



Royal Children's Hospital

Caring for Queensland children and their families since 1878

The Royal Children's Hospital (RCH) has cared for the children of Queensland since it was founded in 1878. From humble beginnings as a 15-bed hospital, it has grown to the 135-bed tertiary paediatric facility that stands in Herston today.

Providing all clinical services except cardiac surgery and renal transplant, the RCH is internationally recognised as a leading centre for paediatric treatment, advocacy, teaching and research.

The hospital is responsible for the provision of general paediatric health services to children and young people in the greater Brisbane demographic area, as well as tertiary paediatric services to the entire state and northern New South Wales.

It also offers a range of outreach clinics and is increasing the use of telemedicine to improve access to quality care for all patients, regardless of where they live.

The RCH delivers a growing number of statewide paediatric specialty services, including rehabilitation medicine, cerebral palsy, cystic fibrosis, indigenous ear health, gastroenterology, oncology and haemophilia.

As part of its commitment to sharing knowledge, the hospital offers a broad range of clinical specialities

Table 1: RCH operational activity

Activity	2012–13	2013–14
Total separations	20,146	21,509
Average length of stay (days)	2.5	2.3
Day-only cases	11,572	12,667
Occupied bed days	50,452	49,396
Emergency presentations	24,632	24,923
Admissions from emergency	6,641	6,935
Outpatients	104,354	106,533
Outpatients (exc allied health)	84,389	84,610

and provides undergraduate, postgraduate and practitioner training in paediatrics. The RCH also plays a significant role in medical research, undertaking research programs with affiliated universities including The University of Queensland and Queensland University of Technology.

The hospital employs more than 1600 people from a range of disciplines. It admits more than 20,000 inpatients and sees just over 100,000 additional children and young people as outpatients each year.

Shorter waiting times for emergency, surgery and specialist outpatients

Timely access to treatment is a fundamental of Children's Health Queensland's commitment to providing the best possible patient- and family-centred care.

In 2013–14, the RCH met the national emergency access target (NEAT) as required by the National Partnership Agreement on Improving Public Hospital Services. In 2013–2014, 87 per cent of patients were discharged home, admitted to a ward or transferred to another facility within four hours of arrival in the Emergency Department (the national target is 83 per cent). For further detail, see the performance statement on page 44.

The RCH also continues to deliver considerable improvements against the national elective surgery target (NEST), including long-wait patients. By June 2014, the RCH had met its overarching long-wait goals, including key elective surgery targets, zero long-wait patients exceeding the clinically recommended time frame for surgery, and key performance



targets for 'treating-in-time' for category 2 and 3 patients.

Families are also waiting less for specialist outpatient appointments. In 2013–14, 89 per cent of category 3 patients had waited less than the clinically recommended 12 months—up from 72 per cent the previous year. The national target is 90 per cent. Waiting times for category 1 and category 2 patients have also improved (see table 2).

Table 2: RCH waiting times for specialist outpatient appointments

Patients waiting within recommended time frames	2012–13	2013–14
	%	
Category 1 (waiting less than one month)	61.12	69.81
Category 2 (waiting less than three months)	42.33	54.51
Category 3 (waiting less than 12 months)	72.08	89.19

Children's Health Queensland is committed to further improving access to specialist outpatient services for our patients and families. Work commenced in 2014 on a specialist outpatient service redesign project which aims to guarantee all children requiring a specialist consultation are seen within the clinically recommended time frames by the end of 2015. Implementation of the reforms required to deliver on this guarantee will be a focus of 2014–15.



Redesign improves access for planned procedures

The RCH introduced the 23-Hour Ward and Medical Day Unit (MDU) in 2013 to improve access and flow for patients undergoing planned procedures.

The 23-Hour Ward has extended the hours of the former Day Procedure Unit to accommodate patients who require a single overnight stay after surgery. This facilitates improved planning to enable efficient patient flow and discharge processes.

The MDU (formerly Surfside Ward) provides eight patients and their families with access to beds and chairs when requiring infusions and short-stay medical procedures. Opening this ward has increased the number of appointments available to families and enabled greater flexibility to provide family-centred care while also meeting the requirements of clinical specialities.

The MDU also provides renal dialysis, which was previously only available in the High Dependency Unit (HDU). This enables the safe provision of dialysis in a less-intimidating and more relaxed, family-friendly environment. Additionally, the relocation of the dialysis service has improved access to HDU beds.

RCH in 2013–14



8,879
operations performed

20,538
hospital admissions

2.3 days 
average inpatient stay

The right patient information, at the right time, at the right place

In 2014, the Royal Children's Hospital was one of the first hospitals in the state to implement Queensland Health's integrated electronic medical record (ieMR) program.

The program, also implemented at Children's Health Queensland's Ellen Barron Family Centre (EBFC), will give clinicians and supporting staff fast access to a single record of a patient's information and health history.

By centralising patient data across the state, the ieMR program aims to ensure professional access to the right information at the right time at the right place.

This will deliver improved care coordination for patients through increased quality and safety, and provide enhanced productivity for a more sustainable health system. The ieMR solution is being deployed incrementally in four releases. The RCH

and EBFC successfully implemented Release 1 on 19 March 2014. Since that date more than 17,500 patient records have been scanned into the ieMR system. Release 1 also included the creation of advanced growth charts, which clinicians complete to assess patient's growth data (height, weight, BMI and head circumference).

There are now more than 320,000 pages of clinical information available electronically at the RCH and other hospitals where the ieMR has been introduced.

The RCH and EBFC are scheduled to go live with Release 2 in July 2014. This will include functions such as problems and diagnosis, direct entry progress notes, alerts and allergies as well as risk assessments.

Future releases with additional functionality will be implemented at the LCCH from 2015.



Self check-in kiosks reduce lengthy outpatient queues

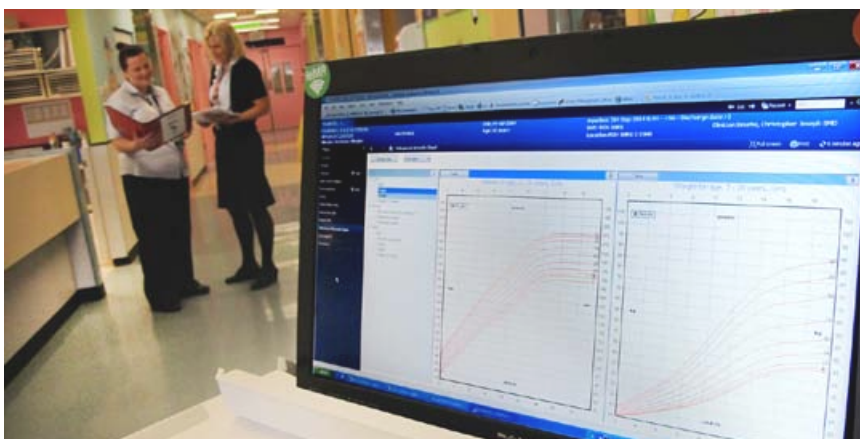
The RCH introduced the 'Queue Manager' patient management system to the outpatients department in May 2014 to improve patient throughput and service delivery.

Queue Manager enables outpatients to self check-in at touch-screen kiosks located at key entry points throughout the hospital. After scanning a barcode on their appointment letter, patients and parents/carers are directed to the relevant waiting area. This helps reduce lengthy queues at reception desks.

Administration staff can see which patients have arrived and prepare charts, while clinicians can see which patients are due in their clinics and whether or not they are available for their appointment.

Patients can also be directed straight to services such as the plaster room, X-ray, audiology and the respiratory function lab.

The Queue Manager system will transition to the Lady Cilento Children's Hospital.



Patient flow trends tracked to improve patient experience

In line with CHQ's commitment to continuous service improvement, the RCH has introduced the web-based Patient Flow Manager system. The application combines information from various sources to manage inpatient flow and care processes and improve the hospital experience for patients and families. It tracks ward occupancy, patient details, referrals to allied health professionals and indicates the expected date of discharge for patients. The system can be viewed across the hospital and help identify patient flow trends, improve discharge planning and potentially reduce patient length of stay.



Child and Youth Community Health Service

Front-line healthcare in the community, for the community

The Child and Youth Community Health Service (CYCHS) brings together a variety of specialist community services to help children, young people and their families lead healthier lives.

The CYCHS predominantly provides front-line healthcare to communities throughout South East Queensland. In fact, the service provides access to community care to around 470,000 children or 42 per cent of Queensland's children. A range of services are provided across the continuum of care as well as health promotion.

Almost 450 (full-time equivalent) staff work in and from more than 50 community health centres, including clinics, hospitals, schools, shops and offices. Services are delivered across the Greater Brisbane metropolitan area from Kilcoy and Bribie Island in the north, south to Beaudesert and east to include the Moreton Bay islands.

A number of CYCHS programs, including Deadly Ears, Good Start and the Ellen Barron Family Centre reach communities throughout Queensland.

Now in its sixth year, the Deadly Ears program aims to reduce the high rates of otitis media (or middle ear disease) in Aboriginal and Torres Strait Islander children in remote communities. In the past four years, the number of children

Table 3: CYCHS operational activity

Activity	2012–13	2013–14
CYCHS occasions of service	158,138	168,652
Health home visit programs	17,147	16,156
Deadly Ears patients seen	2,557	2,078
Deadly Ears surgical procedures	467	368
Ellen Barron admissions	2,496	2,615
Good Start nutrition sessions	831	1,255

presenting at the program's ENT clinics with chronic ear disease (also known as chronic suppurative otitis media) has declined from 21 per cent to five per cent.

The Good Start program aims to reduce the high incidence of chronic disease and obesity in Maori and Pacific Islander children by working with families to build skills, knowledge and confidence in healthy eating, exercise and lifestyle practices.

The Ellen Barron Family Centre provides a specialist child health service to families who require support with building practical skills and confidence in parenting.

Helping Indigenous children to hear, talk, learn and play

The award-winning Deadly Ears program has secured current and ongoing state-government funding to continue delivering its vital child ear health services in Aboriginal and Torres Strait Islander communities throughout Queensland.

Hearing loss caused by middle ear disease (otitis media) affects up to eight out of 10 Aboriginal and Torres Strait Islander children in remote communities. If not treated, it can have a significant impact on health, child development and educational outcomes of children, their families and communities.

Deadly Ears works closely with communities to manage and reduce the high rates of conductive hearing loss attributable to otitis media and deliver long-term improvement in ear health outcomes for children.

Since 2008, the program has:

- delivered more than 1800 ENT surgical procedures and 9700 clinic sessions.
- delivered training to more than 500 staff from more than 70 health facilities and providers in Queensland, including staff from over 20 Indigenous communities
- developed a suite of resources to support the training of health practitioners
- developed a range of innovative tools and resources to support children's



health and education, including those with a hearing loss as a result of ear disease. This includes the *Deadly Kids can Listen and Learn* online teacher training course, and the *One Channel Sound Classrooms* training on classroom acoustics.

In 2013–14, the program also implemented a revised model of care for ear and hearing services which provides better hearing health, health promotion, allied health services and workforce training.

Deadly Ears also launched a new website in 2013 to improve access to information and resources for health practitioners, educators, families and carers, and communities in remote areas.

www.health.qld.gov.au/deadly_ears/

CYCHS in 2013–14

168,652 
community health appointments

 **16,156**
home visits

368
Deadly Ears surgical procedures 

 **2,615**
Ellen Barron Family Centre admissions

1,255 
Good Start nutrition sessions

Safe, effective and sustainable care for communities

Child health, child development and school-based youth nursing services have been reviewed to ensure families receive safe, effective and sustainable community health services. The changes include:

- A new model of care for child health provides the framework for a universal, integrated and tiered system of targeted and extended care services. The model will be phased in throughout 2014 and 2015.
- The Child Development Program has started implementing an integrated tiered system of targeted secondary and specialist tertiary services, provided in partnership with identified primary health care services. This project will enable the implementation of a consistent model of care for child development services across LCCH and CHQ, which includes an appropriately aligned workforce and structure.

This will in turn enable the provision of timely, responsive, evidence-based and equitable care for children and families.

- A new clinical governance structure for the school-based youth health nursing service will support a revised model of care designed to help young people make a safe and healthy transition into adulthood.



Improved pathways to treatment for children with hearing difficulties

The Healthy Hearing program joined the Children’s Health Queensland family of child health services in August 2013, paving the way for faster access to support and treatment for children born with hearing problems.

When hearing problems are detected early, and treatment begins before babies are six months old, they have a stronger chance of heading off future communication, health and learning issues. Healthy Hearing’s new direct connection with CHQ will facilitate this with improved pathways to treatment.

The state-government-funded program screens more than 99 per cent of all infants born in Queensland, with newborn hearing screening offered in 64 birthing hospitals (public and private).

About one per cent of screened babies are referred for further testing to help detect

the 1 in 1000 children born with a permanent bilateral hearing loss of moderate degree or greater.

Since the service began in 2004, more than 500,000 infants have been screened and more than 1000 children have been identified with a permanent hearing impairment.

The Health Hearing team is committed to pioneering innovative approaches to hearing screening, including the tele-audiology project (hearing testing conducted via telehealth services).

In August 2014, the team will launch an Australian-first pilot study into targeting newborn screening for congenital cytomegalovirus (CMV)—the leading cause of treatable, non-genetic hearing loss in children.

www.health.qld.gov.au/healthyhearing

Better reporting for better service planning

Performance reporting and client data records across the CYCHS are being aligned to improve benchmarking and planning for community health services across the Greater Brisbane metropolitan area.

The lack of a dedicated health information management process was identified following the integration of Brisbane’s three child and youth health services in 2012–13.

In the absence of any national or state-driven community health mandatory data collections, a new reporting process, which aligns as closely as possible with the mandatory monthly activity collections of the RCH, was introduced in April 2014.

This move will ultimately enable the use of CHQ’s Performance Management and Activity Based Funding framework to benchmark and compare across the hospital and health service.

Parenting programs delivered statewide

From mid-2013, CHQ has hosted the Statewide Child Health Unit which supports the statewide implementation of Family Partnership training, Triple P (Positive Parenting Program) training and the publication of the Personal Health Record.

In 2013–14, the unit facilitated Triple P training for 39 Department of Health staff and provided a number of Family Partnership training courses.

Funding has also been supplied for resources to support ongoing delivery of Triple P programs across the state.

Collaborating for child health and wellbeing

The Early Years Initiative, established in 2007 by the Logan Beaudesert Health Coalition, transitioned from a Logan-based service to a statewide program in August 2013. Now known as the Centre for Children’s Health and Wellbeing, the service is dedicated to improving the health and wellbeing of children, their families and communities through integrated and collaborative service delivery. The program recognises that children exist within the context of relationships, families, settings, communities and societies, and focuses on each of these elements to ensure optimal health and wellbeing. Current projects include the Connecting2U project, which sends infant health information to new families via text message, and the antenatal ‘Love, Talk, Sing, Read, Grow’ flipchart resource which aims to enhance parenting practices.



Child and Youth Mental Health Service

A focus on collaborative care for children and their care networks

The Child and Youth Mental Health Service (CYMHS) offers specialised, high-level mental health services for families with children and young people (birth to 18 years) who are at risk of experiencing severe and complex mental health problems.

It provides a comprehensive, recovery-orientated mental healthcare service that aims to improve the mental health and wellbeing of children and young people and their carer networks.

The service covers the local area of Brisbane North and surrounds with a population of approximately 750,000, and has a number of specialist statewide teams.

In alignment with the national and state clinical reform priorities for mental health, CYMHS provides a range of acute and tertiary specialities including:

- paediatric inpatient and family assessment unit
- forensic drug and alcohol and mental health
- infant mental health and early years specialist teams
- access, extended hours and community treatment teams
- tele-psychiatry (e-CYMHS)
- consultation liaison
- evolve therapeutic services
- a range of specialist early intervention and statewide hosted services.

Table 4: CYMHS operational activity

Activity	2012–13	2013–14
Client count	3,233	3,236
Occasions of service (OOS)	34,097	50,460
New referral count	3,745	2,745*
Inpatient avg length of stay	18 days	13 days
Local CFTU# discharges	69%	55%
Statewide CFTU# discharges	31%	45%
Forensic drug and alcohol OOS	3,664	4,690
Statewide e-CYMHS OOS	2,018	1,447^

* Change to secondary referral process | * Child and Family Therapy Unit
^ Two sites only part-covered for the year

The service has a defined target population and has a responsive intake mechanism to promote timely assessment and intervention, placing a high priority on collaborative care planning and working in partnership with the young person, their family/carers and their community stakeholder network.

Enhanced extended treatment and rehabilitation care for adolescents

Children's Health Queensland CYMHS is leading the implementation of the statewide Adolescent Mental Health Extended Treatment Initiative.

The initiative follows a comprehensive review of the way extended mental health treatment and rehabilitation care is provided for young people.

CYMHS consulted with mental health experts and care providers throughout Australia to learn about and explore alternative, progressive approaches to adolescent extended treatment and rehabilitation care.

The model of care has been developed in accordance with the principles and services outlined in the National Mental Health Services Planning Framework.

The initiative aims to ensure young people and their families across Queensland have access to safe and high-quality mental health extended treatment and rehabilitation service options as close to their

home or community as possible.

There are five service elements to the model of care:

- Assertive Mobile Youth Outreach Services delivered by multidisciplinary mental health clinicians, who provide recovery-oriented assessment and assertive treatment and care for young people with complex mental health needs in the family home or community.
- Adolescent day program units providing a range of intensive therapy and extended treatment options.
- Step up / step down units offering short-term residential treatment in purpose-built facilities. These units enable early discharge from adolescent acute inpatient units or prevent admission through intense, short-term treatment.
- Residential rehabilitation units for adolescents with severe or complex mental health needs, requiring long-term accommodation and recovery-oriented care, and who may benefit from rehabilitation in a community setting. This service is delivered by a non-government organisation in partnership with mental health specialists. A residential unit opened in South Brisbane in February 2014.
- Subacute beds for adolescents who require medium-term treatment and rehabilitation services in a secure, safe, structured, hospital-based environment. These beds are available in the Mater Children's Hospital until the opening of the Lady Cilento Children's Hospital in late 2014.

www.health.qld.gov.au/rch/families/cymhs-extendedtreat.asp



Programs and partnerships team keeps focus on continuum of care

Research, policy and practice is increasingly demonstrating the value of mental health promotion, early intervention and integrated treatment to enhance the lives of people experiencing, or at risk of experiencing, mental health problems.

The programs and partnerships team was formed to bring this focus across the continuum of care to the consumers, carers and communities supported by CYMHS. Current programs include:

Ed-LinQ

Supports the education sector to intervene early for students experiencing mental health difficulties, including delivery of the Youth Mental Health First Aid program.

Multicultural mental health

A multicultural mental health coordinator and multicultural working group provide culturally sensitive care to consumers and carers from a culturally and linguistically diverse background.

Dual diagnosis

Improved, integrated care to children and young people with co-existing substance use and mental health problems, including liaison with local youth services.

Children of parents with a mental illness (COPMI)

Helps to identify these children and their families, providing holistic education and care, and advocating on behalf of affected families.

Service integration

Improving care to children and young people with complex care needs through effective collaboration within and between service sectors.

Redesigning our care for a better patient experience

Two major service redesign projects are under way to improve access to and quality of mental health services for children, young people and their families.

Adaptive Responsive Care

The Adaptive Responsive Care service redesign project aims to improve the experience of children, young people and their families who seek mental health treatment in public emergency departments.

The primary goal is to ensure all acute mental health presentations are managed in a timely, consistent and developmentally appropriate manner.

The model seeks to ensure children and young people receive early clinical assessment and treatment

and are cared for by the right people, in the right place, at the right time.

The project will also develop and implement a consistent acute response model of care for children and young people in preparation for the opening of the LCCH.

Choice and Partnerships Approach

The Choice and Partnerships Approach has been adopted to provide a consistent model of service for community-based CYMHS teams covering large areas of north and south metropolitan Brisbane.

This service model will see a move from an expert-based model to one of partnership. The aim is to offer clients and families more choice, more empowerment, easier

access to services, and greater satisfaction with care overall.

Service efficiencies will be increased by optimising current resources, reducing duplication and length of service episodes, increasing client engagement, and improving workload management for staff.

Clear CYMHS referral guidelines will be developed that will establish strong links with primary care providers and reduce waiting periods for service.

This is a multi-site project involving Children's Health Queensland CYMHS and Mater CYMHS. Post-amalgamation at the end of 2014, it will be operational across all seven community CYMHS clinics.



More time for more meaningful care

Children, young people and their families are receiving a better integrated care experience, thanks to a service improvement project undertaken by the Child and Family Therapy Unit (CFTU) at the RCH.

The Productive Mental Health Ward, a workplace enhancement program developed by the NHS Institute for Innovation and Improvement, empowers staff to identify ways of working more efficiently, safely and reliably.

Launched in the CFTU in November 2013, the program aims to free up time for staff to deliver more meaningful care and increase the

level of therapeutic engagement and communication with patients.

As part of the program, the CFTU team has developed a series of visual boards to help guide the daily work of the service. These include a 'measures board' outlining the ward's measures achievements and the 'well organised board' which visualises goals for managing administrative tasks relating to patient care.

A third board features photographs of each of the unit's team members. It has provided some fun for the children to find their primary nurse, doctor and allied health team member on the board.



Turning research findings into clinical practice for better health outcomes

Striving to be at the forefront of discovery in children's health

Pioneering world-class research into child health and wellbeing goes hand in hand with Children's Health Queensland's vision of the best possible health care for children and young people.

In 2013–14, our researchers continued to play a leading role in the research activity of the Queensland Children's Medical Research Institute (QCMRI).

QCMRI researchers attracted more than \$10 million in externally-funded research in the past 12 months, including major grants from the Australian Research Council (ARC) and National Health and Medical Research Council (NHMRC). More than 200 papers were published in peer-reviewed journals.

- Fellowships awarded to:
 - » Professor Anne Chang, Department of Respiratory Medicine, awarded NHMRC Practitioner Fellowship from the Menzies School of Health Research
 - » Associate Professor Philip Stevenson, Sir Albert Sakzewski Virus Research Centre (SASVRC), awarded ARC Future Fellowship.
- QCMRI students received three NHMRC PhD scholarships.
- SASVRC researchers obtained four NHMRC grants, three as first-named Chief Investigator.
- Associate Professor Anthony Smith and the Centre of Online Health, received NHMRC's prestigious Centre of Research Excellence in Telehealth status, including funding support to pursue collaborative research and develop capacity in health services research.
- The Children's Health and Environment Program delivered by QCMRI, under the direction of Professor Peter Sly, was appointed as a World Health Organisation Collaborating Centre. This acknowledges QCMRI staff who have been building collaborations and delivering training courses in children's environmental health.
- The Human Research Ethics Committee and CHQ Research Governance Office processed 102 ethics applications and 122 site-specific assessment reviews in 2013—including timely site-specific assessment and contractual agreements.

Strategy provides roadmap for future of CHQ research

The *Children's Health Queensland Research Strategy 2013–2016* reinforces our ongoing commitment to be at the forefront of research to deliver improved health outcomes for children and young people.

Developed in consultation with researchers and clinicians, the strategy works toward healthier Queensland children and reduced disease burden with a five-point plan to:

- build research capability
- translate research findings into practice
- improve research governance and support
- make research core business for CHQ

The strategy will guide the organisation's research activity in the lead-up and transition to the Lady Cilento Children's Hospital in late 2014 and the co-located Centre for Children's Health Research, opening in 2015.

Research strategy

› MAKING RESEARCH CORE BUSINESS

We will expect all clinical services to contribute to the development of new knowledge through research

› BUILDING RESEARCH CAPACITY

We will attract and retain the best clinical researchers and grow our own research talent

› IMPROVING GOVERNANCE AND SUPPORT

We will maximise accountability, transparency and value for money

› GROW CHQ-LED RESEARCH

We will work with our partners to grow research investment and output

› TRANSLATING RESEARCH INTO PRACTICE

We will invest in research to reliably implement evidence into practice across Queensland

Multidisciplinary teams collaborate for key studies

A number of common themes carry through the research being conducted at the QCMRI and CHQ, including viral infection, indigenous health, cerebral palsy and respiratory disease.

Multidisciplinary teams are involved in the planning and execution of many studies. Following are some examples of peer-reviewed papers published in 2013.

Cerebral palsy

These studies are important in understanding the mechanisms of under-nutrition in children with cerebral palsy and intervening to improve quality of life.

- An evaluation of the association of reported eating ability with gross motor function.
- The relationship of oropharyngeal dysplasia and gross motor skills.
- The use of bioelectrical impedance analysis to estimate total body water in young children with cerebral palsy.

Indigenous health

The specific health care needs of indigenous children, remains an important research focus. Such clinical studies, which may pose particular logistical challenges, are key to understanding better the nature and treatment of potentially debilitating respiratory disease in this patient population.

- A randomised trial of long-term azithromycin in indigenous children with non-cystic fibrosis bronchiectasis or chronic suppurative lung disease.
- An overview of bronchiectasis and chronic suppurative lung disease in indigenous children from three different countries.
- Confirmation that quantitative Polymerase Chain Reaction (PCR) was the most reliable way to detect lower airway infection by non-typeable H influenzae in Australian indigenous children with bronchiectasis.

Viral infection in children

These studies inform the diagnosis and management of both common and uncommon viruses in children.

- Respiratory viral detection using nasopharyngeal aspirate was compared with bronchoalveolar lavage to determine the influence of virus type on the most appropriate way to collect samples.
- A retrospective case control study based in a number of emergency departments determining factors that predicted the severity of H1N1 infection in children.
- The influence of respiratory syncytial virus on the load of bacterial infection in the upper respiratory tract of children.
- Detection of novel polyoma viruses in a range of patient tissues samples.

Head injuries study to guide international practice



The Paediatric Emergency Research Unit at the Royal Children's Hospital has completed a large multicentre research project to improve the way hospitals around the world manage children presenting with head injuries in emergency.

The Australasian Paediatric Head Injury Rules Study was conducted in 12 paediatric and large mixed emergency departments across Australia and New Zealand, to evaluate three internationally-derived clinical decision rules for computerised tomography (CT) imaging children with head injuries. Clinical decision rules for neuroimaging of head injuries aim to detect all significant injuries while minimising unnecessary radiation exposure.

Results of the study, conducted in association with the Paediatric Research in Emergency Departments International Collaborative Research Network, will inform the emergency management of children presenting with head injuries globally, and allow the development of robust national evidence-based guidelines.

With the support of the Queensland Emergency Medicine Research Foundation and the NHMRC, the RCH recruited more than 1900 children into the study in 2013–14.

More than 98 per cent of eligible RCH participants were recruited, the highest rate of any Australian site. These outstanding results are a testament to the efforts of the Paediatric Emergency Research Unit team and the research commitment of the multidisciplinary team in the RCH Emergency Department.

Group therapy tames distressed minds

The Taming Adolescent Mind (TAM) group therapy was developed as an intervention for adolescents with mixed clinical mental disorders.

It aims to prevent and reduce treatment for mental disorders through enhancing emotional self-regulation via mindfulness practices that move the young person from problematic thoughts and emotions.

The results from the first random control trial with a group of CYMHS clients suggested the majority of adolescents who completed the five-week group intervention

found themselves able to practice mindfulness more frequently and easily than before they participated in the program.

On the basis of these positive results, the TAM group therapy program has been rolled out across CYMHS clinics as an additional option for enhancing psychological health for distressed adolescents.

The five-week program, conducted with CYMHS clients and their parents, aims to show improved mental health outcomes with shorter treatment times for participant adolescents.

Looking ahead

The next 12 months will see even closer interaction between Children's Health Queensland, the QCMRI and our university partners as detailed planning for the new Centre for Children's Health Research takes place.

New facilities in both the Lady Cilento Children's Hospital and the research centre and the addition of clinical research teams from Mater Children's Hospital will provide many new opportunities for research.



Transferring skills and knowledge today to build tomorrow's workforce

Committed to quality education and training for all learners in our organisation

Educating and training healthcare professionals is core business for Children's Health Queensland. Contemporary, collaborative and integrated medical, nursing and allied health training programs ensure clinical staff have access to the knowledge and support they need to deliver outstanding patient care.

Medical education

A number of programs support a sustainable workforce of medical practitioners who possess effective clinical and non-clinical skills and knowledge. Medical education has well-established partnerships with professional colleges, tertiary education institutions and other educational agencies to enable continued learning across the continuum from medical student to expert practitioner.

Medical Education Committee

The Medical Education Committee provides leadership and innovation to support quality education and training. Committee membership includes junior and senior medical officers, education personnel from partner facilities and university clinical school representatives.

Medical Education Unit

The Medical Education Unit supports junior doctor education and training through leadership, advice and coordination of 'fit for purpose' educational initiatives.

The unit works closely with stakeholders to support capacity and capability and address the barriers to responsive, targeted, flexible and quality training.

A robust performance-assessment and remediation system is maintained along with compliance with the Royal Australasian College of Physicians and Postgraduate Medical Education Council of Queensland accreditation accountabilities. In 2013 the RCH was awarded a full three-year accreditation for Intern education and training by the Postgraduate Medical Education Council of Queensland.

Paediatric Grand Rounds

Weekly Paediatric Grand Rounds presentations attract a high calibre of local and international speakers. Sessions are widely attended by local and regional audiences via videoconference or accessed via the online learning portal.

In 2013 invitations for participation in the Paediatric Grand Rounds were extended to a number of south east Queensland Medicare Local networks, further supporting best practices in the delivery of primary health care to children and young people.

Royal Australasian College of Physicians basic and advanced training

Education of college trainees to meet standards remains a core component of medical education. CHQ has strengthened partnerships with the Statewide Paediatric Basic Training Network and recruited trainees for this pathway. A formal statewide lecture series run by the Medical Education Unit addresses core components of the basic training curriculum using a blended learning approach congruent to contemporary adult learning principles.

In addition, trainee development is further enhanced with real time training during morning handover and ongoing supervisor support provided by clinical units.

In the paediatric basic training examination, CHQ trainees achieved a pass rate of 80 per cent, well above the national average. Establishing an ethos that integrates rather than separates a service and educational pre-requisites has been a priority.

Junior Medical Officer education and training

Formal targeted education and training programs for Junior Medical Officers are complemented with unit based education and training opportunities. These programs are flexible and responsive to the needs of the junior doctor workforce and develops both clinical and professional skills.

The use of web based technologies means that a number of these programs are now available to clinicians across the state. Simulation training and clinical skills sessions are embedded into these programs providing Junior Medical Officers the opportunity to develop a variety of practical and procedural skills.

Medical student education and training

CHQ maintains a strong partnership with the University of Queensland's Academic Discipline of Paediatric and Child Health supporting placement of fourth year medical students and first year elective, interstate and international students.

The discipline has developed a responsive curriculum to produce work-ready interns, through clinical opportunities complemented by case-based learning. In 2013–14, 195 medical students undertook a rotation.

Nursing education

A number of new initiatives were implemented in nursing education in 2013–14. These included the introduction of the nursing showcase and the leadership development program.

Nursing showcase

CHQ launched its quarterly nursing showcase program in November 2013. The showcases, offered as a statewide videoconference, provide an opportunity to highlight the excellent work that has been achieved and share new knowledge, practices and information related to paediatric nursing. Presentations from national and international conferences are also included.

Leadership development Program

This program aims to provide current and aspiring nurse leaders with the strategies and resources to engage the workforce and promote innovation and strive for excellence. Currently 31 CHQ nursing staff are undertaking the program. Each participant leads a project within their clinical or service area in a 12-month time frame. Projects are related to enhancing the patient and family experience, improvement and efficiency, enhancing staff experience and ongoing development.

Nursing scholarships

Nursing professional development has been encouraged through the provision of 20 scholarships of \$1500. These will be paid on completion of nursing post-graduate qualifications for staff who are currently working in, or are willing to work in emergency, perioperative and intensive care areas in the future. Funding for the scholarships is provided by the RCH Private Practice Trust Fund.



Enrolled nurse education

CHQ conducted its first enrolled nurse graduate program in 2013–14. Participants completed development modules and activities to support transition to the paediatric environment. Increasing clinical placement hours for training enrolled nurses, combined with an upskilling program in partnership with Metropolitan South Institute of TAFE means enrolled nurses are now able to administer intravenous medications. This supports each member of the nursing team to work to the full extent of their skills and training.

Undergraduate numbers

CHQ continues to support the learning and development of nursing students. Requests for placement come from up to 15 different universities and vocational institutions. Since 2009 there has been an upward trend in placement allocation with a peak in 2011. This tapered over the following two years reflecting a decrease in demand from universities. From 2012 student placements have been offered to include training enrolled nurses, who had not previously been placed. This supported the future direction of workforce configuration. Graph 1 shows student placement numbers over the past six years.

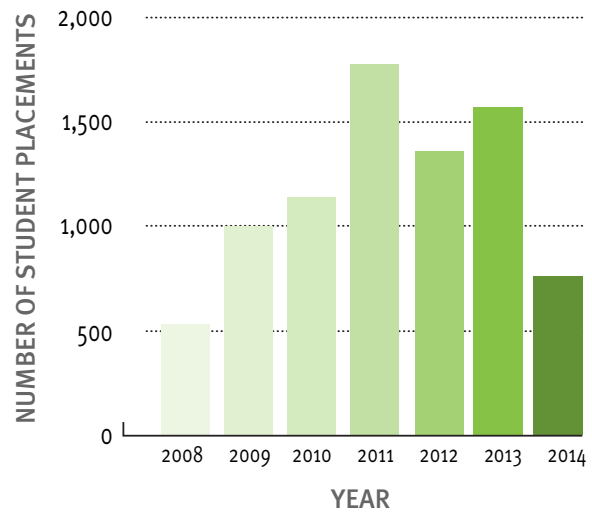
New graduates

New graduate nurses undertake a full year of supported practice through the graduate program. These staff are employed on a temporary basis, with continued employment offered at the end of the year to those who meet key skill requirements. Numbers significantly dropped in 2011-2012 due to workforce reform measures. Table 4 shows new graduate numbers for the past six years. Rosters now include graduate nurse lines for both registered and enrolled nurses. This supports succession planning and development of the future nursing workforce.

New nursing graduates	
2009–10	45
2010–11	32
2011–12	1
2012–13	25
2013–14	13
2014	18

Table 4: Number of new nursing graduates 2009–2014

Graph 1: Nursing undergraduate placements offered



Note: calendar year is represented hence 2014 data is incomplete

Streamlining nurse orientation

Processes for new nursing starters have been reviewed in 2014. This has resulted in implementation of a pre-boarding online learning approach. Feedback on this approach has been positive.

Interprofessional education

This year we have increased interprofessional education through the Recognition and Management of the Deteriorating Paediatric Patient program. A multidisciplinary facilitation team ran the half-day course 44 times in 2013–14, with up to 24 clinicians attending each session.

Paediatric haematology oncology network

Inter-disciplinary education is provided as part of a shared care model to staff across the state who are responsible for managing children with haematology and oncology conditions and their families. Education is provided through face-to-face workshops, online tutorials, simulated clinical assessment, video-conferencing, clinical placements, and education courses. In 2013, 775 staff were involved in the network.

Outreach opportunities

In 2014, paediatric nursing staff from across Queensland have once again taken up the opportunity of a clinical placement at CHQ. Staff from Mount Isa, Cairns, Mackay, Rockhampton, Hervey Bay, Ipswich and Redlands, travel to the hospital for three to five days to enhance their paediatric knowledge and skills. This is made possible by the support of the Children’s Hospital Foundation.

Allied health education

Social work

Social work, welfare, indigenous liaison and administration staff have access to regular internal and external education opportunities as both recipients and educators. Monthly professional development sessions provide service updates and the integration of theory into practice.

Social work staff participate in mandatory training sessions on culturally safe and respectful practice, and are trained to work in emergency after-hours social work, which includes trauma and crisis intervention, child protection, working with families through the death of a child, and self-care.

The student unit program provides placements where students have multiple opportunities to attend wards and outpatient clinics to observe social workers undertaking clinical practice. Students learn through role-plays and direct clinical work under the supervision of clinical social workers.

All new graduate social work staff participate in the new graduate support program, which ensures the developmental needs of new graduates are met within the context of their work areas. New graduates participate in the clinical rotation model, allowing them the development of clinical skills and competence in multiple clinical areas and practice contexts.

Simulated learning for paediatric imaging

Medical imaging students and graduates have access to simulated education in the paediatric clinical environment. The simulated learning initiative was developed across CHQ and Greater Brisbane Metropolitan Area Paediatric Network, in partnership with Queensland University of Technology. Modules developed at clinical sites cover image quality, patient dose and imaging technique. These are all strongly interlinked and delivered via e-learning and practical testing using the SPoRT™ paediatric anthropomorphic training phantom. The initiative was introduced in 2012 and initially funded by Health Workforce Australia with support from medical imaging directors. The program continues to be recognised and supported by medical imaging sites. Recent achievements include accreditation by Health Workforce Australia as a 'Pocket SIM'.

Better organised physio placements

Physiotherapy student placements will be progressively enhanced with the introduction and rollout of a quality framework aimed at providing a systematic and

evidence-based approach to development and delivery of physiotherapy student placements. The framework was developed to address student placements being developed in an ad hoc way, with little reference to learning objectives for paediatrics.

The Quality Framework for Paediatric Physiotherapy Clinical Education Placements was developed by CHQ, with funding provided by the pre-entry placement agreement with six universities across Queensland.

The framework is underpinned by four elements:

- principles of paediatric physiotherapy
- quality indicators for paediatric physiotherapy student placements
- common learning objectives of paediatric physiotherapy
- education resource repository to support paediatric physiotherapy placements.

Piloted in 2013 within CHQ facilities, the initiative will be progressively rolled out to those Department of Health facilities across the state undertaking paediatric student placements. One of the aims of the rollout is also to increase student placement offers from sites not currently confident or resourced to do so.

Nutrition and dietetics education

A number of resources have been developed to assist dietitians, both new graduates and those in the multidisciplinary workforce wishing to upskill in a variety of areas within paediatric dietetics. These include online self-study modules delivered in a variety of platforms at a state and national level in basic paediatric dietetics, the management of food allergies and intolerances, malnutrition, obesity and nutrition assessment. These paediatric-specific modules were designed for use across all paediatric services throughout Queensland and in collaboration with Monash University for use nationally.

Training sessions continue to be delivered via the nutrition and dietetics paediatric special interest group led by the RCH and offered via videoconference, state-wide and nationally. A clinical education framework for paediatric dietetics, based on the Clinical Services Capability Framework, is currently being developed by the Royal Children's Hospital and Mater Health Services and will be aligned with the CHQ Clinical Education Strategy for Allied Health.