

# Alder Hey Children's NHS Foundation Trust

## Quality Report

Alder Hey Hospital  
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This report describes our judgement of the quality of care at this trust. It is based on a combination of what we found when we inspected, information from our 'Intelligent Monitoring' system, and information given to us from patients, the public and other organisations.

# Summary of findings

## Letter from the Chief Inspector of Hospitals

Alder Hey Children's NHS Foundation Trust is one of the busiest children's hospitals in Europe and provides care for more than 270,000 children, young people and their families every year. The trust provides a range of services from the main Alder Hey Hospital site and leads research into children's medicines, infection, inflammation and oncology. The trust is due to move into a new build hospital in October 2015, which is a purpose built, state of the art hospital. This new build named 'Alder Hey in the park' has been built adjacent to the existing site. The new build contains 16 operating theatres and 260 inpatient beds, 48 of which are in intensive care, high dependency and the burns unit.

We last inspected this trust in June 2015 and we rated the provider as 'good' overall. The focus of this inspection was to inspect the new build prior to its opening.

We carried out our focused inspection on 22nd September 2015 to review the building, environment and process for transfer into the new hospital. We focussed our inspection on the most appropriate elements of the safe and well-led domains and reviewed several areas including the intensive care unit, neonatal unit, accident and emergency department, theatres, radiology and a selection of wards. We also reviewed data supplied by the trust.

Our key findings were as follows:

- A big move plan was developed in October 2014 to ensure a robust strategy was in place for the move. This plan was reviewed and found to be comprehensive covering all areas to assist in a smooth transition to the new build. In addition each clinical area had developed business continuity plans incorporating pertinent issues for their area.

- Building control (local authority) and the local fire authority had approved fire regulations. Assurance was given that all fire regulation signage would be completed prior to the hospital opening.
- Schedule 12 "the building certificate" was due to be completed and signed off prior to the building being handed over to the trust on 30th September 2015. The production of the "building certificate" is the culmination and sign off of a process which involves the completion of 76 service / sub certificates of which each in turn have many commissioning test and validation certificates witnessed and signed off. A random selection of test certificates was reviewed and was found to be satisfactory.
- The safety and resilience of services and infrastructure and its testing was found to be satisfactory.
- New and existing medical and non-medical devices and equipment were being transferred and installed through a managed process to ensure it was safe and fit for use.
- The location was suitably equipped and supported to implement the trust's policies and procedures for hygiene and the prevention of health care acquired infections.
- The new build was found to be compliant with the disability discrimination act with disabled toilets, wide corridors and doorways for wheelchair and lift access.

We saw several areas of outstanding practice including:

- The children and young people's design group, which was made up of current and former patients aged 10-22, had input on everything from the colour of the rooms, to the artwork displayed in the new hospital and what their wards should look like.

**Professor Sir Mike Richards**  
**Chief Inspector of Hospitals**

# Summary of findings

## Background to Alder Hey Children's NHS Foundation Trust

Alder Hey Children's NHS Foundation Trust became a foundation trust in August 2008. The trust provides care for more than 270,000 children young people and their families. The trust also leads research into children's medicines, infection, inflammation and oncology. The trust has a broad range of hospital and community services, including many for direct referral from primary care and an inpatient and community Child and Adolescent Mental Health Service (CAMHS) to support young people between the ages of 5 and 14 years. The trust is a designated national centre for head and face surgery as well as a centre of excellence for heart, cancer, spinal and brain disease. The hospital is a recognised Major Trauma Centre and is one of four national Children's Epilepsy Surgery Service centres.

The old hospital site had 257 beds and provided a wide range of inpatient medical, surgical and specialist services as well as 24-hour A&E and outpatient services.

We inspected the new build known as 'Alder Hey in the park' which had been built adjacent to the existing site as a purpose built, state of the art hospital. The new build allowed the trust to significantly upgrade the patient and family experience. It contains 260 inpatient beds, 48 of which are in intensive care, high dependency and the burns unit. In addition, there are 16 operating theatres, including 12 for inpatient use and four for day surgery.

The theatre suite has integrated operating theatres. Seventy-five percent of the beds are single occupancy with en-suite facilities, climate control and strip lighting for the child or young person to control. Each room contains a sofa bed to enable parents to stay with their child.

Each inpatient room offers natural light and many have views of the park. There are separate, dedicated areas, including outdoor space, for children and young people on each ward to allow them to socialise, play and relax. In addition there is a kitchen situated on every ward with a ward based chef to ensure that each child is given a freshly prepared, healthy meal of their choice.

There is a new research and education centre built alongside the new build. The work of this centre will involve partnership working with a local university and will allow researchers to develop safer, better medicines for use with children, infection, inflammation and oncology. Currently, 7,500 children and young people are involved in clinical trials each year.

The trust is a teaching hospital and supports 958 trainee doctors each year and 556 student nurses and allied health professionals.

The trust has an annual turnover of £200 million pounds.

## Our inspection team

Our inspection team was led by:

**Head of Hospital Inspection:** Ann Ford, Care Quality Commission

**Inspection Manager:** Simon Regan, Care Quality Commission

The team included CQC compliance and registration inspectors and a variety of specialists including a theatre specialist, a neonatologist consultant and a health and safety specialist.

No patients were interviewed during this inspection as the hospital was not yet open.

We spoke to several members of staff during the inspection, including clinical leads, staff within the commissioning team, ward managers, independent certifiers and medical device staff.

# Summary of findings

## How we carried out this inspection

The inspection took place on 22nd September 2015.

As the hospital was not open to patients at the time of the inspection, we inspected the most relevant parts of the 'safe' and 'well-led' domains.

To conduct this inspection we analysed data supplied by the trust, carried out a physical inspection of premises, facilities and equipment and held discussions with staff and management.

## Facts and data about this trust

Alder Hey Children's Hospital is in West Derby in the north of Liverpool, a city within the metropolitan borough of Merseyside. Liverpool is the most deprived of 326 local authorities in England. It has a population of around 467,000 (2011). However, 60% of the hospital's income is from specialised services across the North West, North Wales – a population of around eight million.

Alder Hey serves a catchment area of 7.5 million, with around 60,000 children seen in A&E each year. In addition to the hospital site at West Derby, Alder Hey has a presence at more than 40 community outreach sites and programmes and its consultants hold 800 clinic sessions each year from Cumbria to Shropshire, Wales and the Isle of Man to help and support care and treatment closer to home.

The trust provides over 270,000 episodes of care each year. In 2013/14 41,100 patients were admitted to hospital as inpatients or day cases, more than 177,200 attended outpatient clinics and 56,100 were treated in the A&E department.

Alder Hey Children's NHS Foundation trust offers 20 specialist services, including a designated national centre for head and face surgery and a centre of excellence for children with cancer, heart, spinal and brain disease.

Alder Hey Hospital is a teaching hospital and trains 958 medical and 556 nursing students each year. The hospital is also a designated Major Trauma Centre, and is one of four national Children's Epilepsy Surgery Service centres.

Alder Hey Children's Hospital is a paediatric research centre, leading investigation into children's medicines, infections, inflammation and oncology. At any time there are over 100 clinical research studies taking place, ranging from observational studies to complex, interventional clinical trials. Around 7,500 children and young people are involved in clinical trials each year.

Alder Hey Children's NHS Foundation Trust also provides a child and adolescent mental health service (CAMHS). Inpatient services, for children aged between five and fourteen, are provided at the Dewi Jones Unit which is based in Waterloo. Community services are provided by four teams, which are accessed via a single point of access at Mulberry House, based at the main trust site.

The CAMHS service support children experiencing emotional or psychological difficulties. It provides treatment and support for a range of conditions including anxiety and emotional disorders, depression, eating disorders, autism, obsessive compulsive disorders and self-harm.

# Summary of findings

## Our judgements about each of our five key questions

	Rating
<p><b>Are services at this trust safe?</b></p> <p>The new hospital was due to be deep cleaned prior to being opened. All areas we inspected had appropriate hand washing facilities with accessible personal protective equipment. There was at least one isolation room in each clinical area that contained a separate area for entering and exiting the room to avoid cross-contamination.</p> <p>New equipment had been commissioned for the new build and staff were in the process of receiving appropriate training. Areas had been identified where resuscitation equipment would be located but the equipment had not been put in place at the time of the inspection. There were sufficient oxygen and suction points in each clinical area.</p> <p>Each clinical area was light, spacious and child friendly. Each ward area incorporated a parent's room, a children's play area and teenage zone. There was a kitchen on every ward with a ward based chef who would cater for the individual needs of the child.</p> <p>The location was found to be compliant with the disability discrimination act with disabled toilets, wide corridors and doorways for wheelchair and lift access.</p> <p>There was an independent certifier in place who was appointed to certify that the building was safe to be opened to the public. The independent certification was provided to us as part of the inspection process.</p> <p><b>Cleanliness, infection control and hygiene</b></p> <ul style="list-style-type: none"><li>• The trust had a plan in place to ensure the hospital was deep cleaned prior to patients being moved to the new building.</li><li>• All areas had appropriate areas for segregation of waste and had appropriate clean and dirty utility rooms which ensured compliance with the infection prevention policy.</li><li>• Evidence was seen that the location was suitably equipped and supported to implement the trust's policies and procedures for hygiene and the prevention of health care acquired infections. Examples included isolation rooms, contracts for the disposal of clinical waste, as well as ample hand washing basins with lever taps and personal protective equipment throughout. At the time of the inspection there was no signage in respect of hand hygiene, however staff gave assurance that this signage was due to be in place prior to the move.</li></ul>	

# Summary of findings

- There was a sink at each bed space on the intensive care unit with accessible personal protective equipment available. Within pod one of the intensive care unit there were stainless steel, surgical sinks which had been requested by cardiothoracic surgeons in case of emergency surgery being required on the unit.
- Whilst on inspection we saw equipment that had been cleaned and moved into the new build. This equipment was covered and labelled to identify when the cleaning had taken place and by which member of staff.
- Each ward had at least one isolation room which included a separate room on entry. This room contained a sink and facilities to enable the use of personal protective equipment prior to entry into the room and on leaving the room to prevent cross-contamination.

## Environment and equipment

- Each hospital ward had been laid out in the same design with room numbers being consistent throughout the hospital. This was designed to assist the orientation of junior doctors and new staff members and to allow for consistency across the hospital. However, there were some variations to the layout to meet the needs of the ward speciality.
- Each single room had en-suite facilities and contained a sofa bed for parents. There were additional bathrooms located in the main ward areas and pull down beds at each bed space within the bays to allow parents to stay with their child.
- New equipment had been commissioned for the new build and staff were in the process of receiving appropriate training. On the intensive care unit, a new computerised system for the support and monitoring of patients had been commissioned and staff had received training on its use. There were sufficient electrical sockets, oxygen and suction points at each bed space.
- Each ward area incorporated a parents' area, play areas and teenage zones and each room was light, spacious and child friendly. There was a kitchen on every ward where there would be a ward based chef to cater for the individual needs of each child, ensuring they were served a healthy, freshly made meal of their choice.
- There were areas identified for resuscitation equipment but this had not been put in place at the time of the inspection. From inspecting the plans, it was identified there would be sufficient resuscitation equipment, oxygen and suction points throughout the hospital.

# Summary of findings

- The theatre suite was well laid out with a large recovery area. However, the doors within the theatre area had no door stops which would make moving patients difficult. The trust identified that they were aware of this issue and were looking at a solution.
- Within the theatre recovery ward, it was noted that the telephone and the controlled drugs cupboard were situated at the nurses' station by bay 13. If the nurse attending to patients in bays one to 11 needed to use the telephone or access controlled drugs they were unable to see their patients and respond if their condition deteriorated.
- During the tour of the theatre suite we were shown double frosted glass doors which were opened by the manager who explained that this entrance would be used for patients with behaviour that challenges.
- The female changing room on the theatre suite had no screen on entry into it and subsequently once the main door was open people could see directly into it.
- The location was found to be compliant with the disability discrimination act with disabled toilets, wide corridors and doorways for wheelchair and lift access.

## Assessing and responding to patient risk

- There was a nurse call system on each ward consisting of both visual and audible alarms. This was found to be working well on each of the areas that we visited with the exception of the intensive care unit where the emergency call alarm only activated in the pod where the emergency was, which was both visual and audible. The alarm did not activate in any other pod in the critical care unit. This was identified as a risk as there would not always be a doctor or consultant in each pod. Therefore, relevant staff would not be alerted immediately of an emergency situation. Additionally although the audible alarm sounded in both the staff nurse and the consultant room there was no visible screen to inform staff where the emergency was situated. We raised this with the nurse in charge of the unit who told us that she had raised it as a concern and was awaiting a response as to whether this could be rectified.
- The security system that was in place in the new build used an intercom system for visitors entering the ward and a swipe card system for staff. However, for exiting the ward, there was a push button allowing visitors to leave without being supervised. This meant there was a risk that children could leave the ward unsupervised and also raised a concern in relation to child abduction. The trust had completed a risk assessment for security in the hospital which did not cover this area.

# Summary of findings

- There was an outside play area on each ward area, which did not have an emergency call bell. The area was accessed by a push button system to enter and leave the area. The trust was in the process of writing a standard operating procedure (SOP) for the use of the play area, which was due to be finalised prior to the areas being used. We subsequently reviewed the SOP which identified that the play areas would remain locked and children would be assessed by a qualified nurse prior to them being able to access the area. In addition, all children and families would be supervised whilst on the play area.
- The play area for ward 1C was on the ground floor level and led directly onto the helipad and park, with no fenced area to separate the two. This allowed the general public open access to the play area and potentially the ward via the push button. The door leading from the play area led directly onto the neonatal unit. Following our inspection, the trust completed a risk assessment on the use of this play area and identified that was a need to have fence to separate the fenced area, with a completion date of December 2015. In addition, the play areas would be locked with key access only to prevent the general public having access to the ward.

## Medicines Management

- There was a new alert system in respect of controlled drugs for each area of the new hospital. This system alarmed when the controlled drugs cupboard was opened and notified the main monitor at the nurses' station to identify it was open. This was checked in several areas during the inspection and was found to be working well.
- There was a new computerised medication dispensing system installed in the new build which used fingerprint recognition to dispense and quality check medication; ensuring adequate stock was kept in each area. Training was underway to ensure all appropriate staff had the relevant competencies to use this system.

## Staffing

- The trust had determined nurse staffing levels for each ward and department as part of the planned move and told us that this would be reviewed on an ongoing basis to take into account the new environment and the different ways of working in a brand new building.
- Babies requiring neonatal intensive care were to be nursed on the paediatric intensive care unit following surgery. Babies were to be nursed using both the Royal College of Nursing (RCN)



# Summary of findings

(2013) and the paediatric intensive care society (PICS) (2010) guidance. Babies were transferred to the high dependency unit once their condition was stable enough. The staffing ratio on this unit was to be one qualified nurse to two babies.

- Staff did not hold an accredited post-registration qualification in specialised neonatal care (qualified in speciality (QIS)). However, staff on the neonatal unit received thorough training in partnership with a neighbouring trust to ensure all staff nursing neonates were sufficiently skilled. In addition all staff on the paediatric intensive care unit and neonatal unit were expected to undertake further specialist training dependent on their role, which included a neonatal model. At the time of the inspection 60% of staff had undertaken this training. The trust had recently employed new staff on the unit which subsequently reduced the overall percentage of staff that had completed this training.

## Are services at this trust well-led?

The trust had a 'big move plan' in place which provided a comprehensive strategy for all aspects of the hospital move. Schedule 12 "the building certificate" was due to be completed and signed off prior to the building being handed over to the trust on 30th September 2015. A random selection of test certificates was reviewed as part of the inspection and was found to be satisfactory. The safety and resilience of services and infrastructure and its testing was found to be satisfactory.

The children and young people's design group, which is made up of current and former patients aged 10-22, have had input on everything from the colour of the rooms, to the artwork displayed in the new hospital and what their wards should look like.

## Vision and strategy

- The trust had a very clear vision in relation to the move to Alder Hey in the park, which had involved both staff and patients. The trust vision was to be one of the recognised world leaders in research and healthcare and they were striving to achieve this with the building of the research and education centre and their strong links with a neighbouring university.

## Governance, risk management and quality measurement

- A big move plan was developed in October 2014 to ensure a robust strategy was in place for the move. This plan was

# Summary of findings

reviewed and found to be comprehensive covering all areas to assist in a smooth transition to the new build. In addition each clinical area had developed business continuity plans incorporating pertinent issues for their area.

- Schedule 12 “the building certificate” was due to be completed and signed off prior to the building being handed over to the trust on 30th September 2015. The production of the “building certificate” is the culmination and sign off of a logical process which involves the completion of 76 service / sub certificates of which each in turn have many commissioning test and validation certificates witnessed and signed off. A random selection of test certificates was reviewed and was found to be satisfactory.
- Building control (local authority) and the local fire officer had approved fire regulations and fire safety certification had been received by the trust.
- The safety and resilience of services and infrastructure and its testing was found to be satisfactory.
- There was a comprehensive risk register specifically relating to the new build in operation.

## Public engagement

- The new hospital has been designed by children and young people. Initially, in the planning stage in 2009, 1,000 patients drew pictures and shared their views on what their new hospital should look like. The children and young people’s design group, which is made up of current and former patients aged 10-22, have had input on everything from the colour of the rooms, to the artwork displayed in the new hospital and what the wards should look like.
- There was a multi-faith room within a ‘tree house’ within the main area of the hospital. This was a spacious tranquil room, accessible to all young people, parents and carers.

## Staff engagement

- Staff had been engaged with in relation to the new build. At the time of the inspection, the trust was in the process of orientating all staff to their new clinical area prior to the move.

## Innovation, improvement and sustainability

- A new research and education centre had been built alongside the new build. The work of this centre will involve partnership working with a local university and will allow researchers to develop safer, better medicines for use with children, infection, inflammation and oncology.

# Outstanding practice and areas for improvement

## Outstanding practice

- The children and young people's design group, which was made up of current and former patients aged 10-22, have had input on everything from the colour of the rooms, to the artwork displayed in the new hospital and what their wards should look like.

## Areas for improvement

### Action the trust **MUST** take to improve

**There were no actions that the trust must make to improve. However, there were some actions we felt that the trust **SHOULD** take to improve:**

- The trust should review ward risk assessments to ensure they consider and mitigate the risks of abduction and children leaving wards unnoticed.
- Review the female changing rooms on the theatre suite to ensure people could not see directly into it when the main door is open.
- Review the nurse call system system in the intensive care unit to ensure that it allows staff across the unit to be alerted immediately in an emergency situation.