily Wainwright, the 2024 Notre Dame University prize for highest-scoring research project by a final-year medical student.

The study reviewed the records of 226 children who underwent cochlear implantation at PCH, with key findings including that:

- just over half of the study sample had at least 1 confirmed medical condition in addition to their hearing loss, with some having as many as 10 comorbidities
- almost a quarter of participants (23.9 per cent) had conditions that could be classified as mental, behavioural or neurodevelopmental while 19 per cent had diseases of the nervous system such as cerebral palsy

Professor Kuthubutheen said that young cochlear implant recipients who were free of other medical conditions traditionally had more favourable health outcomes than those with comorbidities.

‘But as our research has shown, most implant recipients also have other medical conditions too.

‘This highlights the importance of having paediatric implant programs located in centres that have the expertise and experience to care for children with complex medical needs — such as the PCH-based Children’s Hearing Implant Program (CHIP), which is the only one of its kind in Western Australia.

Professor Kuthubutheen, who is CHIP’s medical co-lead, said the study’s findings would be valuable in helping refine the care and support available to young cochlear implant recipients and their families.

CHIP’s team of medical, surgical and allied health professionals provides services to these children, from birth up to 16 years of age.

CAMHS study identifies research priorities

New research has identified the research priorities for Western Australia’s Child and Adolescent Mental Health Services.

Published in the International Journal of Healthcare Management, the study found ‘evaluation and implementation’ to be the top-ranked priority, with 92 per cent of study participants – consisting of both CAMHS consumers and staff – affirming its importance.

The other priorities were:

- best practice
- experiences of care
- diagnosis and identification
- service utilisation
- innovation
- workforce; and
- determinants and modifiers.

The paper’s lead author, CAMHS Research Manager, Dr Laura Dondzilo said the study’s findings were a valuable resource that would play a key role in guiding CAMHS’ research agenda.

‘CAMHS is currently undergoing significant reform in an effort to meet increasingly high service demand,’ she explained.

‘These priorities will ensure our limited resources are channelled into the projects that best align with the interests and needs of both CAMHS, and the young people and families who rely on its services,’ she said.

The final priority list was achieved through a process of consensus involving 2 panels: one of CAMHS staff, the other of consumers over the age of 12 with recent experience of the service – either directly or as carers of young people.

Dr Dondzilo said having strong consumer representation in the priority-setting process was vital to understanding the needs and perspectives of young people and their families, paving the way for research that would lead to meaningful change.

Tool to help children who can't tell you it hurts

Most children will let you know when they are in pain but that is not possible for many children with disabilities who are unable to communicate with others.

These children can endure pain and discomfort unbeknownst to those around them.

Now relief is in sight for these children thanks to research that is poised to remove the guesswork from knowing when a child is hurting.

Researchers from PCH and The Kids have teamed up with Australian-based medical technology company, PainChek Ltd, to develop a digital app that will alert caregivers to subtle facial and behavioural cues which can be indicators of pain.

They want to see if technology already used widely to detect discomfort in babies, and adults with dementia, can be adapted effectively to detect pain in children with disabilities.

Researcher on the project and PCH consultant paediatrician, Dr Katherine Langdon, says the tool could be life changing for these children because they would no longer suffer in silence.

MERLIN paving way for AI-enhanced research

PCH has become home to one of Western Australia's most powerful computers thanks to a collaboration between CAHS and UWA, and funding from the Stan Perron Charitable Foundation.

The high-performance computer, known as MERLIN, provides a secure and private artificial intelligence (AI) platform, paving the way for improved care through AI-enhanced research.

MERLIN can support AI-driven studies – including machine learning and complex statistical modelling – giving CAHS' researchers a new edge without compromising the high standards of privacy needed to protect children's medical data.

MERLIN also presents opportunities to expand AI literacy and capability across CAHS.

The Anaesthesia Research Team — which manages MERLIN – includes individuals who hold dual qualifications in medicine and computer science.

MERLIN's first assignment at PCH was a project to identify risk predictors for common complications of anaesthesia. The project involved analysing data from more than 10,000 children who participated in earlier studies.

Study highlights need for non-gendered psychological assessments

Self-reported psychometric questionnaires – a mainstay of mental health assessment for almost a century – may need to be adjusted for use with trans and non-binary young people, CAMHS-led research has shown.

The study, published in the Journal of Psychiatric Research, found that ambiguity in how the questionnaires should be scored in gender-diverse youth, could cause early risk flags to be overlooked.

'Our research highlights the need to develop universal, non-gendered measures for rating a person's mental health,' Dr Liz Saunders, a Senior Researcher with CAMHS' Gender Diversity Service (GDS), and the study's lead author, said.

Dr Saunders explained that psychometric questionnaires were a key part of any thorough assessment of a person's mental health and overall functioning.

'They help identify risk and assess the severity of symptoms; contributing to decisions around treatment and support,' she says.

'But to account for sex-based differences in the population the questionnaires are designed to be scored according to the individual's birth-registered sex.

'This creates a dilemma for clinicians assessing trans and non-binary youth: do they still score according to the individual's birth-registered sex, or by their gender identity? And what happens in cases where a young person doesn't identify with a binary male or female gender?'

In the absence of clear guidance on the matter, the study team investigated whether the choice of scoring applied (birth-registered sex or other sex) made any meaningful difference in identifying whether a young person was experiencing mental health symptoms that could be associated with risk.

'Our results showed it did,' Dr Saunders said.

The researchers discovered that applying male or female scoring norms to 4 commonly used psychometric measures could change the classification of the individual's psychiatric symptom severity level, with some moving from "clinically significant' to a "sub-clinical" classification.

Researchers in the spotlight

CAHS researchers make their mark in many ways. In April 2025, a group of our investigators took centre stage at 2 major scientific meetings at opposite ends of the globe.

At the International Meeting on Indigenous Child Health in Winnipeg, Canada, 3 of our staff were invited to present.

- Board member Professor Dan McAullay, provided a plenary presentation on Aboriginal and Torres Strait Islander Child Health in the context of Global Indigenous issues.
- CAHS Director of Aboriginal Health, Mel Robinson, presented on Maawit Maladjin, a clinical trial implementing a Care for Child Development program for Aboriginal babies across Perth. The intervention, which has been successful internationally, is designed to improve child neurodevelopment.
- Professor Asha Bowen spoke about SToP (See, Treat, Prevent Skin Sores) a clinical trial that is evaluating the effectiveness of a package of activities designed to prevent skin infections among children in WA's Kimberley region.

Meanwhile at the Australian and New Zealand Intensive Care Society's annual scientific meeting in Christchurch New Zealand:

- CAHS nurses Arielle Jolly and Chelsea Kelly were 2 of 3 PhD students shortlisted in the Best Nursing Scholarship paper session, with Chelsea's paper, Assessing clinical deterioration in children with dark coloured skin, awarded the Best Nursing Scholarship prize.
- Fellow nurse, Dr Eileen Boyle, was awarded Best Paediatric Nursing Paper for her presentation in the Paediatric and Neonatal session, while Professor Fenella Gill, was an invited speaker who delivered 2 oral presentations (If parents are worried their child is getting worse – the vital sign; and Critical care nurse education – The Australian perspective) and a poster presentation.
- Critical Care consultant Dr Dan Alexander was also guest speaker whose presentation on compassionate end-of-life care told of the final journey of a child being taken home to Fitzroy Crossing.

Trial helps Paige turn corner on cancer

When 6-year-old Paige McKay was diagnosed with a brain tumour in mid 2024, her world – and that of her family – was turned upside down.

The once bright and energetic youngster had been experiencing seizures and regular headaches so severe they would make her violently ill and the right side of her body had become so weak, she could no longer use her dominant arm.

Paige told her mother Amy, that her arm "wasn't listening to her anymore".

For Paige's family, the devastating diagnosis was compounded by news her tumour's location made surgical removal – the usual first-line of treatment – too risky, leaving chemotherapy her only standard treatment option.

Back then, it may have seemed of little consolation to Paige's parents that a biopsy taken at diagnosis showed Paige's tumour had a genetic mutation.

But that mutation made her eligible for a clinical trial underway at PCH. Amy now credits that trial – FIREFLY-2 – with saving Paige's life.

A central computer randomisation process assigned trial participants to receive either the standard chemotherapy or a targeted therapy.

Paige was assigned to the chemotherapy arm meaning she was given the very treatment she would have received had she not been on the trial.

Within 3 weeks of starting chemotherapy it was clear she was not responding well to the treatment. Her tumour had grown, her strength had declined further and her seizures worsened. By this point she was too ill to attend school and remained largely bedridden at home.

Paige's oncologist, Dr Santosh Valvi revealed that Paige's clinical decline and the rapid growth of her tumour were unusual for her tumour type and that had she not been on the trial, the next treatment step would have been radiation therapy with the risk of significant and permanent side effects.

This is where the FIREFLY-2 trial came to the fore.

'The beauty of being on that trial was that when it became clear that the chemo was not working on Paige's tumour, I was able to quickly switch her to the alternative treatment,' Dr Valvi explained.

On the new treatment, Paige turned the corner, regaining strength, an appetite, and her seizures and headaches became less frequent and severe.

Within 2 weeks of switching treatments, Paige could hold a spoon again, for the first time in 9 months.

'It was a significant breakthrough,' Dr Valvi said. With the tumour now less than half its original size, Paige is back to school and enjoying all her favourite activities.

Dr Valvi says that had Paige not been on the trial, her only access to the targeted therapy would have been through a compassionate access request.

'But these can only be considered once all standard treatments have failed,' he explained.

'Even then, approval must go through 2 separate assessments, by the hospital's Drug and Therapeutics Committee and the pharmaceutical company.'

'This can take anywhere between 4 and 8 weeks and by which time, the window for an optimal response to the therapy may have passed.'

Thanks to the trial, Amy says Paige is back to being the happy little girl she was previously.

New research projects

The following projects were 'approved to commence' in the 2024-2025 period.

RGS#	Title
4910	Evaluation of the Early Years Initiative: Child Outcomes Sub-study
5122	Standardised treatment and monitoring protocol for adult and paediatric patients receiving bacteriophage therapy
5533	Diagnostic accuracy of 3D facial photography and sleep oximetry in assessing the severity of Obstructive Sleep Apnoea in infants with Pierre Robin Sequence: A Pilot study
5580	Detecting pain in kids who can't tell you that it hurts: PainChek for children with disabilities
5620	The Mitochondrial Diagnostic Network for Genomics and Omics (MitoMDT)
5879	Therapeutic Crisis Intervention for Families (TCI-F): An Investigation of Parent and Child Outcomes
5889	"P-ICECAP: Pediatric Influence of Cooling duration on Efficacy in Cardiac Arrest Patients. A multicenter, randomized, adaptive allocation clinical trial to identify the optimal duration of induced hypothermia for neuroprotection in comatose survivors of cardiac arrest
6009	AOST2032: A Feasibility and Randomized Phase 2/3 Study of the VEFGR2/MET Inhibitor Cabozantinib in Combination with Cytotoxic Chemotherapy for Newly Diagnosed Osteosarcoma
6034	Effects of immunoglobulin replacement therapy on clinical burden of secondary immunodeficiency disease associated with childhood cancer therapy and haematopoietic stem cell transplant
6229	Inpatient Paediatric Oncology and flowering plants on Whadjuk Noongar Country: Carer perspectives of Nature Spaces
6232	Children's Palliative care Outcome Scale Validation Study: Protocol for Australia and New Zealand
6245	Safety and efficacy of a single step oral provocation challenge in children with a low risk reported penicillin allergy (SafeStep): a randomised controlled study
6314	Type 1 Diabetes National Screening Pilot: Monitoring Early Stage Type 1 Diabetes
6324	Project title: Infant Mental Health: Exploring Relationships between Depressive Symptoms and Child Development
6357	National Disability Insurance Scheme Inklings Pilot of a pre-emptive program for infants showing early signs of developmental delay in Western Australia
6371	Work Design at Perth Children's Hospital
6381	Australian Marrow Failure Biobank
6405	Redefining Glucose Thresholds for Hypoglycaemia Management in Children with Type 1 Diabetes on Closed Loop Therapy: a cross-over clinical trial
6463	A Phase 3, Randomized, Double-blinded, Placebo-controlled, Multicenter Study to Evaluate Efficacy and Safety of ALXN1850 (Recombinant Alkaline Phosphatase) Administered Subcutaneously in Adolescent (12 to < 18 years of age) and Adult Participants with Hypophosphatasia Who Have Not Previously Been Treated with Asfotase Alfa
6464	A Phase 3, Randomized, Double-blinded, Placebo-controlled, Multicenter Study to Evaluate Efficacy and Safety of ALXN1850 Versus Placebo Administered Subcutaneously in Pediatric (2 to < 12 years of age) Participants with Hypophosphatasia Who Have Not Received Previous Treatment with Asfotase Alfa
6471	VANISH: The evolution of pulmonary lesions on high resolution computed tomography scans in immunocompromised children with an invasive fungal disease
6526	BURNOUT: Beyond burnout in anaesthetists: Prevalence and assessment of current strategies and supports for mental wellbeing
6535	Identifying immunotherapy targets in childhood cancer – a platform for translating recent successes in adult cancers to children
6553	ToRToISE- Tonsil and Respiratory Tract Infections with Strep A and EBV
6579	A prospective observational study evaluating extubation criteria in children less 10 years of age undergoing intravenous anaesthesia (EXTUBATE)
6591	Optimal Precision Theraples to CustoMISE Care in Childhood and Adolescent Cancer
6595	Estimating the Impact and Costs of Antimicrobial Resistance in Tertiary Paediatric Practice, Perth Children's Hospital

RGS#	Title
6612	Neurodevelopmental outcomes in SGA (small for gestational age) vs Non- SGA infants with Hypoxic Ischemic Encephalopathy (HIE) undergoing Therapeutic hypothermia: A retrospective observational comparative study
6645	Use of radiation and thermal ablation in pediatric hepatoblastoma
6669	Outcomes of current Neurodevelopmental Screening in Children with Congenital Heart Disease; the next steps we need to take to improve morbidity in a State-wide Tertiary Paediatric Hospital
6671	A Phase 3, randomized, modified double-blind, active-controlled, parallel-group, 2-arm study to investigate the safety and immunogenicity of a 4-dose regimen of a 21-valent pneumococcal conjugate vaccine in healthy infants and toddlers
6685	Developing infant tolerance to nuts via breastmilk: a randomised controlled trial
6708	Mandibular distraction osteogenesis in infants with Robin Sequence: comparison of surgical outcomes before and after implementation of standardised care pathways
6727	JELLYFISH (Just eating these little lollies you'll find it should help): A randomised controlled trial of pre-procedural chewables in children undergoing fasting before surgery
6743	Leigh Syndrome Roadmap Project: a natural history study
6747	Improving outcomes of recurrent preschool wheeze: a multicentre randomised controlled trial (RCT) with biomarker discovery (POWERED Trial)
6764	Parent Eczema Education and Support (PEES) study
6799	Outcomes For Children with Spinal Diffuse Midline Gliomas (sDMG): An International Multi-Institutional Study
6830	VICTORY a pilot study to investigate safety and efficacy of weekly combination of intravenous vinblastine with oral type II RAF inhibitor Tovorafenib in paediatric patients with recurrent/ progressive RAF altered (non-NF1) low grade gliomas
6835	The NACE ADAPT (from Allergy Development to an Accelerated Pathway to Tolerance) Oral Immunotherapy (OIT) in Infants' Evaluation Study: an evaluation of the national implementation of a peanut OIT program as a new model of care in a hospital setting
6840	ANHL2121: Phase 2 Study of Tovorafenib (DAY101) in Relapsed and Refractory Langerhans Cell Histiocytosis
6856	Evaluating the biological activity of a single dose of encapsulated oral semaglutide healthy adults over a period of one week
6864	Real World Blinatumomab Consortium: Multi-center retrospective observational study of the use of blinatumomab upfront, off study in pediatric patients with B-ALL
6866	Developing culturally meaningful type 1 diabetes educational resources with culturally and linguistically diverse communities in Western Australia
6867*	Defining the clinical utility of investigations for chronic wet cough: a retrospective study
6883	The Movement Program: trans-specific exercise program for clients at gender diversity services
6888	Finding early markers of respiratory disease for survivors of preterm birth that identify treatable traits
6917	A Natural History Study of Exocrine Pancreatic Function in Infants With Cystic Fibrosis Less Than 12 Months of Age - VX24-445-130
6922	ANBL2131 - A Phase 3 Study of Dinutuximab Added to Intensive Multimodal Therapy for Children with Newly Diagnosed High-Risk Neuroblastoma
6923	Tailoring the approach to serious illness conversations with parents and children– perspectives of doctors, nurses and allied health professionals
6926	Paediatric Electronic Persistent Pain Outcomes Collaboration (PaedePPOC) within the Complex Pain Service at Perth Children's Hospital
6932	GENTLEB: Describing the Health Outcomes of the GENTLE (GENder idenTity Longitudinal Experience) cohort
6949	Physiological monitoring in the OR; Predicting Outcomes using Infra-red SEnsors, a feasibility study (PORPOISE)
6955	A Phase 2 Multi-Centre, Randomised, Double-Blind, Placebo-Controlled Study to Evaluate the Safety and Efficacy of Subtype-Selective JAK Inhibitors for Preservation of Pancreatic and beta; Cell Function in Newly Diagnosed Type 1 Diabetes Mellitus

RGS#	Title
6958	I3Y-MC-JPEH: A Randomized, Open-Label, Phase 2 Study Evaluating Abemaciclib in Combination With Temozolomide Compared to Temozolomide Monotherapy in Children and Young Adults With Newly Diagnosed High-Grade Glioma Following Radiotherapy
6972	Efficacy and Safety of Tirzepatide Once Weekly versus Placebo for the Treatment of Obesity and Weight-Related Comorbidities in Adolescents: A Randomized, Double-Blind, Placebo-Controlled Trial: SURMOUNT-ADOLESCENTS-2
6978	A Phase 3, Open-label Study Evaluating the Long-term Safety and Efficacy of Elexacaftor/ Tezacaftor/Ivacaftor in Cystic Fibrosis Subjects 12 Months of Age and Older (VX22-445-123)
6979	The Impact of Modulator therapy from Early life on lung health trajectories in cystic fibrosis
6981	Nutrition therapy in Paediatric patients requiring Extracorporeal Membrane Oxygenation: A prospective observational multisite study (PaeNUT ECMO)
6984*	Tiny Baby Collaborative: MINI Study
7042	Talking about type 1 diabetes: Understanding adolescents' needs to have confident conversations
7050*	Evaluating a paediatric multi-disciplinary emergency mental health service: CAMHS Crisis Connect
7056*	Comparison of clinical outcomes and care practices for extremely preterm infants (<25 weeks gestational age) between a Western Australian and a Japanese tertiary neonatal unit: A comparative survey questionnaire study
7064	A Phase 3, Randomized, Observer-Blinded, Active-Controlled Study to Evaluate the Safety and Immunogenicity of a COVID-19 Influenza Combination Nanoparticle Vaccine and a Standalone Trivalent Nanoparticle Influenza Hemagglutinin Vaccine in Participants = 65 years of Age
7072	Dose-response study of probiotics in sick term and late preterm infants: the PRINS-2 trial
7094*	Respiratory Events and emergence Delirium – Post hoc ANalysis of Data (RED PANDA)
7107	Improving parental participation and attachment in newborn emergency transport in Western Australia
7116	Uncovering the microbial and immunological origins of Sudden Infant Death Syndrome – towards development of predictive biomarkers
7124*	Iron content in the Substantia Nigra of children with ADHD
7125*	Neurological and behavioural impact of trauma in children and adolescents with ADHD
7131	Trends in continuous glucose monitoring measures of glycaemic variability in Australian children with early stage type 1 diabetes
7143	Human Factors and Usability Engineering Assessment of the USS Spacer Device when attached to a Mesh Nebuliser
7149	The views of Australian and New Zealand neonatologists on the future of probiotics for extremely preterm infants following the FDA warning - an international survey
7163	Designing and implementing novel health informatics approaches to improve outcomes for people with mild TBI across Australia (AUS-mTBI APP)
7170*	AI and Large Language Models Generating Positive Paediatric Anaesthesia Trial Outcomes (ALLIGATOR)
7189	Bridging Care for ADHD: A Mixed Methods Study on the Model of Shared-Care Between General Practitioners and the Child Development Service
7197	Sweet Mum and Baby Study: a study of the impact of testing and diagnosis of Gestational Diabetes Mellitus on mothers and their babies
7200*	Development of a device for early detection of extravasation in preterm infants – A survey to obtain input from neonatal nurses
7218	Film-forming silicone gel for skin protection in the most vulnerable newborns – A pilot randomised controlled trial
7231	GMA IMPACT (Improving Mental Health Pathways and Access to Child and Youth Treatments)
7235*	Current Practice of Ventilation Strategies in Children undergoing General Anaesthesia and Associations with Postoperative Pulmonary Complications - a Multicentre Prospective Cohort Study (BIG APPLE)
7244	Natural History Study of Selected Type 1 Interferonopathies Based on Data of Medical Records
7285	Individualised dose optimisation of ganciclovir in immunocompromised children (ID-MAGIC) Trial
7297	The Juno Respiratory Training Monitor in Teaching Newborn Facemask Ventilation: A Cluster Randomised Controlled Study

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7301	Patient, Caregiver and Practitioner Perspectives on Commencement of Hybrid Closed Loop Therapy Soon After Diagnosis of Type 1 Diabetes
7314	RESP-ACT: Boosting respiratory health for kids with cerebral palsy
7329	Genomic testing pathways for precision health in cerebral palsy
7330	Understanding needs and preferences for a Type 1 Diabetes (T1D) Community of Practice (CoP)
7336	Use of peripheral arterial cannulation in newborns: An Australian and New Zealand survey
7342*	A Retrospective Study of Contemporary Approaches to First Relapse in B-ALL
7375	A PainChek® App for Kids: Its Practicality, Acceptability, and Impact
7381*	A machine learning approach to inpatient admission prediction from triage
7386	SEALion: a Study on the Effectiveness of Additional oxygenation in Little children during Intubation using Oxygenation delivered by Nasal cannula
7387	Nasal decongestant Administration to Reduce perioperative Adverse events in children With Upper respiratory track infections Having general Anaesthesia - a Low risk intervention. (NARWHAL)
7395*	Clinical presentation and outcomes in children with congenital hyperinsulinism in Western Australia : A single centre experience
7396	A Phase 3 Multicenter Study to Evaluate Efficacy, Safety, and Pharmacokinetics of Upadacitinib with Open-Label Induction, Randomized, Double-Blind Maintenance and Open-Label Long-Term Extension in Pediatric Subjects with Moderately to Severely Active Crohn's Disease and Inadequate Response, Intolerance, or Medical Contraindications to Corticosteroids, Immunosuppressants, and/or Biologic Therapy
7420	Global Retinoblastoma Presentation and Outcome Studies
7427	Hybrid Closed-Loop Therapy Reduces Hospital Admissions and Costs for Acute Diabetes Complications in Youth with Type 1 Diabetes
7434	Profiling early communication in infants at risk of cerebral palsy.
7438	Relationship between diabetes technology and clinic location with glycaemic outcomes in adolescents with Type 1 Diabetes: a population-based study
7439	Supporting Western Australian Families to Navigate Early stage Type 1 Diabetes (T1D): implementation of a co-designed new clinical pathway tailored to their needs
7441	Changes in therapeutic practices and standards of care: associations with glycaemic outcomes in children and adolescents with Type 1 Diabetes – a population based study
7444*	Case Series on Paediatric Pineal Parenchymal Tumour of Intermediate Differentiation
7463	Minimising Adverse drug Reaction and Verifying Economic Legitimacy - Pharmacogenomic Implementation in Children
7483	Understanding priorities and challenges in childhood concussion care from injury through to community reintegration in Western Australia: the perspectives of individuals, families, healthcare providers and educators.
7486	Trends in mental health disorder presentations to CAMHS from 2004 to 2024 and predicted trends in 20 years
7490	Clinician perspectives on the use of digital health technologies in Child and Adolescent Mental Health Service (CAMHS)
7511	Exploring the appropriateness of introducing an intervention aimed to strengthen parent-infant relationships in a community nursing service: A Western Australian Study
7520	The evaluation of a novel biosensor to continuously monitor human fetal scalp lactate intrapartum
7566	BEAGLE: Barriers and enablers for pain medication compliance after going home after tonsillectomy or tonsillottomy surgery- learning from parents' experiences.
7582	Cultural safety indicator: Monitoring safe and equitable care
7586	Improving clinician knowledge of dissociation in children and adolescents: A pilot feasibility and acceptability study of an education program
7586	Improving clinician knowledge of dissociation in children and adolescents: A pilot feasibility and acceptability study of an education program
7587	STINGRAY: Statistical Treatment of data In trials studying New pain interventions: Guiding Research data Analysis to Yield reliable estimates of treatment effects

RGS#	Title
7615	Evaluation of a novel paediatric post-sepsis intervention for families of children in Western Australia
7689	Validating the Eating Disorder Inventory-3 Perfectionism Subscale in Adolescents with Eating Disorders
7692	Retrospective review of current clinical practice and outcomes of ultrasound-guided femoral line placement by Neonatologists in NICU
7773	Evaluating the efficacy of 'Inforeels' – youth-friendly videos about what to expect at Child and Adolescent Mental Health Services (CAMHS)

Waiver of consent

Consent to participate in research is an ethical gold standard that upholds respect for the research participants involved. However in some cases it is not possible to seek explicit consent, and the circumstances of an individual project may justify granting a waiver of the requirement for consent.

The NHMRC National Statement on Ethical Conduct in Human Research guides HREC and researchers in the cases where it is not practicable to seek consent. To approve such a waiver, the HREC must be satisfied that all criteria are met, including that the research is low risk, and the public benefit from the research outweighs potential harm associated with not seeking consent.

Participants in the studies which are granted a waiver of consent may be unaware of their inclusion in the research. This could involve use of their data or tissue samples. For transparency, projects that were granted a CAHS HREC waiver of consent have been listed above with an (*).

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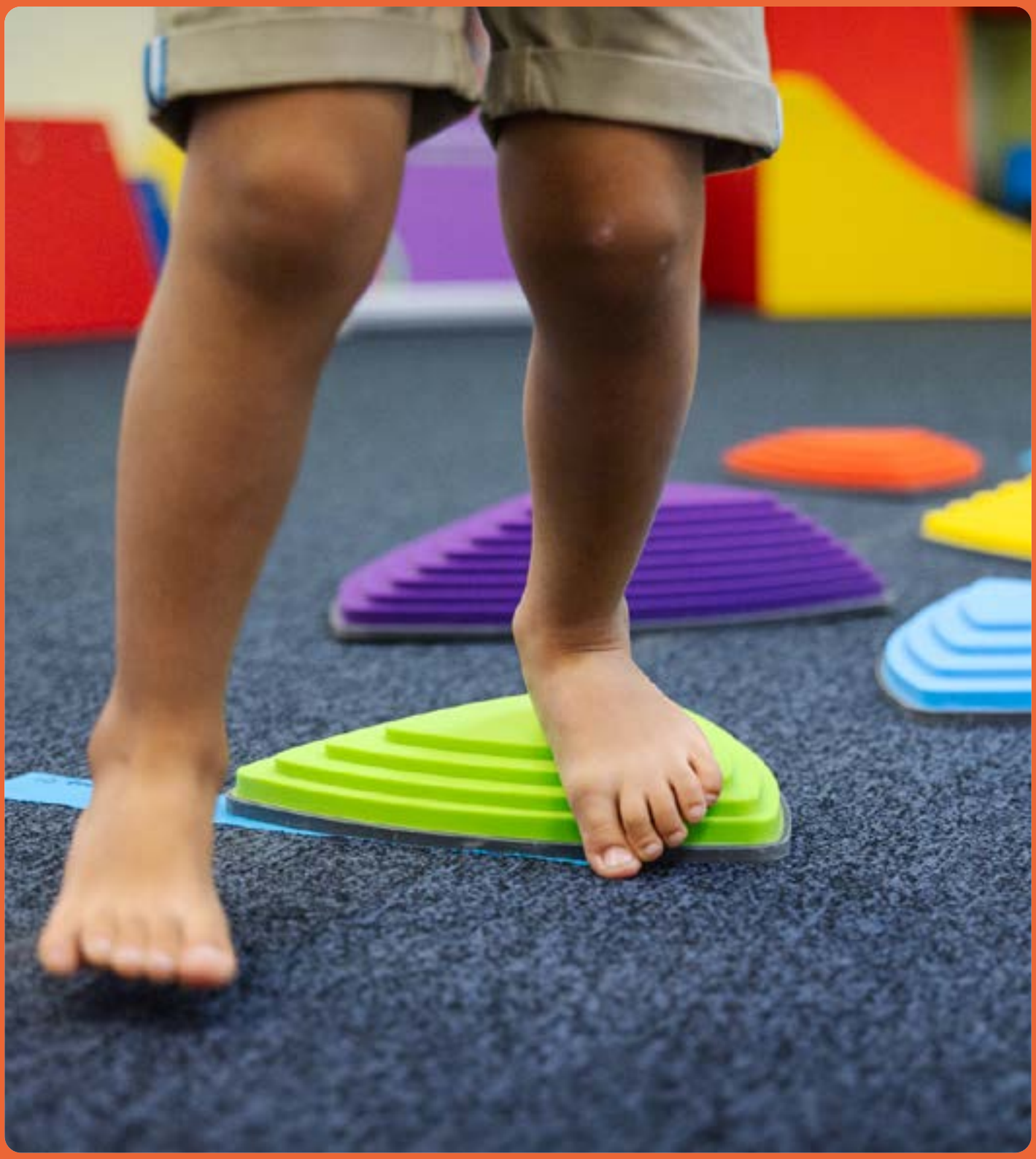

Government of **Western Australia**
Child and Adolescent Health Service

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