

A SPECIALIST
CHILDREN'S HOSPITAL

ALDER HEY

LEADING THE WAY
IN INNOVATION
AND RESEARCH



INSPIRED BY CHILDREN

ANNUAL REPORT SUMMARY
FOR MEMBERS
2016/17

A MESSAGE FROM OUR CHAIR AND CHIEF EXECUTIVE



We are delighted to share with you our Annual Summary for 2016/17, a reflection of our challenges and achievements during our first full year in the new 'Alder Hey in the Park'.

We remain extremely proud of our new Alder Hey, the first hospital in a park in Europe and one which was designed with the help of children and young people. We were incredibly honoured to welcome Her Majesty the Queen and His Royal Highness the Duke of Edinburgh to officially open the new hospital on the 22nd June 2016. It was an unforgettable day for everyone at Alder Hey and we feel very privileged to have had the opportunity to show Her Majesty and His Royal Highness our brand new home.

2016/17 was an extremely tough period across the whole of the NHS as we face greater financial constraints and an increasingly challenging environment. Despite the significant turmoil the NHS continues to face, we are pleased with the progress we have made towards securing our financial stability during 2016/17, whilst also achieving all of the government's national performance standards. This includes delivering the A&E four hour waiting time target against a backdrop of the worst ever winter performance across the NHS. The Secretary of State for Health Jeremy Hunt recently congratulated Alder Hey on being the Trust with the greatest improvement in this area.

Throughout the year we have remained focused upon improving quality, increasing performance and efficiency, enhancing patient experience, engaging with staff and creating the very best environment for them to do their best work. Through the determined efforts and outstanding dedication of our staff we have been able to make significant progress in all

these areas and this has enabled us to over-achieve against our financial targets; an incredibly impressive feat which highlights how Alder Hey continues to perform well compared with many other acute providers.

At the heart of our successes remain our highly skilled and dedicated staff. Engaging with our front line teams has been key to improving our performance; our 'Listening into Action' approach and 'Big Conversations' with staff across the organisation has empowered colleagues to continue to make Alder Hey the very best it can be.

Our staff continue to go above and beyond in their commitment to providing the very best care to our patients. Thousands more children and young people have benefitted from this care over the past twelve months. The feedback we receive from our families is further confirmation of what the CQC told us last year; that we remain 'outstanding' for caring.

This successful year will now provide us with the perfect platform to move from good to great as we continue on our journey to become a world leading centre for children's healthcare and research. Our ambition remains high and we have refreshed our overall strategy for the next three years to deliver on our '2020 Vision' to provide a healthier future for children and young people.

David Henshaw Louise Shepherd

SIR DAVID HENSHAW
Chairman

LOUISE SHEPHERD CBE
Chief Executive

OUR PERFORMANCE

Alder Hey delivered an excellent set of year end results within the challenging environment of the wider NHS. We have remained a top performing Trust, achieving all of the nationally mandated targets including the A&E four hour waiting time target and the 18 week referral to treatment target. In 2016/17 we delivered 8% more elective operations, 8% more non-elective procedures and 13% more outpatient appointments compared to the previous year. We also carried out over 400 congenital cardiac operations on children to meet the national requirement for this highly specialised service.

We received £223m in income during 2016/17, with £192m coming from the delivery of clinical services. £27m non-clinical income included donations from charities, education and training levies, research and commercial activities. The Trust ended the year with a surplus of £2.6m and a cash balance of £6.5m.

The Trust was rated good in its last full inspection by the Care Quality Commission.

Overall Good	Safe	Good ●
	Effective	Good ●
	Caring	Outstanding ☆
	Responsive	Good ●
	Well-Led	Good ●

We were very proud of our progress against a number of quality aims in 2016/17. Alder Hey was in the top three trusts nationally for overall risk reporting and our medication errors, infection rates and reportable pressure sores were lower than previous years. We successfully recruited to all our nurse staffing vacancies, almost eliminating the need to use agency staff.

A sepsis pathway based on NICE guidelines has also been introduced to improve quality of care. This was supported by a large scale training programme, the appointment of new sepsis nurse specialists and a communications campaign to improve the recognition and timely treatment of this potentially life threatening condition.

Read more about our quality achievements within our Annual Report, available on our website.

Since early 2016, Alder Hey has been undertaking a 'Listening into Action' journey. Focussed around staff empowerment and positive change, 'Listening into Action' (LiA) is a Trust-wide drive to identify issues and blockages, bring together all the right people into the same room and then work together on a solution.

Through this initiative, dozens of clinical teams from across the Trust have been involved in positive change. Examples of solutions include developing a CAMHS self-referral service, rolling out a new cardiac surgical pathway and investigating staff diversity. Many more staff have supported a growing list of quick wins and other longer term solutions around catering information, thermometer supply in the Emergency Department, phlebotomy equipment, recycling and a staff running club.

Alongside this, a monthly network meeting has been established between Alder Hey and Aintree University Hospital focusing on 'Listening into Action' and 'Freedom to Speak Up' issues. Through these meetings, both trusts are able to keep each other informed, share good practice and learn from each other's experience.



Royal Approval for Alder Hey in the Park

Alder Hey in the Park was officially opened by Her Majesty the Queen and His Royal Highness the Duke of Edinburgh on 22nd June 2016, during an historic and unforgettable day.



Hundreds of well-wishers including Alder Hey patients, families and staff gathered outside the hospital entrance and waved Union Jack flags to welcome the Queen and the Duke to the new Alder Hey.

Before entering the hospital, the Queen was presented with a posey by two year old patient Lewis Connett. Lewis, a Young Fundraising Ambassador for Alder Hey who has helped raise thousands of pounds for the new hospital, has been making the regular journey from his home in Halifax to Alder Hey since he was diagnosed with Apert Syndrome when he was a baby. So far, Lewis has had four surgeries at Alder Hey with his first at only five months old.

The Royal Party then went on a tour of the new hospital, accompanied by Alder Hey Chairman Sir David Henshaw and Chief Executive Louise Shepherd. Beginning with a visit to our Outpatients' Garden (funded by the Steven Gerrard Foundation), they listened to Alder Hey's Staff Choir perform while meeting children involved in the design of the hospital. Children and young people have been involved since an initial consultation back in 2009, where almost 1000 patients drew pictures and shared their views on the new hospital design. Alder Hey's Children and Young People's Design Group had their say throughout the design process on everything from the colour of the rooms, to the artwork displayed in the new hospital and what their wards should look like.



The Queen and the Duke then continued to the hospital's oncology and general medical wards. On ward 3C, patients and families greeted the Queen while enjoying a Royal Tea Party especially prepared by Alder Hey's ward chefs. Our hospital has a unique food offering for our children; chefs are based on every ward and are able to make fresh food on demand for patients as and when they want them.

The Royal Party concluded their tour in the hospital atrium, where they were introduced to major donors of Alder Hey Children's Charity who have helped fund lifesaving equipment, vital research and arts and play activities in the new hospital. Watched by a host of staff, patients, families and supporters of the hospital, Sir David Henshaw invited the Queen to unveil a plaque and officially open Alder Hey in the Park.



Alder Hey in the Park Wins Prime Minister's Award



The new Alder Hey Children's Hospital won the Prime Minister's 'Better Public Building' award at the British Construction Industry Awards in October 2016. The Award recognises publicly-funded projects that demonstrate innovative and productive construction, deliver value for money and bring real change for their communities. It is the pinnacle of the British Construction Industry Awards, organised by the Institution of Civil Engineers.

"Alder Hey is a great example of how to transform public services in an innovative and cost effective way. Engaging the community in the design and using local apprentices to support the construction will ensure the hospital will continue to be at the heart of the community for generations to come."

Ben Gummer, Minister for the Cabinet Office

Our Vision for Alder Hey in the Park

As the first paediatric hospital in Europe to be built in a park, we have a once in a lifetime opportunity to combine the impact of nature and the environment with improved health and wellbeing.

A public consultation is set to take place with the local community about the future development of Springfield Park once our old hospital buildings are demolished. In the meantime, efforts have already been made to improve the environment and engage the local community using the existing parkland.

An interactive 'Woodland Walk' has been created and in partnership with the Lancashire Wildlife Trust, a Forest Schools initiative was launched in 2017. This involves local primary schools using Springfield Park to train as Forest School leads. Other exciting ventures include plans to start an edible planting scheme using community growing areas, while a number of successful events have taken place including an arts and crafts fair and bluebell wood planting.

Alder Hey Joins Forces With Al Jalila to Improve Children's Health

Alder Hey and Al Jalila Children's Specialty Hospital in Dubai signed an official agreement in November 2016 to help enhance children's healthcare across the world. The agreement was signed during an official visit by the Duchess of Cornwall to the newly opened and first specialised paediatric hospital in the United Arab Emirates.

His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of

Dubai, has developed the new dedicated children's hospital with an aim to deliver care to children at the highest level and on par with international standards.

Alder Hey and Al Jalila Children's share a vision and capability of creating a healthier future for children and young people worldwide. Together they will aim to deliver the highest quality care in outstanding facilities, with continuous improvements made through medical education, innovation, and clinical research.

Alder Hey will be able to provide guidance to meet the challenges often faced when opening a new hospital. Children requiring very specialised treatments not currently available in the UAE, such as complex neurosurgery

and neuro-oncology, will now also benefit from being able to access those treatments at Alder Hey. Furthermore as part of this collaboration, Al Jalila Children's will aim to establish dedicated education programmes for health professionals, providing valuable training that will develop the next generation of paediatric specialists and services in the UAE. Alder Hey will also have access to a variety of patients with rare diseases which will support vital research, thus creating the potential for future joint treatment programmes.



Alder Hey to Trailblaze Digital Revolution in the NHS

Alder Hey has been selected to join an elite group of NHS hospital trusts who will drive new ways of using digital technology in the NHS. These 'digital exemplars' were selected from the most digitally advanced hospitals in the NHS and will lead the way in delivering radical improvements in the care of patients. Alder Hey is the only specialist children's NHS Trust to be selected.

As a digital exemplar, Alder Hey will receive £9.6m over the next four years to achieve Global Digital Excellence. The funding will support the digitisation of 43 clinical pathways, enabling Alder Hey to improve efficiency and effectiveness, enhance operational processes, improve clinical evidence of high quality care and strengthen staff engagement.



The new funding will accelerate and enhance the Trust's plans to deliver:

- A fully digital and paperless medical record for every child, including test results and scans.
- A web portal for patients and families that provides them with direct and secure access to medical information and their medical records, allowing them to make and change appointments.
- A web portal for healthcare professionals that provides secure access to records for patients who are in the care of a number of different NHS organisations.
- A patient 'app' platform with several elements: familiarisation with the hospital environment; gaming and rewards for compliance with treatment; and distraction and entertainment.

Innovation Award for Surgeon Iain Hennessey



Mr Iain Hennessey, Consultant Paediatric Surgeon and Clinical Director of Innovation at Alder Hey, was presented with a gold award in January 2017 for his pioneering leadership of innovation by the Innovation Agency.

As an Innovation Scout, Iain champions innovation at Alder Hey. Innovation scouts are senior clinicians, academics and managers who actively promote and support innovation among their colleagues, from ward to Board level.

They learn from other organisations, through events, visits and study trips organised by the Innovation Agency (the Academic Health Science Network for the North West Coast).

Alder Hey's Innovation Team work with world leading companies and local small businesses with an aim to drive innovation in healthcare.

Alder Hey Set to Become UK's First 'Cognitive' Hospital

In May 2016, Alder Hey announced a ground-breaking multi-year collaborative programme with the Science and Technology Facilities Council's (STFC) Hartree Centre, supported by IBM (NYSE: IBM), to create the United Kingdom's first 'cognitive' hospital by harnessing 'big data' and the power of IBM's Watson technology platform.



This is the first time that Watson technology has been applied to improve patient experience in the United Kingdom. Alder Hey and the Hartree Centre believe that by applying Watson, an innovation in computing technology, we will enhance patient care and potentially generate savings for both the hospital and the NHS as a whole.

Using Watson to analyse any feedback that is voluntarily and securely provided by our patients, with appropriate consent as needed, it is anticipated that Alder Hey will be able to greatly enhance patient experience by; identifying patient anxieties and providing information and reassurance on-demand; reminding young patients and their parents about appointments and about aftercare; and providing insightful feedback to clinicians based on the tone and sentiment of these interactions. Using this valuable insight, clinicians at Alder Hey will be able to make a hospital stay for a child less

daunting, by providing a more personalised service for a child while also being able to identify clinical trends more quickly that could affect patient flow and effectively make significant cost savings.

The first stage of this multi-year project is underway, with an initial version of the platform expected to be ready for testing in the hospital around the end of the year. Over the last few months, Alder Hey patients and their parents have been asked a range of questions on everything from parking, to what they would like to eat, to their favourite games and films and what they want their bedroom to look like. They have also been asked what questions they have about clinical procedures, general anaesthetic, and surgery. A team of experts from the Hartree cognitive team, made up of the Hartree Centre and IBM, are using this information to train 'Watson' to anticipate and respond to questions from patients and families before they come into hospital.

World Leading Research

During the year, Alder Hey delivered a strong performance across a range of research programmes and in partnership with a number of higher education institutions, the charitable sector and the commercial sector.

Almost 4,000 children and young people were enrolled into clinical research studies at Alder Hey, more than any other children's healthcare provider in England and Wales. This placed Alder Hey within the top 10% of NHS organisations with respect to research volume.

We have developed our research workforce and have been at the forefront of novel collaborations and funding partnerships to ensure that children and young people have access to life changing clinical trials. Agreements and investments have been secured with the Cystic Fibrosis Trust for Alder Hey to become a Clinical Trials Accelerator Platform Centre, while Duchenne UK has invested in a number of key posts to enable more clinical trials to be made available at Alder Hey to boys with Duchenne Muscular Dystrophy.

Alder Hey CRF Awarded £2million Grant

Alder Hey's Clinical Research Facility (CRF) received a £2m grant over five years from the UK Government via the National Institute for Health Research (NIHR).



The grant will fund the infrastructure costs for early translational (experimental medicine) research to help speed up the translation of scientific advances for the benefit of patients. The funding application was made by Alder Hey in partnership with the University of Liverpool. Every year thousands of children at Alder Hey participate in clinical studies to help find new medicines and treatments for children with both common and rare childhood illnesses.

Trio of Research and Innovation Awards for Alder Hey

Alder Hey Children's Hospital received three awards at the annual North West Coast Research and Innovation Awards, which recognise outstanding work from around the region. The awards are jointly organised by the Innovation Agency; the National Institute for Health Research (NIHR) Clinical Research Network North West Coast; and NIHR Collaboration for Leadership in Applied Health Research and Care (CLAHRC) North West Coast.



Alder Hey received the Most Innovative Collaboration Award for the 'Digital Alder Hey' project, which involves developing an app to help families familiarise themselves with the hospital and distract young patients while they are being treated.

A dedicated team of researchers organised by Alder Hey also won the NIHR @10 Award for 'Clinical Research Outstanding Impact'. The network of research nurses, clinicians and managers was started ten years ago, covering nine hospitals in Cheshire, Merseyside and North Wales, to involve young patients in clinical trials to improve treatments.

In the network's first year, 35 children were recruited in trials; after ten years, more than 30,000 children have been recruited and a total of 226 research studies are underway.

Finally, young patient Sophie Ainsworth, who brought together other young people, teachers, parents and researchers to highlight the impact of lupus, won the Outstanding Contribution to Patient and Public Involvement in Research Award. The Young patient research ambassador, set up an 'invisible illness support group' called RAiSE (Raising Awareness of Invisible Illnesses in Schools and Education) two years ago and led a project to develop resources for schools to support students with invisible illnesses. She was nominated by Jenny Preston, Patient and Public Involvement Manager at Alder Hey's NIHR Clinical Research Facility.

Revolutionary Hybrid Operating Theatre Opened at Alder Hey

Alder Hey opened a groundbreaking hybrid operating theatre earlier this year. A hybrid theatre contains all the high tech equipment and software required to perform high resolution diagnostic imaging and operations at the same time. Alder Hey's new theatre is the first in the country suitable for operating on children from different specialties including heart, brain or spinal surgery.

The new theatre cost £1.23m and was made possible thanks to funding provided by Alder Hey Children's Charity.

Access to high resolution imaging in theatre means the surgical team at Alder Hey has much more information available to them in real time during an operation. Operations can take less time and there is no need to move the patient out of theatre for a scan which reduces infection risks. High quality 360 degree imaging and BrainLab navigation systems ensure much more precise diagnosis and surgery, significantly increasing survival rates. This software and technology helps to minimise potential side effects of surgery and exposure to radiation, while



reducing the need for repeat operations and the number of times a child needs to be anaesthetised.

State-of-the-art imaging also enables minimally invasive surgery to take place by providing a clear visual of a small area. Rather than performing open surgery, surgeons are therefore able to access this small part of the body using a catheter or endoscope. The size of the theatre is also helpful as it provides more space for a greater amount of equipment and more clinicians, which can be particularly helpful during intensive procedures.

BBC Children's Takes Over Alder Hey



Alder Hey hosted a live broadcast by BBC Children's as part of a special 'Hospital Takeover' in December 2016.

CBBC, CBeebies and BBC Interactive all helped launch Christmas at Alder Hey during a memorable day in the hospital. Alongside pre-recorded content and live links, presenters were filmed meeting patients, families and staff and also visited patients across the hospital wards.

The broadcast reflected a longstanding relationship with BBC Children's following Alder Hey's involvement in BAFTA award winning medical show *Operation Ouch!* The show returned to Alder Hey for a fifth series in 2016 which was broadcast on CBBC in the Autumn. This series is aimed at children (6-12 years) and is a fun insight into the world of medicine, while removing some

of the fear for children coming into hospital. The series is made specifically for children and aims to give its audience a proper knowledge and appreciation of hospitals and how fantastic and adaptable the human body is in a fun yet informative way.

Operation Ouch! featured familiar faces from Alder Hey including staff and patients from our emergency, radiology, ENT, oncology, haematology, cardiac, physiotherapy and anaesthetics departments along with staff and families across our wards, including ward chefs and our theatre, post room, arts, domestics and maintenance teams.



Ophthalmology Win National Award

Alder Hey's Ophthalmology Team saw off strong competition from hospitals across the country to be awarded winner at the Bayer Honours 2016 awards. Held at the prestigious Royal College of Surgeons in London in December, the team was singled out for their innovation, hard work and absolute commitment to their patients for their Paediatric Intraocular Clinic.

Developed as a multi-disciplinary team approach to each child's journey through the department, the pathway has been shown to greatly ease the anxieties of

parents and provide a smooth and consistent experience. The patient sees where possible the same team members at the same clinic, keeping their experience friendly, familiar and focused.



"This is an excellent example of improved communication in the paediatric setting. A well thought out approach and a novel idea. The Team recognised the lack of education and support for patients and as a result they successfully developed the service to meet these needs."

The Judging Panel at the Bayer Honours 2016 Awards

Alder Hey Nurse Honoured

In November 2016, specialist children's nurse Anne Sweeney was honoured for her dedicated work caring for seriously ill children.

In May 1993 Anne became the first ever Roald Dahl nurse; her post at Alder Hey Children's Hospital was created and initially funded by Roald Dahl's Marvellous Children's Charity (then known as the Roald Dahl Foundation), which provides specialist children's nurses and family support for seriously ill children across the UK.

The charity held a special presentation ceremony for Anne at the end of its annual nurses' conference, which took place at Alder Hey's 'Institute in the Park'. Anne is very proud to have been the first Roald Dahl Nurse, a post which was also the first paediatric Epilepsy Nurse Specialist in the UK. She was presented

with special gifts by Liccy Dahl (Roald Dahl's widow), Martin Goodwin (the Chair of Trustees) and Jane Miles (the charity's CEO).



Dr Richard Appleton Receives Epilepsy Award

Alder Hey Consultant Neurologist Dr. Richard Appleton was awarded the Lord Hastings Award by national charity Epilepsy Action in June 2016.



The award recognises Dr Appleton's outstanding personal contribution to the improvement of the quality of life of children with epilepsy and their families. He was presented with his award by a previous patient Carl Foster, 28, who now works for Epilepsy Action.

The Lord Hastings Award was set up in 1990 to recognise outstanding personal contributions to people with epilepsy. Since it was created by Epilepsy Action, it has only been awarded to eleven people. Dr. Appleton's work at Alder Hey has made a huge impact on the lives of children with epilepsy. He helped to establish the first full-time nurse specialist post in paediatric epilepsy within the UK, initially funded by the Roald Dahl Foundation. He also established the first transitional epilepsy clinic in the UK, managing teenage patients' transition from child to adult services. In 2004, Dr. Appleton was instrumental in establishing the Paediatric Neurosciences Foundation at Alder Hey, another first in the UK.

Alder Hey Children's Charity

Following a successful appeal for the new hospital, raising over £25m towards lifesaving medical equipment, enhanced facilities and entertainment for our children, Alder Hey Children's Charity raised a further £5m in 2016/17. £2.5m of this will support the development of the 'Institute in the Park', Alder Hey's dedicated research, education and innovation facility.

Fundraising activities have ranged from corporate partnerships, community fundraising (including running and challenge events), trust and foundation fundraising, community lottery and more. The Charity is continuing to increase its strong community fundraising base, particularly through the North West. Bespoke fundraising events are now well established and have proven successful, generating over £250,000. Charity lottery membership has gained a membership of over 15,000 members and is continuing to grow. The Charity now has over 20 young fundraising ambassadors located across the country who help to raise funds and awareness.

In September 2015, the team at Shop Direct voted for our Charity as their charitable partner of the year for 2015/16.



Colleagues of Shop Direct have taken part in a variety of activities to raise money, exceeding their initial target of £200,000. The Ecommerce team of Shop Direct has also been working closely with our Innovation Team here at Alder Hey to develop an app, the first of its kind in the country.

In 2016/17, Matalan released an Alder Hey Christmas campaign for the third year running ('Get Your Stripes'). International links continued to develop through the support of the Institute of Travel and Tourism (this membership organisation has raised over £1.5m) and Liverpool John Lennon Airport continued their support of Alder Hey through their pledge of £200,000 to support our digital app development. The Airport has also given significant time and expertise in assisting the hospital to improve its signage and patient flow.

Alder Hey Children's Charity continues its appeal to support the development of our 'Institute in the Park', while also developing the digital app and supporting projects to enhance patient experience.

New Child Bereavement Centre for Alder Hey

Alder Hey in the Park will have a new, bespoke Child Bereavement Centre thanks to the support of Alder Hey Children's Charity and the Treasury.

The Alder Centre is dedicated to providing a comprehensive range of bereavement support services, tailored to the needs of those that have suffered the tragic loss of a child. The centre provides an emergency bereavement care service to Alder Hey Children's Hospital, for families in the immediate event of the death of a child, and also runs the National Child Death Helpline (NCDH) in partnership with Great Ormond Street Hospital (GOSH).

Following the opening of our new hospital in October 2015, the Alder Centre was moved to temporary accommodation. Alder Hey Children's Charity

compiled and submitted a bid for support of the new Alder Centre to HM Treasury's LIBOR Grants programme and £1.4m of funding was announced by the Chancellor of the Exchequer Philip Hammond in his Autumn Statement.

The award of this funding now means that new, bespoke premises can be built to accommodate the Centre within walking distance of the hospital, providing privacy for those that it supports. Antoinette Sandbach MP, Chair of the All Party Parliamentary Group on Baby Loss, said: "I was delighted to be the advocate in Westminster for the important work done by the Alder Centre, particularly its provision of bereavement care for parents in the North West, and it is great news the Centre will receive £1.4m from the Government for its new building. I have worked hard with the Trustees of the Alder Hey Children's Charity and this announcement is very welcome."

Alder Hey Children's 
NHS Foundation Trust

If you would like any more information about any of the details in this report, please contact:

By post: Alder Hey Children's NHS Foundation Trust, Eaton Road, Liverpool, L12 2AP

By telephone: 0151 228 4811

By email: communications@alderhey.nhs.uk

www.alderhey.nhs.uk