Delivering Great Care

For patients, families, carers, staff and community Quality of Care Report 2014-15

TELT



Our Vision

The Royal Children's Hospital, a GREAT children's hospital, leading the way.

Our Values

UNITY We work as a team and in partnership with our communities

RESPECT

We respect the rights of all and treat people the way we would like them to treat us

INTEGRITY

We believe that how we work is as important as the work we do

EXCELLENCE

We are committed to achieving our goals and improving outcomes



For the fourth year in a row, since our move to this amazing facility, we have again seen a record number of children seek care and treatment at our hospital.

In the 2014–15 year there were:

- 84,482 presentations to our Emergency Department
- 237,407 Specialist Clinic appointments
- 8,615 patients were admitted from the elective surgery waiting list. Admissions increased from 660 to 718 on average per month, a nine per cent improvement on last year
- 46,178 children were admitted to our wards
- And on any given day we cared for approximately 400 children in the community.

As the numbers keep going up, and as healthcare resources remain under pressure, how can we continue to meet these challenges?

This year that question has been at the heart of our work. We have been focussing on how we can change, adapt, evolve and lead the way in paediatric healthcare to respond to the changing landscape of healthcare.

The Royal Children's Hospital (RCH) 'Good to Go' initiative has been the cornerstone of access improvement for the past four years. Most recently, this program has resulted in a 10 per cent reduction in the average length of stay leading to a significant increase in bed access.

Our surgical teams continue to work very hard to meet the challenges of increased demand and recently halved the number of overdue patients on our elective surgery wait list.

Simultaneously we are working to change the tools we work with through the implementation of the Electronic Medical Record (EMR). The EMR will include the 'MY RCH Portal', a new way for RCH to put patients and families at the centre of care.

Without a doubt, the RCH is a leader in paediatric care. We have a skilled and expert workforce, dedicated to improving the health and wellbeing of the children and young people who come to us for care.

As you read through this report, you will learn about many of our achievements to take the care we provide to the next level.

Christine Kilpatrich

Professor Christine Kilpatrick Chief Executive Officer The Royal Children's Melbourne



EXCELLENT CLINICAL OUTCOMES

Our outcomes compare with national and international leaders in paediatric healthcare.

POSITIVE EXPERIENCE

Our team works together to provide a positive experience for all.

TIMELY ACCESS

Our patients will receive timely access to clinical services.

ZERO HARM

Our hospital will be safe; delivering evidence-based and safe care to our patients.

SUSTAINABLE HEALTHCARE

We are committed to delivering a sustainable healthcare system that ensures we provide Great Care now and into the future.



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Cover photo: RCH Cardiac Surgery Fellow Elie Sawan and Cardiac Surgeon Johann Brink



Consumers and the feedback process

In 2014-15 The Royal Children's Hospital (RCH) Consumer Feedback Survey was developed by members of the Family Advisory Council, the Consumer Participation Manager (CPM) and the Consumer Liaison Officer (CLO) to measure how Consumers providing feedback felt about the process.

The survey is sent to consumers that have had a complaint lodged and closed in the Victorian Health Incident Management System (VHIMS). To date the RCH has received a 61 per cent response rate to the survey.

'The survey explores the consumer's experience of the RCH complaints process, what the consumer hoped to achieve and how satisfied they were at the outcome,' Director of Quality Systems Dianne Tucker said. 'So far the results are really informative and are going to allow us to continue to improve our services for patients and families."

Fifty per cent of respondents were satisfied with the complaints process, while 75 per cent reported that they felt acknowledged and heard by the hospital.







Facebook feedback on previous Quality of Care report

WALLABY WARD (HOSPITAL IN THE HOME)

DEAN JOHNSTON: 'Home based services (and the wonderful RDNS nurses) are great. Nothing better than being able to go home early to receive care in your own comfort. Hospitals can be very lonely places - Good work RCH.'

TEDDY BEAR HOSPITAL

CAROLINE LOVICK: 'Love this, so much fun.'

GREAT CARE ROUNDS

JOANNE TAN: 'Clinical governance at its best.'

SCOTT SWANWICK: 'Well done team!'

AUSTRE

Enhancing cultural responsiveness among RCH volunteers

The Royal Children's Hospital (RCH) Volunteers from Culturally and Linguistically Diverse backgrounds now identify themselves via badges, offering family support in their languages.

In an effort to meet the ever-increasing needs of Culturally and Linguistically Diverse (CALD) families coming to the RCH, the Family Services and Volunteers Department has taken steps to enhance the cultural responsiveness of volunteer support.

In June 2014 the Volunteer Service Database was surveyed to help staff improve their understanding of the cultural diversity of RCH volunteers. The survey found that 22 percent of volunteer respondents are bilingual, with more than 21 languages represented.

'Volunteers who speak another language have begun wearing badges offering family support in that language,' Family Services and Volunteers Manager David Tonge said. 'Bilingual volunteers will not replace our Interpreter and NESB Services, but they will welcome CALD families to the hospital and offer directions and information.'

Yasmin Abubakar, who was born in Kenya and speaks Somali, volunteers with the RCH Immigrant Health Clinic every week. She utilises her bilingual skills to support families who are not yet confident with English.

'I welcome families, escort them to consultation rooms when they are called and help record their height and weight. I also ensure that their interpreter is ready for the appointment and take the families to the pharmacy after their clinics, or to their next appointment,' Yasmin explained.

RCH Specialist Clinics volunteer Reshma Mirage speaks Urdu, Hindi and Punjabi.

'I encourage patients and families who recognise the languages on our diverse language badges to come over for a chat,' Reshma said. 'Even if it's something simple like asking for directions to the toilets and appointment rooms, or what activities are on offer in the waiting room – we are always here to help.'

The RCH Volunteer Service encourages applications from people who meet the criteria and speak more than one language.

'The application form to volunteers now includes a question on the Country of Birth and the Languages Spoken by the applicant,' David explained. 'The presentation at our information sessions also encourages interest from those who speak more than one language, and our partnership with AMES encourages their clients to apply.'

'I welcome families, and escort them to consultation rooms.'

Volunteer Yasmin Abubakar

Improving care for Aboriginal patients

Reconciliation Action Plan

In 2014–15 the RCH held five roundtable meetings, jointly auspiced by the Wadja Aboriginal Family Place and the University of Melbourne, Department of Paediatrics.

The purpose of the roundtables is to connect organisations and people working in Aboriginal child health, to share information ideas and knowledge and provide mutual support.

Over the past year roundtable participants, along with the wider Melbourne Children's community, have developed the draft RCH Reconciliation Action Plan, to provide a roadmap for action to close the gap in health outcomes for Aboriginal children.

The draft RCH Reconciliation Action Plan:

'We recognise the historical and ongoing realities that prevent Aboriginal children, young people, their families and their communities from enjoying the same level of health and access to quality healthcare services enjoyed by non-indigenous Australian families. These include the impact of past policies and practices including the forced removal of Aboriginal children from their families and communities. The plan also seeks to address the underrepresentation of Aboriginal people in our workforce.'





Community feedback in the spotlight

The Victorian Healthcare Experience Survey (VHES) is a state-wide survey of patient and family experiences. The surveys are distributed in the month following the hospital admission or the emergency department attendance. The Royal Children's Hospital (RCH) is utilising data from the survey results to improve our services and patient experience.

Patient and staff communication

A major theme that was identified in the VHES data is communication between staff, patients and families.

In order to improve information shared with patients and improve communication, the RCH has installed enhanced patient communication boards in each in-patient room. These boards serve as a place for patients, families and clinicians to collaboratively document the patients' daily goals, their care plan for the day and any tests or clinics scheduled.

Patients and families also add their own notes to facilitate two-way communication with hospital staff.

Adolescent-friendly services

VHES feedback from in-patients over the age of 16 is supplied to the RCH Youth Advisory Council (YAC), which is collating the data to develop a hospital improvement project.

The YAC is a group of young people who come together to have their say on how the RCH could be more adolescent friendly and ensure that young people's voices are heard across the RCH.

'Our adolescent patients are a very diverse and often vulnerable group, and so we're always looking for feedback on their experiences,' Director of Quality Systems Dianne Tucker said. 'The prominent themes and commentary from the survey offers the Youth Advisory Council really valuable guidance on the projects we should initiate in order to help improve services for our adolescent patients.' TIMELY ACCESS

Elective surgery waiting list decreased significantly In 2014-15 The Royal Children's Hospital (RCH) theatre teams admitted 8,615 children from the elective surgery waiting list. This was an increase from 660 average admissions per month to 718 admissions, a nine per cent improvement on the previous financial year.

More efficient use of theatre time, overall reduced length of in-patient stay, and significantly reduced Hospital Initiated Postponements saw the RCH surpass our elective surgery target.

'Waiting for surgery is inconvenient and distressing for children and their families, and improving our efficiency is a priority focus across the organisation,' RCH CEO Christine Kilpatrick said. 'On this basis, and while acknowledging there is always more work to be done, we are really pleased with the recent figures that demonstrate progress over the last financial year.'

Admissions from the Elective Surgery Waiting List (ESWL) increased from 660 to 718 per month this year, representing a nine per cent improvement.

'With the support of the DHHS, we received additional funding for elective surgery, which has allowed us to put in place a number of initiatives,' Executive Director of Clinical Operations John Stanway said. 'We conducted analysis in order to work with individual surgical units to ensure that they are aware of which cohort of patients need a priority focus.'

'It's a whole-of-hospital approach. It's not just a matter of doing more work in theatre, you need the support services including Intensive Care Unit (ICU) and post-surgical services to be part of the process as well,' John added.

The RCH also achieved a 50 per cent reduction in overdue patients on the surgery waiting list.

Chief of Surgery Mr Mike O'Brien said that the RCH surgical teams have maintained a consistent and concerted focus on treating overdue patients.

'Over the past twelve months, we have held a weekly MATES meeting (Meeting Access Targets in Elective Surgery) to maintain a constant focus on access to surgery for our patients,' Mr O'Brien said. 'We have also been sharing more data with the surgical teams and Heads of Departments to give them the information, tools and resources they need to achieve our targets.'

'As a group, we have shifted our focus on performance to a team-based approach and we understand that it takes a team effort to achieve our targets and maintain clinical excellence; it's not just an indication of an individual's ability, effort, or commitment,' Mr O'Brien added. 'We have a phenomenal team here; this is a bunch of people who care very deeply about what they do, about the patients they look after and about the RCH.'



'We understand that it takes a team effort to achieve our targets and maintain clinical excellence.'

Chief of Surgery Mr Mike O'Brien

Partnership with University Hospital Geelong

A partnership with University Hospital Geelong is enabling children from the Geelong area to have general paediatric surgical procedures closer to home. RCH paediatric surgeons work alongside local clinicians two sessions per fortnight, performing surgery and holding outpatient clinics.

RCH Chief of Paediatric Surgery, Mr Mike O'Brien, says the collaboration is a fantastic initiative which promotes patient and family centred care.

'This service helps families avoid the inconvenience and costs associated with traveling to Melbourne for surgery, while giving them access to the very best in surgical care,' Mr O'Brien said.

The service will initially focus on day-case paediatric surgery, so that patients will be discharged home prior to the RCH surgeon departing University Hospital Geelong at the end of the day. Patients from the region requiring complex surgery will continue to receive care in Melbourne.

Mr O'Brien says the initiative offers benefits for both hospitals.

'What's really great about this collaboration is that, while we are working through the existing University Hospital Geelong surgical wait list, we are also identifying patients living in the Geelong region who've been referred to the RCH for low-complexity surgery.

'We can then redirect these patients to University Hospital Geelong so they'll be closer to home for their operation and outpatient reviews, which in turn helps avoid unnecessary additions to the RCH wait list,' he said.

Record transplantation activity

As a Nationally Funded Centre in organ transplantation, the RCH provides care to some of Australia's sickest children. In 2014–15 the RCH performed more organ transplantations than ever before, including 10 heart transplants and, in partnership with Austin and Alfred Hospitals, 14 liver, 13 kidney and three lung transplants.

'It has been an exciting and challenging year for RCH's Nephrology and Renal Transplant team,' Nephrology Director Dr Mandy Walker said. 'The team has been challenged with complex patients and procedures; including blood group incompatible transplants, patients with multiple diseases, and multiple paired-kidney exchanges.'



Continuity of care for rural consumers Cardiac care on the road

In order to close the gap in regional access to specialist paediatric cardiology services, The Royal Children's Hospital (RCH) Cardiology Department delivers Peripheral Cardiac Clinics (PCCs) to ten regional communities throughout Victoria and Tasmania.

The clinics, held in Hobart, Burnie, Launceston, Devonport, Ballarat, Sale, Albury, Wangaratta, Shepparton and Geelong, provide diagnostic cardiac testing and specialist cardiac consultations.

The clinics provide sustainable, local specialist paediatric cardiology services for rural families; in many of these areas, no specialist paediatric cardiology service had been previously available.

'The intention of the RCH Peripheral Cardiac Clinics is to deliver tertiarylevel outpatient care in a regional setting,' Chief Cardiac Technologist David Dupuche said.

'The clinics run collaboratively with local paediatric health services, sharing knowledge and expertise between specialists, and by providing opportunities for observation, training and experience to both medical and nursing students from local campuses in Launceston, Hobart, Geelong and Ballarat.'

'The clinics also foster an important relationship between the RCH and regional centres by providing support through face-to-face discussions with local medical staff and continuing expert and specialist medical advice in the area of cardiology,' Director of Cardiology Dr Michael Cheung explained.

At a PCC, patients can receive ECG, cardiac ultrasound and ambulatory ECG monitoring. Patients are clinically reviewed and examined by a paediatric cardiologist, and medications or other interventions are prescribed as required. In 2014-15, the RCH PCC service delivered specialty cardiac care to more than 1,000 patients and provided over 1,600 cardiac ultrasound scans.

'This service improves equity, access and the delivery of optimal care; closing the gap for patients and families who live remotely from the RCH and may find it difficult and expensive to travel long distances to Melbourne for regular follow-up visits,' Mr Dupuche added.

FACEBOOK FEEDBACK

NAOMI GEORGIA WILLIAM: 'Our son had open heart surgery at nine days old to repair a transverse of the great arteries. We were in the Koala ward for weeks and weeks and the staff were truly amazing, the most terrifying experience of our lives was made that bit easier because of their professionalism and kindness. It was a wonderful reminder of the depth of human compassion, that there are kind and warm people in the world. I felt like my family mattered to these people. My wee lad is six month old now and 11kg, he's a big healthy monster! I get to hug, kiss and love him every day because of the doctors and nurses in the Children's Hospital. There are no words that could come close to being capable of allowing me to express my sincere gratitude.'

MONICA FLETCHER: 'Honestly the best surgeons I've met, they have such a great heart, and not only that but they're so good when they talk to you – like they actually have great personalities.'

Immunoglobulin replacement treatment at home

The Royal Children's Hospital (RCH) has increased the number of RCH patients receiving immunoglobulin replacement therapy (IRT) by subcutaneous immunoglobulin (SCIg) in the home environment. This project is the largest of its kind in Australia.

Immunoglobulin replacement is the mainstay of treatment for children with antibody deficiency. Historically immunoglobulin has been administered intravenously (IVIG) every four weeks, requiring a day admission to hospital. More recently subcutaneous immunoglobulin (SCIG) has become available but Australia has lagged behind other countries in adopting.

The RCH Allergy and Immunology department recognised that internationally, SCIG was the preferred treatment option for many patients due to practical and quality of life benefits, and therefore planned to increase patient access to SCIG.

'There are a number of advantages of subcutaneous immunoglobulin,' Allergy and Immunology Consultant Therese Cole said. 'Venous access is not required, and technique is easy to learn and can be performed at home. Studies have demonstrated improved convenience, better quality of life and fewer absences from school.'

'There was recognition within the department that internationally, SCIG was the preferred treatment option for many patients,' Dr Cole explained. 'We recognised the practical benefits and wanted to be able to offer this to our patients as the preferred option for immunoglobulin replacement.' The program has also put children directly on to SCIG at diagnosis who would have previously been treated with IVIG. These children therefore do not need to attend the hospital for day admission for IVIG, reducing exposure to potential infections and freeing up space in the Day Medical Unit other patients.

The RCH now has the largest cohort of children receiving SCIG in Australia; with 33 children regularly receiving SCIG at home.

Studies have demonstrated mproved convenience, petter quality of life and wer absences from school.

Allergy and Immunology Consultant Dr Therese Cole







RCH Plastic Surgery Nurse Consultant Carly Potte Clinical Nurse Sharon Trevorrow with patient D

EXCELLENT CLINICAL OUTCOMES

Understanding paediatric emergency demand

FACEBOOK FEEDBACK

EMMA GILMOUR: 'We've been to Royal Children's ED five times this year with our son. Each time has been an emergency and he has been seen within 15 minutes each time. The team are amazing and the speed and efficiency they dealt with my son was life-saving. I have witnessed them deal with all manner of emergencies with skill and diplomacy and my respect for you guys know no bounds. I would always avoid ED if another option was available (Doctors on Call) as I know firsthand how important it is when your son's life depends on their skill.'

LEAH MCFARLAND: 'We presented to RCH ED twice last year with our then-one year old and both times we were sent by our GP after visiting them first. He had respiratory issues that turned out to be recurring bronchiolitis but our GP suspected pneumonia or asthma. I would always attempt to see our GP first and certainly understand that unnecessary ED visits are a strain on resources but we were treated with such respect and care and never once made to feel like we were there unnecessarily.' <image>



The Royal Children's Hospital (RCH) Emergency Department (ED) continues to experience extraordinary demand, with more than 84,000 presentations in twelve months. The hospital is conducting research to understand the growth in demand and better allocate ED resources within Victoria.

2014-15 saw more than 84,482 children receive urgent care in the Emergency Department.

'We have had the highest number of emergency presentations ever in this financial period,' Executive Director of Clinical Operations John Stanway said. 'But despite the unprecedented demand, the hospital managed to come very close to achieving our National Emergency Access Target.'

'In order to manage the surge of patients, we have streamlined the flow of patients through the ED and have continued to strengthen the strategies we developed last year to manage ED demand, including the new after-hours 'fast track' area for acute patients, and new observation beds in the medical imaging area to monitor patients who have been treated in the ED, but are not quite ready to go home,' Director of Emergency Medicine Ed Oakley said.

'Improving ED access has been a whole-of-hospital effort,' John Stanway added. 'We have strengthened our Short Stay Medical Unit, or Dolphin ward, with additional after-hours resources to facilitate discharges around the clock; and we have relied upon the support and flexibility of the Medical Imaging team to accommodate the observation beds.'

Understanding paediatric emergency presentations

This year the RCH and the University of Melbourne have undertaken a research project to better understand the rise in emergency presentations for Victorian children aged zero to four.

'The fundamental goal of this project was to collate actionable information regarding ED presentations for children that could be used to develop evidence-based policies,' Lead Researcher Professor Gary Freed said.

By studying the volume of paediatric ED presentations across the state, parental motivations for ED presentations at four Victorian hospitals, actual availability of same-day general practitioner (GP) appointments and the accuracy of ED triaging, the project has produced real data to help better allocate ED resources within Victoria and the potential role of primary care to address ED overcrowding.

'Without a clear understanding of our current system, we would not be able to determine where the system is working well, where it is not, and where interventions in the system have the highest likelihood of actually making a difference in the lives of Victorian children,' Professor Freed added.

Prior to the project, the RCH had no firm data on why young children were attending the ED with lower urgency conditions and whether there was, or was not, same-day GP appointments available for them.

'This work is directly relevant to the functioning of our health care system both in the immediate and long-term' Executive Director of Clinical Operations John Stanway added. 'It also allows us to work with other hospitals, GPs and our state partners in new, mutually beneficial ways.'

Hydration in hospital: discovering the safest IV fluid for children

The Royal Children's Hospital (RCH) research is changing the way children receive intravenous fluid in Australia and overseas, helping to prevent intensive care admissions, serious neurological morbidity and mortality around the world.

Intravenous fluid, given to maintain hydration, is the most common medical intervention administered to hospitalised children. However the use of IV fluid can be associated with hyponatraemia, or low sodium concentration in the blood. While rare, hyponatremia can cause significant illness and even death.

In 2014-15 researchers from the RCH Emergency Department, Intensive Care Unit, and Departments of Anaesthesia and General Medicine finalised a randomised, controlled trial in children requiring intravenous fluid. The children received either standard hypotonic intravenous fluid (containing less sodium than blood) or an isotonic fluid containing a similar sodium concentration to blood.

The study demonstrated that children receiving the new isotonic fluid had a lower risk of hyponatraemia, without an increase in other adverse effects. The study results were published in The Lancet, the leading international medical journal, and have been cited in The New England Journal of Medicine: Journal Watch.

'Despite IV fluid being one of the most common medical interventions administered to hospitalised children, there was global uncertainty regarding the safest composition of intravenous fluid prescribed to children,' RCH General Paediatrician and Lead Researcher Dr Sarah McNab said.

'This study has addressed this gap in evidence, which will benefit all hospitals treating children. By reducing rates of hyponatraemia, we anticipate that adverse consequences secondary to extreme hyponatraemia will also be minimised. This will prevent intensive care admissions, serious neurological morbidity and will save lives.'

The researchers have liaised with the Victorian Paediatric Clinical Network regarding the sharing of educational resources to assist in a similar change at all Victorian hospitals treating children. The authors have been contacted by numerous hospitals regarding the results of the trial, including Great Ormond Street Hospital in London. This will prevent intensive care admissions, course of the sector of the

Improving surgical outcomes with better imaging

The RCH is using 3D photography to achieve better outcomes for children with craniofacial conditions while reducing the requirement for invasive and burdensome medical imaging. The RCH Craniofacial Surgery Unit was one of the first in the world to regularly record their results with 3D photography.

3D photography is a system in which multiple standard photographs are taken from different directions and a computer program is used to assemble those 2D images into a 3D accurate representation. The RCH has been at the forefront of 3D photography application to document the growth and outcomes of children with craniofacial condition who undergo surgical and conservative treatment.

The RCH has the busiest paediatric craniofacial surgery unit in Australia, with a long-standing commitment to innovation and excellence. The hospital recognised that accurate measurement outcomes was the most important factor for obtaining excellent clinical results, and initiated the 3D photography program.

'The 3D Photography service is a sustainable and integral component of the RCH Clinical Photography department activities and has also found applications well beyond the craniofacial surgery application,' Medical Photographer Robert Reitmaier said.

On average, 70-80 trans-cranial surgical patients would need post-operative CT scans each year, which typically require a general anaesthetic for paediatric patients. 3D imaging negates the need for post-operative CT scans; this provides a safer and more positive medical experience for children, parents and staff, and results in cost savings for the hospital.

3D imaging negates the need for post-operative CT scans; this provides a safer and more positive medical experience for children...



3D photography has proved extraordinarily useful in helmet therapy for children with deformational head shape, allowing helmets to be constructed without subjecting babies to plaster moulding and allowing more accurately moulded helmets. In some cases this may have prevented the need for surgery.

The RCH is continuing to develop the database of 'normal' head shapes, which will be the first research repository for documenting normal growth of the face and head in Australian children.

This will generate new insights into facial growth which will have implications for the management of a range of craniofacial conditions.

Although this practice is now widespread, the RCH remains at the cutting edge of the use of this technology. The hospital is now expanding the service to measure results for animation surgery for facial palsy, fat grafting and other techniques.

Weighty matters: improving outcomes for a fast-growing cohort

The Royal Children's Hospital (RCH) Weight Management Service is the largest and most established tertiary-hospital based, multi-disciplinary clinic in Australia that is working on the management of childhood obesity to prevent long-term disease. It is quickly becoming recognised as an international centre of excellence for the clinical management of childhood obesity.

125,000 children and adolescents in Victoria are clinically obese. These children are at risk of significant future health problems, including heart and liver disease, diabetes and cancer, as well as major psychological issues.

The RCH Weight Management Service (WMS) has created a new model of care for the treatment of childhood obesity to meet the growing medical demands for management of this complex condition. Previously, healthcare systems have waited until these children and adolescents developed problems before they could receive formal medical attention. The RCH WMS involves specialist paediatric, dietetic, nursing, social work and psychology input.

With an emphasis on 'reverse patient flow', the new model centres around providing a specialist initial assessment, empowering families by creating an activity and lifestyle plan based on enhanced education and support, and drug therapy and consideration of surgery in specific cases

This new model builds on a smaller pilot program which has demonstrated improvements in weight status for more than 80 per cent of referred patients, by translating this to a sustainable and improved service with minimal waiting times. An innovative addition to this service is the provision of service while upskilling regional health professionals to clinically manage this difficult community issue.

Since the new model of care began, the clinic has reduced its waiting time from 2.5 years to less than six months, with less than 100 children on the waitlist, down from 240.

Approximately 240 new patients now undergo an initial assessment at the clinic every year (up from 105). More than 780 patients (aged two-18 years) are currently enrolled in the service and receiving ongoing care.

Alongside this, the RCH has provided written materials for patients and healthcare providers, run a series of talks and workshops on childhood obesity, provided undergraduate and postgraduate clinical training and education and contributed to advocacy at a regional and national level.



HELEN FRASER: 'Can't praise Matt and his team high enough for all their hard work & dedication towards creating healthy futures for our children. Thanks Matt, Erin and team for everything over the years, from both my son and l.' unsing Too

Taking the scare out of scanning – Okee in Medical Imaging

Having a medical imaging appointment can be overwhelming and distressing for young patients. The Royal Children's Hospital (RCH) has developed a mobile and tablet application that utilises games, videos, photography and text to prepare children and families for medical imaging scans in a fun and engaging way.

The RCH medical imaging department performs more than 84,000 imaging sessions each year.

'Imaging quality and the time required for imaging is negatively impacted when patients are reluctant to be imaged or refuse imaging altogether,' Educational Play Therapist and Project Lead Siobhan Greene said. 'This can lead to delays, cancellations and the need for sedation or general anaesthetic. These factors increase medical risks, costs and lost time.'

Aimed at the four- to eight-year-old demographic, the Okee in Medical Imaging app explores CT, MRI, ultrasound, nuclear medicine, X-ray and fluoroscopy in detail. The app design and build was funded via donations to The Royal Children's Hospital Foundation.

'We conducted a survey of families in the medical imaging department, and found that 60 per cent of families with children aged four to eight felt unprepared for their appointment,' Siobhan explained. 'These same families also rated their child's coping much lower than those families who felt prepared. The challenge then became a way to provide at-home education for young patients and their families that was both engaging and able to be self-initiated.'

The development of the free app for smart phones and tablets has also helped the RCH provide access for the majority of families, particularly rural families who may not be able to attend preparatory sessions at the hospital. The app offers children nine games related to medical imaging. Three training games focus on activities such as keeping still, breath-holding and cannulation, then six missions explore the equipment, movements and sounds involved in the different imaging modalities. Each of these missions finishes with a video linking the game with the in-hospital experience.

'The app also includes information about procedures, tips and frequently asked questions to assist families in discussing their child's upcoming appointment. The package is complemented by photography and videos, and includes RCH information such as phone numbers, maps and parking information,' Siobhan explained.

Following the launch of the app, research was conducted to measure patients' anxiety. Patient compliance with the requirements of medical imaging processes, as assessed by radiographers, increased by more than 40 per cent in the experimental group; and anxiety levels, as measured by parents and radiographers, reduced by more than 45 per cent for the experimental group while in the hospital.

'Parent feedback also noted benefits such as making imaging easier to talk about, increased knowledge and understanding for both themselves and their children, their child sharing the experience with siblings, feeling a sense of mastery, and feeling more relaxed and at ease with the process,' Siobhan added.

The free app is currently in use at RCH and at hospitals around the world. You can download it www.rch.org.au/okee

The application has also been recognised for its quality in the ICT and creative sectors as well. Okee has won trophies at the state and national iAwards, the Melbourne Design Awards, the Australian App Design Awards and the Create Awards.



The app includes information about procedures, tips and frequently asked questions to assist families in discussing their child's upcoming appointment.

FACEBOOK FEEDBACK

JOANNA COWIE: 'My kids LOVE this app! Definitely helped prepare my four and a half year old for an MRI without general anaesthetic – he was so excited about it and happily told anyone who would listen! (Would be great for adults who were a little uneasy too) Thanks Okee!'

TANIA CARSTEIN: 'My seven year old Son loves Okee and it made him understand all the tests he is going to have and his MRI Brain scan that's coming up. He enjoys the games and enjoyed the information it gave him on his scans...It's even a good laugh watching him practice holding his breath.'



No pain, greater gain: Coolsense Pain Numbing Applicator

In 2014-15, the RCH Medical Imaging department was the first public hospital in Australia to utilise new Coolsense Pain Numbing technology to improve the experience for patients and families.

Many children are deeply fearful of needles and intravenous (IV) cannulas, but each year the RCH imaging department must perform more than 4,400 IV cannulations to administer tracers, contrast media, or medications to improve image quality.

The Coolsense Pain Numbing Applicator is a new device originally developed and used for cosmetic procedures. Coolsense is a hand-held pain numbing device that acts upon application, without chemicals, to cool and numb the site of injection. Post application, it takes only five to ten seconds to work. The injection can then be administered immediately. With an operating temperature of minus two to minus six degrees Celsius, Coolsense is more effective than ice. It is simpler and quicker to use than topical analgesic creams, and has no side effects like rashes, welts or vascular constriction.

'The Medical Imaging team began trialling Coolsense in June 2014, and has now performed over 5000 cannulations using the device. During the trial overwhelming positive feedback has been received from patients who reported radically reduced sensations of pain with IV insertion,' Senior Medical Imaging Technologist Glenn Cahoon said.

'The primary outcome was the pain rating for patients, with the majority of children rating their pain as less than three out of ten,' Mr Cahoon explained. 'Staff have reported greater flexibility in selecting appropriate veins resulting in increased first attempt success, with fewer procedures requiring escalation to more invasive procedures. Staff also reported benefits including reduced waiting time for patients; more effective numbing of the IV site; and reduced operating costs.'

Patients and carers consistently report a preference to use Coolsense for future cannulations.

'Most importantly the team has produced a better experience for RCH patients and families by reducing pain associated with treatment, which is vital in preventing future issues related to needle placement,' Deputy Director of Anaesthesia and Pain Management Philip Ragg added.

Continuity of Care for people with chronic or complex patients

Complex Care Program

RCH Consultant Paediatrician Dr Louise Baker with patient Willem

The Royal Children's Hospital (RCH) Complex Care service is a new model of care, created, piloted and evaluated in 2014-15, to unite a whole of hospital approach to better support complex patients and their families.

It is an international and growing phenomenon that a small proportion of patients with complex needs use a disproportionately large amount of healthcare services. These children have complex medical healthcare needs, requiring multiple stays in hospital and frequently use the RCH Emergency Department. These patients represent approximately three per cent of all patients, but account for fifteen per cent of entire hospital bed days.

In response to this problem the RCH convened a steering committee and a project team to review the legitimacy of a new and innovative model of care, the complex care service. From the outset, the RCH defined complex children as having multiple admissions in the past twelve months, multiple diagnoses with three or more medical teams involved in care, frequent presentations to Emergency and Specialist Clinics and having community service providers involved in their care.

The project team developed the foundations for the service with consultation and direction from families, patients, staff and community service providers. Baseline data was collected on their bed days, ED presentations, inpatient admissions and Specialist Clinic appointments. Families also completed a survey to understand their satisfaction with existing service provision.

A Clinical Nurse Consultant was allocated as the Complex Care Coordinator for these families. The key services offered to patients and families were care coordination, timely access to advice and support and family partnership.



'Better quality of life and wellbeing, and more efficient use of RCH resources.'

Nurse Consultant, Nicki Mountford

'The positive results delivered by the Complex Care service are twofold: improved patient and family experience, leading to better quality of life and wellbeing and more efficient use of RCH resources to the benefit of other patients and the broader community,' Complex Care Clinical Nurse Consultant Nicki Mountford said.

In the first twelve months, the Complex Care service delivered a 50 per cent reduction in bed days and Emergency Department presentations for children in the service as well as a 77 per cent positive response in the patient and family satisfaction survey (30 per cent improvement).

The RCH Complex Care service has plans to scale up in a measured and staged approach over the next two years to accept up to 200 patients and their families. The connections and collaboration between departments and services, both within RCH and the community, which is necessary to support this complex care model requires a change in work practices and behaviours.

A core component of innovation is an acute customer focus and this new model of care is moving from a service driven model to a consumer driven model of healthcare.

The RCH Complex Care service is unique in that it is a multidisciplinary service that is integrated across all domains of care – inpatient, outpatient and community. By having a clear clinical lead to integrate and connect services the hospital is moving from a crisis driven model to a proactive model of care and empowering families to manage their child's healthcare.

The RCH Complex Care service is unique to paediatric care in Victoria. The organisations long-term commitment to improving the care and experiences of complex children, is driving this innovation and ensuring great, patient and family centred care.



Monster Rock

Down in the dark old monster's lair, a mob of monsters jump, dance, laugh and stomp to a spooky monster beat.

Young patients in the RCH Education Institute's kindergarten program are encouraged to create, explore, play, discover and experiment to make sense of the world around them. They are also supported by early childhood educators to learn more about the things that interest and intrigue them.

'When a group of these kinder students showed a keen interest in monsters, our kindergarten teachers, Sonja Fea and Sonya Nedovic, helped them to bring their own boisterous beasts to life with paper, fabric and fine-liner pens,' Head of Education Institute Communications, Events & Stakeholder Engagement Bridie Mckay said. 'The children then imagined their creatures doing all kinds of fun things 'deep in the forest where the monsters live', like nibbling, chatting or laughing all day.'

Soon, the remarkable rhyming story of Monster Rock was born.

ABC Play School presenter and RCH Education Institute Ambassador, Eddie Perfect, brought the cheeky creatures of Monster Rock to life with an animated reading of the book, showing children in the audience how to 'boogie boogie', 'munch munch', 'boing boing' and 'flap flap' like a mischievous monster.

'Don't expect any scary or spooky monsters in this book. The characters of Monster Rock dance, fly, jump, dig and snooze – just like the little monsters who made them,' Ms Mckay added.

Monster Rock was made possible through the generous support of The Royal Children's Hospital Foundation.

Minimising risk with an EMR focused on patients and families





An Electronic Medical Record that is focused on patients and families.

The Royal Children's Hospital (RCH) is building a comprehensive Electronic Medical Record (EMR), which will support staff to deliver the best and safest care to patients and families now and in the future.

The \$48 million EMR project is funded in partnership with the state government and will be implemented hospital-wide from 30 April 2016.

EMR Project Director Jackie McLeod said implementing an EMR would offer many benefits for RCH patients, families and staff but improving patient safety was the number one priority for the hospital.

'With the support of US-based firm Epic and clinicians, we are building an EMR that significantly minimises the risks for patients who are cared for by the RCH,' said Jackie.

'There is no doubt that the Epic system has given us a strong foundation for our EMR. Some of the benefits include alerts when prescribing medications for allergies, automatic calculation of safe drug doses based on patient weights, automatic detection of duplicate orders, secure messaging, barcoded medical administration, more accurate and discrete recording of clinical information, access to real time patient information, and improved data collection and reporting.

'As our EMR takes shape and we move beyond April next year, it will be exciting to see these and many other features in practice across the hospital.'

RCH Chief Medical Information Officer and Medical Director on the EMR Project Mike South said clinicians and staff across the hospital had used the EMR project as an opportunity to review and improve existing working practices.

'We want to ensure that our EMR is evidence-based to deliver the best and safest possible care to patients. We want care that is efficient and, where possible, standardised to reduce variation in care and avoid unnecessary duplication,' said Mike.

'As part of the EMR project, we have put every aspect of our working practice under the microscope. This will help us to realise the full benefits of the Epic system for our patients and their families, for our staff and for the hospital more broadly.'

When the EMR is launched on 30 April 2016, it will include a patient portal—called My RCH Portal—which will give families the ability to view and update information on their RCH medical record.

The RCH will be the first paediatric hospital in Australia to provide a patient and family portal.

'We want to ensure that our EMR is evidence-based to deliver the best and safest possible care to patients.'

EMR Medical Director, Dr Mike South

FACEBOOK FEEDBACK

JESSICA RODRIGUEZ: 'Your phlebotomists are amazing. My 15 month old daughter has eight weekly blood draws and they are so quick, gentle and professional. She doesn't even cry and each experience is a positive one for her. Our paediatric endocrinologist is fantastic as he is attentive and super diligent—Dr Kao is always contactable and really listens to us. He is so informative and knowledgeable that I have no hesitation in trusting him. Thank you for the special people you have that make our sick children's lives so much better.'

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RCH Nurse Claudia Sch

National blood authority award for the RCH

In June 2015 The Royal Children's Hospital (RCH) received a National Award for Excellence in Blood Management, in the category of 'Excellence in implementing an Inventory Management program'.

The awards were part of the inaugural National Blood Symposium, presented by the National Blood Authority and the Australian Commission on Safety and Quality in Health Care.

The award recognises the multiple strategies the RCH Transfusion team has implemented to fulfil our responsibilities as 'custodians' of a precious donated resource whilst ensuring timely access for patients and sustainable healthcare by reducing wastage.

The strategies include the Extended Life Plasma (ELP) project, the 'Improved communication with the Children's Cancer Centre' initiative, the 'Blood Box' initiative, inventory sharing with the Royal Women's Hospital and Melbourne Health and price signals for blood product wastage. These combined strategies have led to a sustained reduction in blood and blood product wastage.

'The implementation of these strategies has seen wastage rates reduce significantly over the last four years,' Head of Clinical Haematology Dr Helen Savoia said. 'RCH rates have met and then exceeded nationally set targets. The resultant annual 'savings' represent approximately 1,000 blood donations and nearly \$400,000 in processing costs.'

Total blood product discard costs



Infection prevention and control

Getting the jab done

For sick and vulnerable children, contracting the flu can have a major impact on their health, complicate an underling condition, and extend their time in hospital.

In 2014-15 86.2 per cent of The Royal Children's Hospital (RCH) staff participated in the hospital-wide influenza immunisation program, well above the target of 75 per cent. This figures represents 90 per cent of Nursing staff, 88 per cent of medical staff and 87 per cent of Allied Health team members.

'Protecting ourselves from flu, and ensuring we do not expose our patients and their families, is vital to delivering great care,' RCH Infection Control Coordinator Sue Scott said. 'Even those in non-clinical roles are at risk of contracting and passing on flu as we all share public spaces whether that be elevators, coffee shops or even passing each other in the corridors.'

Ebola Virus Disease

The 2014 Ebola Virus Disease (EVD) epidemic prompted the development of a Victorian EVD response plan. In August 2014 the RCH was designated as the Victorian receiving hospital for suspect cases EVD in children of up to 16 years.

A multi-disciplinary working group at the RCH developed EVD procedures and identified isolation requirements. This included strategies to manage an accompanying carer should they too become unwell. Initially more than 120 nursing and medical staff from the Emergency Department, Intensive Care and Paediatric Infant Perinatal Emergency Retrieval service (PIPER) were trained to manage and coordinate a potential EVD case. Many more have since been trained.

Between September 2014 and July 2015, four children were admitted for investigation. One parent who became unwell was also investigated. Happily, no individuals were diagnosed with EVD.

'With each event of a suspected case, staff became more confident in implementing the response as well as identifying areas for improvement,' Sue Scott explained. 'The management and investigation of four children who fitted the 'suspected case' definition demonstrated that the protocols and staff training implemented within a short timeframe were effective in providing a safe environment for staff whilst providing appropriate care for the patient.'

Minimising mental health seclusion rates

Over the past twelve months, as part of its work to embed the new 2014 Mental Health Act, the RCH has implemented a number of strategies to reduce the use of 'restricted intervention' with mental health patients.

Restrictive interventions can include bodily restraint or episodes of seclusion. At all times RCH staff seek to prevent the need for restrictive interventions, and they are implemented only to maintain the safety of consumers and staff.

Seclusion occurs when a consumer is confined to a purpose built room for a limited period of time. Following the introduction of the new Mental Health Act 2014, the RCH convened the Restricted Interventions committee to govern the use of restrictive intervention and to promote harm minimising practices.

The committee implemented multiple strategies to reduce restrictive interventions. Over the past 13 months Banksia ward have had no more than four episodes of seclusion in a one month period, and four months during this period with no seclusion episodes at all. Over the past six months Banksia ward has achieved less than two episodes of seclusion per month. Overall this represents a significant decrease on prior years.

'The committee, along with Banksia team leaders, are really rigorously interrogating all incidents of restrictive intervention,' said Emma Barker, Nurse Unit Manager of Banksia, the ward in which RCH mental health consumers are cared for. 'We discuss why every seclusion occurred and what could have been done to prevent it. '

'Our teams are also debriefing consumers after seclusion, so that the consumer understands why it occurred,' Emma added. 'Seclusion can be very confronting, and we want to check in with consumers to recognise any distress and involve them in the resolution.'

The committee is now developing more strategies to reduce restricted interventions, including the creation of different spaces across the hospital for consumer's that are unsettled or exhibiting behaviours of concern.

'Some consumers are very agitated upon presentation to the Emergency Department or Banksia ward, which can be very busy and stimulating environments,' Nursing and Allied Heath Clinical Lead Nadine Stacey said. 'We know if we can create a quiet space where we can orientate and assist consumers, then it will decrease the amount of restrictive interventions including seclusion that we may need to implement'. 'We discuss why every seclusion occurred and what could have been done to prevent it.'

Nurse Unit Manager of Banksia, Emma Barker





Tell us what you think

We value your opinion and want to hear what you think about the quality of our care. Your experience can help us improve our service to you and others. We want to know what you like about the RCH and any suggestions about how we could do better.

Send us your feedback via our online feedback form or email

ONLINE FEEDBACK FORM ww2.rch.org.au/quality/feedback.cfm

BY EMAIL clo@rch.org.au If you prefer to discuss your feedback with the Consumer Liaison Officer directly, please phone (03) 9345 5676.

VIA SOCIAL MEDIA FACEBOOK www.facebook.com/rchmelbourne TWITTER www.twitter.com/RCHMelbourne The Royal Children's Hospital Quality of Care Report 2014–15 was developed by RCH Corporate Communications in consultation with our consumers. Design and photography by the RCH Educational Resource Centre.





RCH patient Lola

