

Alder Hey Children's NHS Foundation Trust

# Alder Hey Children's Hospital

## Quality Report

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This report describes our judgement of the quality of care at this hospital. 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.

## Ratings

Medical care

Good



Surgery

Requires improvement



# Summary of findings

## Letter from the Chief Inspector of Hospitals

Alder Hey Children's NHS Foundation Hospital is one of the busiest children's hospital 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 and leads on research into children's medicine. The trust also provides child and adolescent mental health inpatient and community services.

Before visiting the trust, we reviewed a range of information we held and asked other organisations to share what they knew about the trust

We carried out this responsive inspection on 19 and 20 April 2017 and 5 May 2017 following increasing concerns we had about the services. We inspected surgical and medical care services.

We did not inspect urgent and emergency services, critical care, neonatal services, end of life care, outpatient and diagnostic imaging or transitional services.

We last inspected the services in September 2015 and we rated the hospital as 'good' overall. Surgical and medical care services were judged to be good overall however, there were areas for improvement.

At this inspection we judged that surgical services requires improvement and medical care services as good. These ratings did not affect the Alder Hey Children's NHS Foundation Trust overall rating.

Our key findings were as follows:

### Medical care services

- Children, young people, and those close to them were treated with respect, dignity, and compassion.
- Staffing levels at the time of inspection met standards set out by Royal College of Nursing. Staff told us the trust found it challenging to recruit to junior doctor vacancies but had made an investment to train advanced nurse practitioners to partially address the shortfall.
- Medicines were safely stored in areas that were accessible to staff only, and each area had a dedicated pharmacist based on the wards.
- Staff were aware of their safeguarding roles and responsibilities and knew how to raise matters of concern appropriately.
- The environment was suitable and welcoming to meet the needs of children and young people and their parents and carers. The individual needs of patients were met and included children and young people with learning and physical complex needs.
- The ward areas we visited were visibly clean. We saw that staff followed good practice in relation to the control and prevention of infection.
- Assessment of nutrition and hydration formed part of the nursing record and was completed in all of the records we reviewed at the time of our inspection. We observed fluid balance charts recorded on the electronic record and children and young people had their weight recorded to inform dietary requirements.
- A range of menus were available and included age appropriate foods. Children and young people could also request additional options.
- Staff told us they felt supported by their immediate team colleagues and by senior managers and the working relationships between nurses and medical staff, and allied health professionals worked well.

# Summary of findings

- There were communication systems in place to keep staff informed which included newsletters, emails, and safety huddles. Staff confirmed they received updates and information via these systems.

However;

- We were not assured that children and young people were receiving treatment for sepsis that reflected national guidance. We found delays in the review process but the trust had commenced training to improve the management and identification of sepsis.
- The compliance rate for safeguarding training level three for children was on average 80%, which was below the trust's target of 90%. This was highlighted as an area of concern following the last inspection, however there had been an increase in compliance since the last inspection.
- There were low levels of compliance with mandatory training for medical staff within the medicine clinical business unit. Only 55.2% of medical staff were up to date at the time of the inspection which was significantly worse than the trust's target of 90%.
- Medical records were not securely stored on each ward we visited so confidentiality was at risk. Patient privacy and dignity was not fully maintained on wards we visited due to the display screen which was visible to people entering the wards.

Surgical services

- The hospital did not always ensure that a member of staff who was trained in advanced paediatric life support (APLS) was available on each department at all times. This did not meet the Royal College of Nursing (RCN) minimum staffing requirements. The trust had acknowledged this shortfall in a recent review but at the time of the inspection no formal plans had been made to implement the improvements.
- We found that compliance with mandatory training across surgical services was mixed. We had particular concerns that compliance with safeguarding level three training for surgical staff overall was only 67% at the time of the inspection. This had only slightly improved since the last inspection despite actions being put in place to increase compliance. At the last overall compliance with safeguarding level three training was 57%.
- On surgical wards there was a risk of abduction or that children were able to leave the ward unnoticed. This was because all doors could be opened from the inside and exit buttons were not out of reach from children. This risk was highlighted when the hospital was built in 2015 but it was unclear if this had been formally risk assessed or what actions had been taken to rectify this and it still remained a risk at this inspection.
- We sampled various departmental and clinical business unit risk registers and found that in a number of cases there was limited or no evidence that the risks had been reviewed fully or details about how the level of risk had been mitigated appropriately.
- Resuscitation equipment was available on every department. However, on the surgical wards the equipment was kept in different boxes and in different locations posing an additional risk.
- Compliance with infection control standards on the wards was consistently low ranging between 54% and 72%.
- There were currently no audits being undertaken measuring if patients were compliant with the fasting guidance before undergoing a surgical procedure.

However,

- There were sufficient numbers of staff on the days of our visit to safely care for patients. This was both on the wards and in theatre. In theatre staffing was in line with national guidance set by the Association for Perioperative Practice (AfPP).

# Summary of findings

- We found a strong, person-centred culture. Holistic care was provided by kind and caring staff who made every effort to provide support to patients and their parents.
- Patients and their parents were actively involved with decisions about care and treatment and their views and wishes were respected and valued.
- The surgical clinical business unit (CBU) held monthly morbidity and mortality meetings. We saw evidence of actions and learning that had been implemented following these meetings.
- We observed both the theatre and ward areas to be visibly clean. In theatre, there was an identified lead for infection prevention and control (IPC) and they undertook regular audits which showed that overall compliance had improved to 99%.
- There were procedures in place to provide fasting guidance to patients and relatives at the pre-operative assessment stage.
- Nutrition and hydration assessments were undertaken as part of the pre-operative assessment and for admissions to the inpatient wards. There was access to a dietitian during normal working hours between Monday and Friday if needed.
- A range of menus were available to all patients. We spoke to several patients and relatives, who told us that the food was excellent and that there was a lot of choice. Relatives were also able to order food.

We saw several areas of outstanding practice including:

- Each ward had their own dedicated pharmacist and medication was accessed by fingerprint technology this ensured that medication was secured and stock levels were adequately controlled.
- There was a chef allocated to each ward and all food was prepared on the ward.
- A hybrid theatre had recently been opened and a small number of operations had been undertaken using this facility. This was the first paediatric hybrid theatre to be opened in Europe.
- The hospital innovation team had worked collaboratively with a local university to develop 'virtual surgery' and to use high definition 3D printing so that organs can be viewed in much more detail. This allowed staff to 'virtually walk around' organs.
- The Trust had pioneered a headspace project which had created the world's first normal equivalent model of the human head. This enables comparison of pre-operative and post-operative 3D images of craniosynostosis patients.

However, there were also areas of poor practice where the trust needs to make improvements.

Importantly, the trust must:

- The trust must take action to ensure all staff who are involved with assessing, planning, and evaluating care for children and young people are trained to safeguarding level three in line with the safeguarding children and young people: roles and competencies for health care staff Intercollegiate Document (2014).
- The trust must take action to ensure all children and young people receive treatment in relation to sepsis within appropriate timeframes and have a process to monitor adherence to policy for patient's treated for sepsis.
- The trust must ensure that there is a member of staff trained in advanced paediatric life support available in every department at all times as outlined in the Royal College of Nursing guidelines.
- The trust must ensure that compliance with mandatory training is improved, particularly for medical staff.

# Summary of findings

- The trust must ensure that formal risk assessments are undertaken in all departments and all identified risks are captured on the risk register where needed.

In addition the trust should:

- Review the systems in place to enable staff to be clear about their roles and responsibilities during an emergency resuscitation scenario.
- The trust should ensure that all resuscitation equipment on inpatient wards is checked fully in line with the hospital resuscitation policy.
- Review the systems in place to mitigate the risk of children and young people absconding or being abducted from the ward areas.
- Expedite plans and actions to enable all staff to improve compliance with mandatory training to the trust's target of at least 90%.
- Have safe storage facilities in place for medical records on all wards to protect children and young people's confidentiality.
- Have disease specific pathways in place that are based on up to date evidenced based practice and a system for assurance during the period of transition from paper to electronic pathways.
- Improve staff appraisal rates to reach the at least the trust's target of 90%
- Consider training on the Mental Capacity Act for clinical staff being part of the mandatory training.
- Ensure visual display screens on the wall behind the desk to the entrance of wards do not compromise patient confidentiality.
- Identify review dates on all risk registers and review monitor that actions identified to mitigate risk are in place in medical services and surgical services
- Consider implementing a schedule for replacing curtains in the ward areas.
- The management team should consider ways in which to improve monitoring of surgical site infections for patients who have undergone non-specialist surgery.
- The management team should make sure that discarded controlled drugs across all departments are recorded appropriately.
- The management team should consider ways in which to improve the meditech system so that it accurately reflects the time that medicines had been administered, reducing the potential risk of a medication overdose.
- The hospital should find ways in which to make sure that there is always a supernumerary co-ordinator available in all areas, at all times to support staff.
- The management team should ensure that all staff receive a full annual appraisal in line with the trust supervision policy.
- The hospital should consider ways in which to reduce the number of cancelled surgical procedures, and when this does happen to facilitate a further appointment within 28 days of the cancellation.

**Professor Ted Baker**

Chief Inspector of Hospitals

# Summary of findings

## Our judgements about each of the main services

### Service

#### Medical care

### Rating

Good



### Why have we given this rating?

- There was a positive culture of incident reporting at ward level and there was evidence of learning and changes in practice following incidents. Staff felt supported by their immediate team colleagues and by senior managers.
- Staffing levels and skill mix was planned, implemented, and reviewed to keep children and young people safe.
- Consultants took part in a 'Consultant of the week' rota and were present in the hospital during times of peak activity.
- Age dependent pain assessment tools were in use and analgesia was available to children who required it.
- The environment was suitable and welcoming to meet the needs of children and young people and their parents and carers. Services were planned and delivered to meet the needs of local area, the North West of England, North Wales and the Isle of Man.
- We found consent to treatment was clearly recorded in the records we reviewed. We observed staff interacting with patients and their relatives with kindness, dignity and respect. Parents and patients told us they were included in decisions about their care and were kept well informed. The patients and parents we spoke with were extremely positive about the care they received and one parent told us "the staff are like a family, we will miss them when the treatment finishes".
- The trust had achieved 100% compliance with all cancer waiting times for the period April 2016 to March 2017 except for one month where they achieved 88%.
- There was a clear vision which was aligned with the trust vision to provide 'a healthier future for children and young people' which was underpinned by a set of values. We observed staff demonstrate the set of values when they were delivering care.

# Summary of findings

- There was a process in place to enable the performance, safety, and quality of the service to be reported and reviewed. Risk registers were held at ward and clinical business unit level with a process to escalate risks to keep children and young people free from harm.

## Surgery

### Requires improvement



- The hospital did not always ensure that a member of staff who was trained in advanced paediatric life support (APLS) was available on each department at all times. This did not meet the Royal College of Nursing (RCN) minimum staffing requirements
- We found that compliance with mandatory training across surgical services was mixed. We had particular concerns that compliance with safeguarding level three training for surgical staff overall was only 67% at the time of the inspection.
- We found that the governance framework for surgical services was relatively new and was still being embedded at the time of inspection.
- On surgical wards, there was no evidence of formal risk assessments being completed, such as formally assessing the level of risk posed by resuscitation equipment being in different ward areas. We were therefore unsure if all risks had been identified and mitigated appropriately. This was not line with the hospital's risk management strategy.

# Alder Hey Children's Hospital

## Detailed findings

### Services we looked at

Surgery and Medical care



# Detailed findings

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## Background to Alder Hey Children's Hospital

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. 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 hospital contains 270 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 lightening 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 hospital. 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.

The inspection team looked at the following core services in full at Alder Hey Children's Hospital:

- Surgery
- Medical Care

This was a responsive inspection in response to increasing concerns we had about the services at the hospital.

## Our inspection team

Our inspection team was led by:

**Head of Hospital Inspections:** Ann Ford, Care Quality Commission (CQC)

The inspection team included two CQC inspector managers, four CQC inspectors, a neonatal consultant, a lead nurse and a governance specialist.

# Detailed findings

## How we carried out this inspection

To get to the heart of children and young people's experiences of care, we always ask the following five questions of every service and provider:

- Is it safe?
- Is it effective?
- Is it caring?
- Is it responsive to people's needs?
- Is it well-led?

Before visiting the trust, we reviewed a range of information we held and asked other organisations to share what they knew about the trust. These included the clinical commissioning groups, Monitor and NHS England.

We spoke with children and young people and staff from the ward areas. We observed how children and young people were being cared for, talked with their parents and carers, and reviewed their records of personal care and treatment.

We would like to thank all staff, children and young people, their parents and carers and other stakeholders for sharing their balanced views and experiences of the quality of care and treatment at Alder Hey Children's NHS Foundation Trust.

## Facts and data about Alder Hey Children's Hospital

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 medical and 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. Between April 2016 and March 2017 312 clinical research studies took place, ranging from observational studies to complex, interventional clinical trials and 3372 children and young people took place.

Alder Hey serves a catchment area of 7.5 million

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.

The hospital treats 275,000 patients a year and 75% of children have their own room with pull out beds, offering more dignity and privacy to visiting families. All patients have easy access to relaxation areas including a giant indoor tree-house, play desks and fish tanks.







## Our ratings for this hospital

Our ratings for this hospital are:

# Detailed findings

	Safe	Effective	Caring	Responsive	Well-led	Overall
Medical care	Requires improvement	Good	Good	Good	Good	Good
Surgery	Requires improvement	Good	 <b>Outstanding</b>	Good	Requires improvement	Requires improvement
Overall	N/A	N/A	N/A	N/A	N/A	N/A

# Medical care

Safe	Requires improvement	
Effective	Good	
Caring	Good	
Responsive	Good	
Well-led	Good	
Overall	Good	

## Information about the service

The hospital is a regional Children's hospital that admits patients from a wide geographical area, including the North West of England, North Wales and the Isle of Man.

During the inspection, we visited all the wards where children with medical conditions were being cared for and treated. Each ward included a dedicated pharmacist, there were play specialists and a school for older children. There were facilities for parents / carers to stay with their child including overnight stay and food and drink preparation areas.

As part of our inspection we visited the following wards:

- Ward 4C was a general paediatric ward with 32 beds or cots
- Ward 3C included gastroenterology (conditions of the stomach and intestines), rheumatology (joint conditions), endocrinology (hormonal disorders), nephrology (kidney conditions) and respiratory (lung conditions) with 28 beds.
- Ward 4B included neurology (nervous system care), long-term ventilation and rehabilitation with 24 beds.
- Ward 3B was the oncology area (cancer care) that included 16 inpatient beds, 10 day care beds and a dedicated adolescent area.

We previously inspected this hospital in June 2015 where the safe domain only was inspected for medical services. This inspection was carried out in response to information we had received from routine monitoring and also information received from parents.

We spoke to 38 members of staff of all grades including: children's nurses, health care assistants, doctors, registrars, consultants, specialist nurses, physiotherapists, pharmacists, senior managers, the bed manager, domestic staff, and advanced practitioners. We spoke to three children and young people, two parents, and reviewed parts of 19 care records as well as reviewing further information received from the trust.

# Medical care

## Summary of findings

We rated medical care services at Alder Hey Children's NHS Foundation Trust as 'Good' overall because;

- There was a positive culture of incident reporting at ward level and there was evidence of learning and changes in practice following incidents.
- Medicines were safely stored in areas that were accessible to staff only, and each area had a dedicated pharmacist based on the wards.
- The trust had commenced training to improve the management and identification of sepsis. We observed sepsis posters on all the wards we visited to raise awareness.
- Staff were aware of their safeguarding roles and responsibilities and knew how to raise matters of concern appropriately.
- Staffing levels at the time of inspection met standards set out by Royal College of Nursing (RCN) standards (August 2013).
- The National Paediatric Diabetes Audit 2015/16 showed the trust had performed better than the England average for the number of individuals who had controlled diabetes.
- The trust had achieved 100% compliance with all cancer waiting times for the period April 2016 to March 2017 except for one month where they achieved 88%.
- The environment was suitable and welcoming to meet the needs of children and young people and their parents and carers. The individual needs of patients were met and included children and young people with learning and physical complex needs.
- Children and young people at trust level had a shorter average length of stay when compared to an average of four children's specialist trusts for both elective and non-elective medicine.
- Staff told us they felt supported by their immediate team colleagues and by senior managers and the working relationships between nurses and medical staff, and allied health professionals worked well.

- There were communication systems in place to keep staff informed which included newsletters, emails, and safety huddles. Staff confirmed they received updates and information via these systems.
- The trust had recognised the difficulty in recruiting junior medical staff and had made significant investment to support and train nurses to become advanced practitioners to bridge the gap.
- Feedback from parents and children and young people was consistently good. Parents, carers, and children and young people we spoke with told us "the staff were like a family, we will miss them when the treatment finishes".
- Children, young people, and those close to them were treated with respect, dignity, and compassion.
- Services were planned and delivered to meet the needs of local area, the North West of England, North Wales and the Isle of Man.

However;

- We were not assured that children and young people were receiving treatment for sepsis that reflected national guidance. We found delays in the review process of up to 18 hours when a high risk of sepsis alert presented. This was discussed at inspection and changes to the electronic system and the policy were planned to be reviewed within two weeks of the inspection.
- The compliance rate for safeguarding training level three for children was worse than the trust target.
- There were low levels of compliance with mandatory training for medical staff within the medicine clinical business unit.
- Medical records were not securely stored on each ward we visited. We were not assured that children and young people's confidentiality was being maintained.
- Patient privacy and dignity was not fully maintained on wards we visited due to the display screen which was visible to people entering the wards.
- We raised concern with the electronic record system in relation to alerting deterioration in children and

# Medical care

young people that may have a diagnosis of sepsis. The trust responded immediately with actions and a timeframe to ensure the pathway in the system was robust.

## Are medical care services safe?

Requires improvement



We rated medical care services as 'requires improvement' for safe because;

- The compliance rate for safeguarding training level three children was worse than the trust target.
- Records for two children with a history of sepsis were reviewed and both highlighted delays in treatment. We were not assured that children and young people were receiving treatment for sepsis that reflected national guidance. At the time of our inspection there were no assurance systems in place to audit and monitor adherence to policies in relation to managing the deteriorating patient.
- Resuscitation equipment was not kept together in one place and relied on several staff to collect equipment during an emergency. There was lack of clarity from staff over responsibilities when an emergency call was raised and both these concerns could present a risk of a delay in equipment being available.
- Children, young people, and visitors could leave the ward unsupervised by using the exit buttons as staff were not always available to observe the ward exit. This meant there was a risk of children absconding or being abducted.
- There were low levels of compliance with mandatory training for medical staff within the medicine clinical business unit.
- Medical records were not securely stored on each ward we visited. Confidential records were kept on the ward corridors, in unlocked trolleys, and not always supervised by staff as well as electronic screens that displayed patient details. We were not assured that children and young people's confidentiality was being maintained.
- Due to several electronic systems in place across the trust for medical records, it was difficult to navigate the patient's journey and this could result in all information not being reviewed when making clinical decisions about care.

# Medical care

However;

- The trust had an incident reporting policy available on the intranet. Staff knew how to access the policy and how to report incidents using the on-line reporting system. Incidents were investigated with actions for improvements identified. Staff gave us examples of how changes had been made following the learning that took place from reported incidents.
- The wards and clinical areas were visibly clean. Staff were aware of and adhered to current infection prevention and control guidelines such as the 'bare below the elbow' policy. Personal protective equipment such as aprons and gloves were readily available throughout the ward areas we visited.
- There was a comprehensive system in place to ensure all equipment was appropriately maintained and replaced as required. Although resuscitation equipment was not kept together in one place, a plan was in place to introduce standardised resuscitation trolleys for each ward within two weeks of the inspection.
- Medicines were safely stored in areas that were accessible to staff only and each area had a dedicated pharmacist based on the wards.
- Staffing levels at the time of inspection met standards set out by the Royal College of Nursing (RCN) standards (August 2013).

## Incidents

- The trust had an incident reporting policy available on the intranet. Staff knew how to access the policy and how to report incidents using the on-line reporting system.
- At the time of our inspection staff demonstrated how to report incidents. Feedback on the reported incidents was sent to staff via email. We reviewed the last nine incidents that were reported across two wards and found that eight of the nine incidents were reported on the same day as the incident occurred. One of the incidents was reported two days after the incident occurred and was in relation to out of date equipment which was replaced the day the incident was reported.
- Between February 2016 and January 2017, the trust reported no incidents which were classified as never events for the medicine CBU. Never events are serious incidents that are entirely preventable as guidance, or safety recommendations providing strong systemic protective barriers, are available at a national level, and should have been implemented by all healthcare providers. Each never event type has the potential to cause serious patient harm or death. However, serious harm or death is not required to have happened as a result of a specific incident occurrence for that incident to be categorised as a never event
- The medical specialties and medical clinical business unit (CBU) reported a total of 1,272 incidents for the period April 2016 to March 2017. Of these incidents, 1,073 were reported as causing no or minor harm, 191 were reported as near misses, two were moderate harm, and one was reported as a serious incident in accordance with the Serious Incident Framework 2015.
- The serious incident reported in November 2016 was categorised as sub-optimal care of the deteriorating patient. The root cause analysis (RCA) investigation identified that there was no formal procedure in place to recognise and escalate the deteriorating patient causing a delay in treatment.
- Actions were identified following the RCA investigation and we saw evidence at the time of our inspection that those actions were being implemented. Actions included: training in relation to Sepsis and the Paediatric Early Warning Score (PEWS) which is a tool to monitor whether a child's condition is deteriorating.
- We were given another example of learning from incidents following medication errors that were reported. The trust had introduced the use of a red apron to be worn when preparing medication to prevent disturbance, however, this practice was not observed across all the medical wards: we observed it in place on ward 3C but nurses on other wards were observed preparing and administering medication not wearing the red aprons.
- Safety huddles took place on the wards daily where any key messages were shared and staff we asked confirmed these took place.

# Medical care

- The medication safety officers had introduced the 'safer times' monthly poster which we reviewed for March 2017 which identified incidents reported in relation to medicines management. The poster identified errors and trends, and highlighted lessons learnt and 'Good Catch Awards' which reflected the near misses. There was also links to policies for staff to review. We observed the poster for March and February 2017 on the notice board in an office on ward 4C at the time of our inspection.
- We saw evidence of the monthly ward reports which informed the CBU of incidents.
- The duty of candour is a regulatory duty that relates to openness and transparency and requires providers of health and social care services to notify patients (or other relevant persons) of certain 'notifiable safety incidents' and provide reasonable support to that person. Some staff we spoke to were unfamiliar with the term 'Duty of Candour' however all could describe the principle and the circumstances in which it was used. We observed Duty of Candour within the actions in the RCA investigation for the serious incident we reviewed with a meeting with the family within a week of the completion of the investigation.
- We saw examples of completed mortality review forms that were comprehensively completed by consultants however; the morbidity forms were not always fully completed.
- The ward areas we visited were visibly clean. We saw that staff followed good practice in relation to the control and prevention of infection. Staff were aware of and adhered to current infection prevention and control guidelines which included the 'bare below the elbow' policy. Personal protective equipment such as aprons and gloves were readily available throughout the wards we visited.
- We observed 'I am clean' stickers in place on equipment and cots on the wards to alert staff at a glance that equipment or furniture had been cleaned however; there was no routine schedule in place to change the ward curtains.
- Hand sanitizing dispensers were available in each ward bay and outside each ward cubicle. We observed staff and carers using hand gel when entering the ward.
- On induction to the trust, nursing staff received training on the Aseptic Non Touch Technique (ANTT) which is a technique used to prevent microbial contamination of aseptic parts and sites by ensuring that they are not touched directly or indirectly. Audits took place across the medical wards by observing staff perform the process against a range of standards. The trust provided data for ANTT audits across six medical areas which equated to 69 observations for a range of periods from 11 August 2016 to 20 April 2017. We found three of the six ward areas achieved 100% compliance in this period.

## Safety thermometer

- As a children's trust, Alder Hey were not required to submit data as part of the NHS Safety Thermometer (a tool designed to be used by frontline healthcare staff to measure a snapshot of specific harms once a month).
- The trust had introduced a monthly 'Nursing Dashboard' which presented data relating to quality, bed occupancy, and workforce for each of the wards. Within the quality domain data in relation to hospital acquired pressure ulcers was collated. For the period January to March 2017 for four medical wards we found there had been one pressure ulcer reported on ward 4B.
- Each ward area had a Nursing Dashboard which captured a range of data including infection control. We reviewed the data for January to March 2017 for four of the medical wards which included 3B, 3C, 4C, and 4B. Monthly cleanliness scores ranged from 95% to 99% compliance.
- Monthly hand hygiene audits were completed. The four medical wards had achieved between 89% and 100% compliance for the three month period. There were 13 hospital acquired infections identified in the three month period of which nine were reported on Ward 3C.
- There had been two cases of meticillin-resistant staphylococcus aureus (MRSA) bacteraemia reported

## Cleanliness, infection control and hygiene



# Medical care

in the medical division between April 2016 and March 2017, both on ward 3C but there were no cases of Clostridium Difficile (C.Diff) reported within the same period.

- The results of a cot audit on ward 3B which identified that beds and chassis were dust free and 100% compliance against standards was achieved for the 18 assessed however, the audit was not dated.
- All the wards we visited had single bedded cubicles, this enabled isolation of children and young people who were diagnosed with an infectious disease. A process was in place to 'deep clean' cubicles following the discharge of all patients.

## Environment and equipment

- The trust had an Asset Management System in place which held information on medical devices owned by the trust. We reviewed the database at the time of our inspection which included the model, purchase date, replacement date, and maintenance schedule for each device. Engineers ran reports to identify which equipment required a maintenance review and the service ran a month end governance report.
- We reviewed the month end report for equipment receiving maintenance checks in March 2017 and found the service had achieved 87.8% against a key performance indicator (KPI) of 90% for high risk devices for example syringe drivers. For low to medium risk equipment for example blood pressure monitoring equipment and tympanic thermometers (recorded temperature via the ear), the service had achieved 79.2% against a KPI of 85%. An identifiable asset number was in situ on equipment we observed on the wards.
- We saw weighing scales had been calibrated and verification checked. The asset manager told us this was done on site by an external company every six months and by trading standards every two years.
- We observed cots, beds and equipment stored on the ward corridor areas on ward 4C and staff told us that storage space was limited. We found this was an identified risk on the ward risk register with action to identify an area to store the beds however; this risk had not been reviewed since 19 July 2016.
- Resuscitation equipment was available on all the wards we visited however there was no identified resuscitation trolley or similar which held all the equipment in one place.
- The wards had a trolley with a defibrillator machine, a separate cylinder for oxygen, a separate orange or silver case holding equipment and a separate case holding emergency medication. This equipment was not all stored in the same place on the wards and required several staff to take equipment to an emergency which could result in a delay to access equipment.
- The trust informed us at the time of our inspection that they had commissioned an external review of the resuscitation equipment, which supported our view that there could be a delay in accessing equipment and there were plans to have trolleys in place within the two weeks following the unannounced part of our inspection to enable resuscitation equipment to be kept together and be easily accessible so it could be transported to an emergency without delay.
- There was an additional orange rucksack with additional equipment for resuscitation held on each floor of the building. Staff on ward 3B told us that when a resuscitation call was raised the porter takes the rucksack to the area it is required however; not all staff present were aware of this process and there was some confusion when talking to staff whose responsibility it was to actually take the rucksack. One of the morbidity reviews we looked at highlighted that a porter needed to get the emergency drugs during resuscitation. It was unclear if all staff were aware of the process in place when an emergency resuscitation call was raised.
- Emergency medication that required refrigeration, were stored in locked fridges in locked rooms accessible by staff with swipe cards. On ward 4C, the portable suction machine was kept in a locked room that staff accessed by swipe card. This could present a delay in accessing equipment in an emergency.
- Entry to all the wards we visited was via an intercom system for visitors and a swipe card system for staff. To exit the ward visitors could exit by pressing a button that was in reaching distance of children. This presented a risk that children could leave the ward

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unsupervised and also raised a concern in relation to child abduction. This was raised at the focussed inspection on 22 September 2015 by CQC to review the new building and environment before the new hospital opened. However, we observed people leaving the ward unsupervised and the reception desk was not occupied by staff at several times during our inspection on wards 3C and 4C.

- We found separate fridges were available for the storage of breast milk on the wards, however; on one ward the fridge was in the unlocked pantry. We observed the storage and handling of breast milk on the medicine risk register where actions to reduce the risk of people other than staff having access highlighted. Staff told us that this area was for parents and two nurses checked the milk prior to handing to parents or carers. This presented a risk of cross contamination or tampering with the breast milk.
- Staff completed daily work sheets, for their allocated patients, for the checking of equipment, via the trusts electronic system.

## Medicines

- Medicines, including controlled drugs, were stored securely, stock levels checked twice daily and access was limited to staff.
- Fingerprint technology was in place for staff to gain access to stock medication including medications for discharge.
- There was a ward based pharmacist on wards 4C and 3B. Stock controls and expiry dates were monitored and take home medication was available from the wards when children and young people were discharged.
- A pharmacist told us that the fridges were linked to a central system that monitored the temperatures were in the appropriate range of two to eight degrees. The fridges alarmed if the temperature was out of range, alerting the pharmacist to investigate the reason for the alarm and take appropriate action. In addition to this fridge temperatures were monitored and recorded on paper daily by the ward housekeepers, although;

there were no ranges recorded. We found that there were omissions in recording temperatures when the housekeepers were not working, with no system to ensure they were checked by another member of staff.

- There was a specialist nurse, on ward 4B (neurology), who was a non-medical prescriber and advanced nurse practitioners on ward 3B (oncology) who could prescribe medication.
- There had been 30 medication incidents reported for the period January to March 2017 for the four wards we reviewed. We reviewed the 'safer times' poster for March 2017 to identify trends for medication incidents. We found these related to staff reporting that when they had signed for medication on the trust electronic system. The system did not show the medication had been signed for, dates when medicines were opened were not documented, and diagnostic tests not performed prior to administration of medication.

## Records

- Nursing records were held electronically and medical records were paper based with some elements available electronically.
- Since the last inspection in 2015 the trust has implemented an electronic patient record system. However there were different electronic systems used for medical records across the trust which presented difficulties when trying to navigate the full patient's journey. There was a different electronic system in place in critical care areas that was different from the system used on the medical wards.
- We reviewed ten sets of medical records and found all to be legible, signed and printed, with clear management plans in place. We saw evidence of disease specific pathways within the medical records.
- We reviewed electronic prescription charts which detailed the allergy status, medicines prescribed, doses, and frequency for administration.
- The records we reviewed included evidence of input from members of the multi-disciplinary team (MDT) and discussions with the children and young people's parents and carers.

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- Patient medical records were not securely stored in any of the wards we visited at the time of our inspection. Medical records were available on the ward near the nursing station in unlocked trolley's that were not always supervised by staff.
- Electronic screens were present that displayed patient details that were clearly visible to staff and visitors to the ward which included the patient name, this did not provide us with assurance that confidentiality was being maintained for children and young people on the wards.

## Safeguarding

- Safeguarding policies and procedures were in place across the trust and these were available electronically for staff to refer to.
- In discussion with us, it was clear that staff were aware of their roles and responsibilities, and knew how to raise matters of concern appropriately. Staff we spoke with were aware of the safeguarding team and how to access support and advice.
- A database of all referrals and notifications of attendance for children and young people known to a Social Worker was kept by the safeguarding department. During the period April 2016 to March 2017, 1,491 referrals/notifications were completed trust wide.
- We were provided with information from referrals made and evidence of multi-professional meeting records which clearly identified ongoing actions and the partnership working with local authorities and other agencies.
- Safeguarding training was part of the mandatory training matrix and required all patient facing staff to be trained to level three. The safeguarding children and young people: roles and competencies for health care staff Intercollegiate Document (2014), states that clinical staff who contribute to assessing, planning, and evaluating the needs of a child or young person and parenting capacity where there are safeguarding/child protection concerns should all be at Level three.
- We reviewed training compliance for safeguarding level three for wards 3B, 3C, 4B, and 4C and found compliance ranged between 78% to 85.2% with a mean average of 80% across the four wards. This was lower than the trust target of 90%.
- Child sexual exploitation and female genital mutilation were included in the safeguarding level three mandatory training.

## Mandatory training

- Mandatory training was provided by the trust and attendance at modules were determined by staff roles. The mandatory training programme for all staff included modules for fire, major incidents, handling complaints, information governance, fraud awareness and bullying and harassment. The additional modules for clinical staff included:inflection control, safeguarding level three children, medicines management and paediatric life support. Each module had a timeframe for completion.
- Staff told us they were alerted via email when they were approaching renewal and were required to attend mandatory training
- Staff told us there was a mandatory training day available on a Friday once a month to complete a range of modules.
- At the time of our inspection we reviewed mandatory training compliance for nursing staff for wards 4B, 4C, 3B, and 3C for March 2017 and all were achieving between 80.7% to 88.1% with a mean average across the wards of 85.4%. However, the medical staff in the medical CBU were achieving 55.2% which was significantly lower than the trust target of 90% compliance. This compliance rate for medical staff was worse than the findings in our previous inspection in May 2014 when the compliance for mandatory training was 67%.

## Assessing and responding to patient risk

- The trust used a Paediatric Early Warning Score (PEWS) system, which is a tool designed to identify children who are at risk of their clinical condition deteriorating. PEWS were used to monitor the condition of a child or young person and was automatically populated on the electronic record when physiological observations were recorded.

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- In November 2016 there had been a serious incident which resulted in an unexpected death. Following investigation it was identified that all observations were not recorded to generate an accurate PEWS and escalation of PEWS was not done in a timely manner.
- A sepsis steering group was set up to monitor sepsis in the trust. A training programme in relation to sepsis was set up and delivered by a designated team that included: awareness of the PEWS policy, the Sepsis Policy and pathway, the completion of scenarios on-line and the completion of a competency document for all clinical staff.
- Ward 3C were the first ward to do the sepsis training in February 2017 and at the time of our inspection 44 out of 50 clinical staff had completed all the training components.
- Ward 4C had gone live with the sepsis pathway the week prior to our inspection. We reviewed training records which identified 31 out of 66 clinical staff had completed all components of the training. The permanent night staff on the ward had not completed the training however, the Band 6 staff members that rotated onto night shifts had completed all the training.
- We asked a Band 5 staff nurse what action they would take if a patient had a PEWS score of three. We were told that a repeat set of observations would be taken immediately and if there were no significant change they would continue to monitor. The nurse informed us if a patient had a new PEWS of four or more they would contact the registrar to review. This action reflected the trusts PEWS Policy.
- Medical staff told us that during out of hours, if a patient presented with a new PEWS of four, the trust policy advocates a discussion with the consultant however, if the registrar is satisfied with the patient's condition they did not contact the consultant at home. At each recording of physiological observations on the electronic system there was a prompt with options to consider if a patient had any identified risks of developing sepsis. When the physiological observations were input, a PEWS score was calculated and there was an additional prompt which identified if there is a medium or high risk of sepsis. This is displayed for the clinician to consider again if a patient may have sepsis.
- We reviewed an electronic record where a child had an increased respiratory rate which had triggered a moderate to high risk of sepsis and a PEWS score of nil. This prompted the clinician to consider and record if the child could have sepsis. Nursing staff used their clinical judgement and could document that there was no risk however: Although the trust agreed policy was that all health care assistants worked under the direct supervision of a qualified nurse we were made aware of a risk that when health care assistants inputted the physiological observations they could also complete this area of the assessment without discussion with a qualified clinician.
- During the inspection, records for two children with a history of sepsis were reviewed and both highlighted delays in treatment. Both these children had alerts on the electronic system saying 'high risk of sepsis, immediate review' for up to 18 hours, yet there was no review in that time period, and it was only after 12 hours in one case and 18 hours in the other, that they were escalated, for medical review and antibiotics administered in a timely manner. There was a risk of delay in on-going treatment. There were two early warning systems running concurrently where one (the PEWS) can give a score of zero yet the other (sepsis risk) can say 'high risk of sepsis, immediate review' or 'moderate risk of sepsis, urgent review' calculated from the very same parameters entered into the electronic system. This is supported by national guidance which advocates separate sepsis scores.
- This was raised with the Executive Team at the time of the inspection and as a result of the feedback of our findings, the sepsis steering group agreed that the escalation advice in the electronic system could lead to confusion about appropriate action to take. The trust proposed changes to the way this presented to staff on the system to be completed within two weeks along with updating the sepsis policy to reflect the changes.
- The trust required registered nurses to complete a paediatric life support course that included 'intraosseous infusion' (injecting into the marrow of a

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bone) as well as 'cardiac arrest rhythms and defibrillation familiarisation'. We reviewed data from the 5 May 2017 for wards 3B, 3C, 4B, and 4C and found paediatric life support mandatory training compliance ranged from 72.9% to 97.3% across the four wards with a mean average of 85.9% compliance. The trust target was 90%.

- The Royal College of Nursing document defining-staffing levels for children and young people's services, identifies at least one nurse per shift in each clinical area (ward/department) to be trained in Advanced Paediatric Life Support (APLS) depending on the service need as a core standard to be applied in services providing health care for children and young people.
- The trust told us that staff rotas were completed to ensure appropriately trained staff were available at any time of day or night and this was monitored by the ward managers. We were told that all senior medical staff and the out of hour's senior nursing team were trained in advanced paediatric life support (APLS) to ensure that wards could access a health professional with the necessary emergency skills whenever needed. There were also some nurses trained to APLS level on the medical wards.

## Nursing staffing

- Staff informed us that the staffing levels were based on the Royal College of Nursing (RCN) standards (August 2013) which recommends a staff ratio of 1:3 (nurse:children) for children under two years of age and 1:4 for children above two years of age.
- At the time of our inspection, ward 4C worked to nine nurses on a day and night shift and two health care assistants. On the 19 April 2017 the ward had eight nurses and four healthcare assistants on duty during the day. The ward was split into four pods and each pod reviewed the acuity twice daily. There were 31 inpatients on the ward of which 14 were under the age of two years of age. This meant that the number of staff met the RCN recommendations. For the same date we reviewed the staffing on ward 4B where there were 17 inpatients with five nurses and six healthcare assistants on duty which also met the requirement.

- Staff worked 'long days', 'nights' or internal rotation that was a combination of day and night duties. The numbers of staff required were the same over the 24 hour period.
- The sickness rates for registered nurses in the medical CBU for wards 3B, 3C, 4B and 4C were an average of 6.9% between April 2016 and March 2017 and for health care assistants the sickness rates were an average of 5.5% for the same wards and the same time period.
- Rotas were planned so that the nurse- in charge could act as supernumerary (surplus to as to oversee and co-ordinate care through the wards), however; in the event of unplanned absences such as sickness, the nurse in charge assisted in patient care also.
- Between April 2016 and March 2017, the turnover rate for registered nurses was an average of 0.6% per month and the turnover rate for health care assistants was an average of 1.1% per month for the same time period.
- We received the staffing numbers at the time of inspection. These showed the numbers of staff were less than planned for each of the medical wards of about one registered nurse, although ward 3C had the planned number. This resulted in the ward co-ordinators who are usually supernummary having to participate in providing care to patients. The ward nursing dashboards, we received, included the available staffing between January and March 2017. That showed an average of 85% of the staff were available to work across the four wards.
- We observed a ward handover from the night staff to the day staff on ward 4C. All the day staff attended a safety briefing where they were alerted to particular concerns for the ward. Staff were provided with printed handover sheets which included patient details. The nurse in charge on nights did a handover for the whole ward to the nurse in charge on days. The other staff members attended a detailed handover for their allocated patients. This meant that if a nurse needed to be moved to one of the other three pod areas on the ward they would not have received a handover for those patients.
- Any shortfalls in staffing levels were supplemented by bank or agency staff. Between April 2016 and March



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2017 the medical CBU areas: ward 3B filled an average of 29 shifts per month with bank staff, for 3C it was 80 shifts, for 4B it was 24 shifts and for 4C it was 55 shifts. Agency staffing was less with 3B filling two shifts on average per month; for 3C it was 11 shifts, for 4B it was one shift and for 4C it was nine shifts filled by agency staff on average per month for the same time period.

- On ward 4C there was a tendency to use their own staff to cover bank shifts. Staff told us this had been difficult of late as staff had experienced being moved to another ward so had declined to work additional hours.

## Medical staffing

- We observed a medical handover which took place verbally walking round the ward and seeing patients. We saw that observations recorded on the electronic system were reviewed and observed discussions with parents however: there was no registrar in attendance on this ward round which meant there was lack of support for junior doctors when complex issues arose.
- Following the inspection we were told that there were three handovers every day. The morning handover was with the team following the post take ward rounds; there was a consultant led evening handover from 4pm-5pm followed by ward rounds and a Specialist Registrar led night handover.
- The 'consultant of the week' was available daily for each ward.
- Junior doctors could access specialist registrars via a bleep system if they required assistance.
- We reviewed the medical rotas for March 2017 and found there was 24 hour cover by consultants and senior doctors.
- From April 2016 to March 2017 the estimated whole time equivalent (WTE) locum usage for medicine was on average 11 WTE per month.
- The medical staffing turnover trust wide was 1.2% from April 2016 to March 2017.

- Staff told us the trust found it challenging to recruit to junior doctor vacancies but had made an investment to train advanced nurse practitioners to partially address the shortfall and we observed advanced nurse practitioners on wards.

## Major incident awareness and training

- Major incident awareness training formed part of the mandatory training. There was a policy in place should a major incident occur.
- The hospital had an emergency power supply which was tested on a regular basis by the on site maintenance team.

## Are medical care services effective?

Good



We rated effective as 'good' because:

- The service used national and best-practice guidelines such as those from the National Institute for Health and Care Excellence (NICE) to determine care and treatment provided. Records we reviewed confirmed there were a number of evidence-based pathways in place.
- Age related pain assessment tools were available to assess and respond to children and young people who were experiencing pain. There was access to a pain specialist team if additional review was required.
- Nutrition and hydration needs were assessed on admission, all food was prepared on the ward in the kitchen, and there was access to a dietician if required. Children and young people and visitors all gave positive feedback in relation to the food and the choice available. We found menus on the ward to be age appropriate.
- The risk of readmission for non-elective medicine was higher when compared to an average of children's specialist trusts but remained within the expected ratio for haematology, oncology and respiratory medicine.

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- There were processes in place to obtain informed consent either from a young person or from their parent or carer on their behalf. Staff cited the safeguard team as a point of contact if they had any concerns in relation to consent.

However;

- It was not clear when certain disease specific pathways had been reviewed or if based on up to date practice; this may place a child or young person at risk.
- We requested outcomes for National Clinical Audits however: the data was not available from the trust.
- Mandatory training did not include mental capacity act training.
- Staff appraisals were below the trust standard at March 2017.

## Evidence-based care and treatment

- Policies and procedures were in place and could be accessed via the trust's intranet and staff we spoke with were aware of how to access them.
- The service used national and best-practice guidelines such as those from the National Institute for Health and Care Excellence (NICE) to determine care and treatment provided.
- We observed the pathway for children and young people with newly diagnosed diabetes which was dated version 3, 2013. The medical pathway coordinator informed us that the newly diagnosed diabetes pathway was in the process of being updated and was waiting for sign off however, this had been in progress for at least two years.
- We observed the pathway for diabetic ketoacidosis had been implemented in the accident and emergency department where a child presented and the pathway was ongoing when the child was admitted to the ward. We observed medication prescribed and administered in line with the pathway along with the recording of hourly physiological observations.
- We reviewed the pathway for the management of difficult to control asthma which was dated version 7, 2015 and referred to the British Thoracic Society (BTS)

Guidelines for management of asthma (2007) however; new guidance on the management of asthma was published by the BTS in September 2016. We spoke with a member of the respiratory team who informed us that this pathway was used on home visits and that there was a different acute asthma pathway that was used for inpatients. We reviewed the acute asthma pathway which was version nine, dated January 2013 and therefore could not have taken account of the 2016 guidance from the BTS.

- We spoke with the Medical Pathway Coordinator about the process for updating and reviewing pathways. We were told that due to the introduction of the electronic records system, pathways were being reviewed and updated when they were merged onto the system. We asked how the trust were assured that children and young people were given the most up to date care and there were no systems in place to provide this assurance. The delay in reviewing and updating disease specific pathways had not been captured as a risk on the risk register.
- The trust Sepsis Steering Group, which included senior clinicians from across the trust, had developed a sepsis pathway to implement the NICE sepsis guidance from July 2016. This was prioritised for rapid development in February 2017 within the hospital's electronic record, and was being introduced across the trust at the time of our inspection using a phased implementation process.
- The process was introduced on one ward from the 13 March 2017 and was being rolled out to other wards across the clinical business unit (CBU) with complete implementation planned to be in place across the CBU by 30 June 2017. A monitoring and evaluation process was due to be in place by 31 May 2017 and we were told it would include data from the introduction of the process and include an audit of the Paediatric Early Warning Score (PEWS).
- We reviewed the trust Guidelines for Care and Maintenance of Intravenous Access Devices in Paediatric Patients which was dated February 2017 and was evidenced based. We observed staff at the time of our inspection providing care in line with the policy.

## Pain relief

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- The medical wards used age dependant pain assessment tools. For younger children, observations and crying were used to assess pain. There was a faces pain rating scale in place where children could point to a picture that most represented how they felt and for young people, pain was assessed using a number scoring system.
- We observed a pain audit to measure compliance against three standards which included: Initial pain assessment was completed, daily pain assessment was completed, and pain score frequency was documented. The audit was performed on wards 3B and 3C in April 2017 which included six patients. The audit identified 100% compliance against all three standards for both wards however: the audit only included six patients and a larger audit may provide more assurance.
- The wards had access to the pain specialist team and play specialists. Pain was discussed at handovers and multi-disciplinary meetings where patients care was reviewed.

## Nutrition and hydration

- Assessment of nutrition and hydration formed part of the nursing record and was completed in all of the records we reviewed at the time of our inspection. We observed fluid balance charts recorded on the electronic record and children and young people had their weight recorded to inform dietary requirements for example: children with failure to thrive, diabetes, and those receiving intravenous feeding as total parenteral nutrition (TPN) to enable correct provision of fluids and nutrients.
- TPN regimes were reviewed and prescribed by the medical team and were prepared and stored in pharmacy and were delivered to the ward daily.
- The wards had access to a dietitian and were aware of how to refer to the service.
- All food was prepared on the wards in the ward kitchen by a ward based chef. Special milk preparations were prepared off the ward in a central place or were delivered ready prepared.
- There was a separate kitchen area on the wards for carers and parents and they could also request a meal from the menu for a small charge.

- We observed breast milk clearly labelled and stored in designated fridges.

## Patient outcomes

- Between 1 December 2015 and 30 November 2016, elective patients for rheumatology, gastroenterology and oncology had a mixed performance when compared to the average risk of readmission of the four children's specialist trusts in this core service with a higher proportion of patients readmitted for oncology.
- For non-elective medicine, the risk of readmission for Alder Hey was higher when compared to an average of children's specialist trusts but remained within the expected ratio for haematology, oncology and respiratory medicine.
- A project to develop a model of care for children with complex needs called potential, organised, involved, needs-based and together (POINT) was introduced. The project, which focused on children who had been in hospital for more than 30 days, found that, by focusing on aspects of the child's care journey, there was a reduction in the length of stay for these children and young people.
- The trust measured HbA1c as an indicator of how well an individual's diabetes was controlled over time. The trust performed better than the England average for the period 2015 to 2016.
- There had been 402 medical outliers (patients on a different ward to the one they would require) on surgical wards for the period April 2016 to March 2017 with the higher numbers from November 2016 to February 2017, which would represent the time of winter pressures.
- During the reporting period 1 April 2016 to 31 March 2017, the trust submitted data to 10 of 11 National Clinical Audits and five National Confidential Enquiries that it was eligible to participate in. The trust had submitted data to the ulcerative colitis and crohns disease national audit, the paediatric diabetes audit, and Asthma care in Emergency Departments Royal College of Emergency Medicine audit.



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- We requested data for outcomes of National Audits however: the trust did not provide any data only the numbers of cases submitted to the audits. We were therefore unable to make any comparisons to benchmark against other trusts.
- We reviewed six patient records and found that all six patients were seen by a doctor within 43 minutes of arrival with the shortest wait time being 35 minutes.

## Competent staff

- Staff identified their learning needs through the trusts appraisal process. We reviewed the appraisal rates for three wards at the end of March 2017. Ward 3B had achieved 85%, ward 3C had achieved 84%, and ward 4C had achieved 72%. Although this was lower than the trust standard of 90%, it was better than the overall trust compliance of 67%.
- Induction processes were in place for new staff and students. Preceptorship was in place for newly qualified staff and included demonstration of competencies with equipment. A newly qualified nurse showed us their in-house workbook where we observed clinical competencies had been completed for a range of clinical procedures for example, intra venous training for a newly qualified nurse.
- We spoke with a newly qualified staff nurse who informed us they had received a six week induction programme and remained supernumerary (out of the staffing numbers for learning purposes) for their first four weeks.
- The respiratory physiotherapy team described how they had weekly training sessions on various subjects and also shared findings from literature reviews. There was an annual competency based review which included a peer review of three cases to review assessment and treatment plans.
- The cystic fibrosis team identified attendance at the annual cystic fibrosis conference and staff were supported to attend the cystic fibrosis European conference as a way to share learning.
- Doctors had an induction meeting and training when they commenced at the trust. Doctors we spoke with confirmed they had attended the induction training which included the management of sepsis.
- Ward 4B had a training room on the ward where staff could be trained and assessed on a range of procedures.
- The medicine CBU was meeting standards set out in Facing the Future: Standards for acute general paediatric medicine services (2015). We saw evidence in medical records which included; being seen by a middle grade or consultant within four hours of attendance, there is at least one medical handover in each 24 hour period led by a consultant, consultants were available in the hospital during peak times, and there was a 'consultant of the week'.
- Learning from incidents had prompted the trust to train staff on the screening, management, and the policy, in relation to sepsis and the deteriorating patient. This training had commenced prior to our inspection and was being rolled out to wards with a comprehensive training plan delivered on the ward by a separate team.
- We were told that all senior medical staff and the out of hours senior nursing team were trained in advanced paediatric life support (APLS) to ensure that wards could access a health professional with the necessary emergency skills whenever needed. There were also nurses trained to APLS level on the medical wards however: not all nurses had received this level and had completed the PLS training.

## Multidisciplinary working

- Good multidisciplinary team (MDT) working was noted in areas we visited. Clinical staff told us there were good working relationships between medical and nursing staff.
- Our observation of practice, review of records, and discussion with staff confirmed effective MDT working practices were in place. This included working with internal services including radiology, pathology, and pharmacy and external services including specialist doctors across the country and countries outside of Great Britain.
- In the CQC Children's survey 2014 the trust scored 8.62 out of ten for the question 'Did the members of staff caring for your child work well together?' This was about the same as other trusts.

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- A child and adolescent mental health service (CAMHS) was available at the trust and referrals to the service could be made.
- We reviewed meeting records for children and young people where a safeguarding concern had been raised and these evidenced close working with social services, local authorities, health visitors and the police.
- Play specialists were available on the wards and there was also a school available on ward 3C.
- A consultant from the trust informed us at the time of our inspection that the trust was actively engaged with experts in other centres to understand how both adult and paediatric providers were implementing sepsis pathways so they can share learning.
- The cystic fibrosis team were a fully integrated team which included: advanced nurse practitioners, specialist nurses, consultants, physiotherapists, dieticians and a pharmacist. The team worked with a network of trusts in the North West and Wales to provide MDT annual reviews for children in their care.
- Ward 3C had a training room where they were able to provide training to staff in the community that would be providing care to children and young people on discharge. Staff told us that community staff were invited to the ward to be trained and to provide care to the patient under the supervision of ward staff. This provided the opportunity to build working relationships and communication networks to support safe discharge for children and young people.

## Seven-day services

- The medical wards had seven day access to services including radiology, pharmacy, and some allied health professionals which included physiotherapists.
- Medical cover was provided and there was consultant cover provided on-call.
- Two medical staff we asked both told us they could access registrars and consultants out of hours and had not experienced any difficulties.
- Ward rounds took place daily and all new patients were seen by the medical team at weekends.

- The physiotherapy service was available 24 hours a day with an on-call system in place after 9pm to 8am each day.
- Take home medications were stored on the ward and could be dispensed out of hours to prevent delays in the discharge process.

## Access to information

- Policies and procedures were kept on the trusts intranet and staff we spoke with confirmed they were familiar with how to access them.
- Staff could access diagnostic results for example blood tests and x-ray results via the electronic system.
- The trust had a discharge planning policy which was due for review in September 2018. We saw evidence in the patient's records that the policy was being followed: there were discharge summaries to the GP, referrals to community and others services where required with follow up arrangements.
- Young people or their carers were given a copy of the GP discharge letter at the time of discharge.
- Staff received information in a variety of methods which included: emails, newsletters and ward 'huddles' we observed this on inspection and staff we asked confirmed this.
- There was immediate telephone advice available from specialist paediatricians for acute problems.

## Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- Staff told us that formal consent to treatment was assessed and gained from the medical team. Where appropriate some young people were able to provide their own consent to treatment.
- Staff described how they worked on the principle of verbal consent for some procedures such as taking observations of temperature and pulse.
- Staff could describe the principles of Gillick competency used to assess whether a child had the maturity to make their own decisions and how decisions were made with the involvement of parents.

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Gillick is a term used to describe if a child under 16 years of age is able to consent to their own medical treatment without the need for parental permission or knowledge.

- Nurses we asked were not clear about Fraser guidelines which are specifically related to consent for contraception and sexual health.
- We found consent had been gained and was clearly recorded in the records we reviewed.
- Staff told us they would gain advice from the safeguarding team when dealing with parents who may lack capacity however: staff explained that any parents that may lack capacity would already be known to social services and their nominated keyworker would attend the hospital to aid support in this instance.
- Training in relation to Mental Capacity Act (2005) did not form part of the mandatory training requirements.

## Are medical care services caring?

Good



We rated medical care services as 'Good' because;

- Children and young people, carers, and parents we spoke with at the time of our inspection were complimentary about the staff that cared for them. We observed staff treating patients and their families with compassion and respect.
- At the time of our inspection we observed staff responding to parent's emotional needs and supporting and including the sibling of a child receiving treatment.
- Parents and patients told us they were included in decisions about their care and were kept well informed. There was evidence that they were valued as individuals and partners in the care provided.
- Parents told us "the staff are like a family, we will miss them when the treatment finishes".

- The NHS Friends and Family Test (FFT) asks patients and their carers how likely they are to recommend a hospital after treatment. We reviewed the results for four medical wards for December 2016 and January 2017, which were positive.
- There were a range of clinical nurse specialists available to support children and young people and referrals could be made to mental health services if required.

However;

- Patient privacy and dignity was not fully maintained on wards we visited due to the display screen which was visible to people entering the wards.

## Compassionate care

- Medical services were delivered by caring staff. Staff were committed and compassionate about their role. We observed staff interacting with patients and their relatives with kindness, dignity and respect.
- The children and parents we spoke with were extremely positive about the care they received and one parent told us "the staff are like a family, we will miss them when the treatment finishes".
- The trust performed about the same as the England average for all 14 of the questions relating to compassionate care in the CQC Children's survey 2014.
- The NHS Friends and Family Test (FFT) asks patients and their carers how likely they are to recommend a hospital after treatment. The FFT Test response rate at the trust in January 2017 was 22% which was about the same as the England average of 23%. We reviewed the scores for wards 3B, 3C, 4B, 4C, for December 2016 and found three of the wards scored 100% with the other scoring 96%. In January 2017 the scores ranged between 87% to 100% with two of the four wards achieving 100%.
- We observed the digital display screen containing inpatient details was visible to the public at the nursing stations on entering the ward. This meant that there was a risk that their privacy and dignity may not be fully maintained.

## Understanding and involvement of patients and those close to them

# Medical care

- In the CQC Children's Survey 2014, the trust performed about the same as other trusts for 16 out of 19 questions relating to understanding and involvement of patients and those close to them. The trust performed better than other trusts for keeping patients and relatives informed, and communicating with children in a way they understood.
- In the CQC Children's survey 2014 the trust scored 9.01 out of ten for the question 'Did a member of staff agree a plan for your child's care with you?' This was about the same as other trusts.
- The friends and family test results in March 2017 for ward 3B identified that all 16 respondents had received information to enable them to make choices about their care.
- A parent showed us the patient information folder they were given, the parent and the child both said they had been involved in all aspects of care with doctors and nurses discussing options with them both.
- Peer support groups and trips, were organised, for children, young people and those close to them, particularly in the oncology service, such as weekly movie and pizza events.

## Emotional support

- Children requiring child and adolescent mental health services (CAMHS) admitted to the medical wards were supported by staff however; there was no registered mental health nurse on the ward.
- We observed a parent becoming emotionally upset on the ward and observed staff responding to them and offering support.
- We observed a play specialist playing with a patient's sibling whilst the child and parent went off the ward for treatment. The parent told us the sibling was always kept involved and enjoyed the trips to the hospital.
- There was an ablution room for patients and carers to perform ritual ablutions available within a "tree house" in the main area of the hospital. The "treehouse" included a quiet room with kitchen facilities and a chaplaincy and was accessible to all children and young people, parents, and carers.

- Clinical psychologists provided therapies in various forms for adults and children and staff could make referrals for the families to the service. There was an on-call psychologist available Monday to Friday. We saw evidence that counselling services were offered in the morbidity and mortality reviews.
- There were a range of clinical nurse specialists available to support children and young people and their families and those close to them.

## Are medical care services responsive?

Good



We rated medical care services as 'Good' for responsive because:

- Services were planned and delivered to meet the needs of local area, the North West of England, North Wales and the Isle of Man.
- Parents and young people we spoke with told us they felt their individual needs had been considered when their care and treatment was planned.
- The trust had achieved 100% compliance with all cancer waiting times for the period April 2016 to March 2017 except for one month where they achieved 88%.
- The environment was suitable and welcoming to meet the needs of children and young people and their parents and carers.
- Children and young people had a shorter average length of stay when compared to an average of four children's specialist trusts for both elective and non-elective medicine.
- There was a multi faith spiritual care service team and a 'treehouse' which included a quiet room with kitchen facilities and a chaplaincy and was accessible to all young people, parents, and carers.
- There were various ways that people could make a complaint and this included: via the website, writing or speaking to the Patient and Liaison Service or speaking to staff on the wards.

## Service planning and delivery to meet the needs of local people

# Medical care

- The trust accepted admissions from the local area, and the North West of England North Wales and the Isle of Man for some specialities.
- The hospital had a helipad on site to enable speedy access for emergency cases.
- Wards worked with other referring trusts and local agencies to coordinate care for children and young people. We saw evidence of this documented in the patient records we reviewed.
- The trust performed about the same as other trusts for all four questions relating to responsiveness in the CQC Children's survey 2014.
- Parents were able to stay overnight with their children and there were pull down beds in the ward cubicles, that were en-suite.
- There was open visiting for parents and carers.
- There was access to facilities in the 'Ronald McDonald House' near to the hospital for parents to stay that needed to be close by or had a lengthy journey to the hospital.
- There were outside areas to play however: these areas were only accessed by staff via a swipe card system and only used under supervision. The outside areas on ward 3B could not be used and windows were kept closed due to the demolition of the old hospital and the risk of dust.

## Access and flow

- Children and young people were admitted to the wards from a variety of routes including the emergency department, GP referral, transfers from other departments within the hospital, transfers from other hospitals, and direct self-referral to the ward.
- The total number of admissions from January 2017 to March 2017 was 1,748 for the four wards we reviewed. Bed occupancy for the same period ranged from 67.9% to 94.9%.
- Ward 3C had the highest occupancy rates; however, at the time of our inspection there were available beds.
- Patients who received Oncology or Haematology services that become unwell at home between the hours of 08:30 and 17:00 Monday to Friday could phone the day care number and could be assessed on

ward 3B. Outside of these hours patients could contact ward 3B and receive an assessment using the telephone triage pathway which we observed on the ward at the time of our inspection. If the triage process identified the need to attend the hospital, the patient then attended the Emergency Department. Patients were given an Alert Card which they presented at the reception so they could be directed to a cubicle and be assessed by the triage nurse.

- Between 01 December 2015 and 30 November 2016, patients had a shorter average length of stay when compared to an average of four children's specialist trusts for both elective and non-elective medicine.
- The trust had a discharge planning policy which was due for review in September 2018. We saw evidence in the patient's records that the policy was being followed: there were discharge summaries to the GP, referrals to community and others services where required and follow up arrangements documented.
- We saw evidence in medical records which included; being seen by a middle grade or consultant within four hours of attendance, there is at least one medical handover in each 24 hour period led by a consultant, consultants were available in the hospital during peak times, and there was a 'consultant of the week'.
- For the period April 2016 to March 2017 the paediatric cancer waiting time standards for two week waits, 31 day referral to treatment, and all cancers 31 day waits until subsequent treatment, were achieved in 100% of cases, with the exception of the cancer two week waits in November 2016, which was 88%.

## Meeting people's individual needs

- The parents and young people we spoke with said that their individual needs had been taken into account when planning their care. Parents and carers were able to stay overnight with their children and there were beds available in the cubicles that were en-suite.
- We saw information displayed encouraging parents to discuss with staff if their child had a learning disability or special requirement. Staff adopted a multi-disciplinary approach when planning care to enable all needs to be met.



# Medical care

- Staff on the wards could access interpreters either in person or by a telephone service for those children and young people whose first language was not English.
- British sign language interpreters were available to book in advance.
- We observed a range of books in the format of a story to assist children to understand their condition, treatment, and what to expect.
- The wards had designated play areas with child sized furniture with a range of toys available. On ward 3B we observed a dedicated area for teenagers which had a pool table and games consoles.
- Ward 3B had an Oncology/Haematology information booklet for new families which covered a range of information including: contact details, support groups, medication, and support on discharge.
- There was a lift available to the upper wards and the environment was accessible by people with mobility aids including wheelchairs.
- There was a multi faith spiritual care service team who were available on site at the hospital during core hours and available 365 days a year, 24 hours a day, seven days a week through an on call service. There was an ablution room for patients and carers to perform ritual ablutions available within a “tree house” in the main area of the hospital. The “treehouse” included a quiet room with kitchen facilities and a chaplaincy and was accessible to all young people, parents, and carers.
- A range of menus were available and included age appropriate foods. Children and young people could also request additional options. One child told us “the chef will cook anything”. Parents and children we asked all told us the food was good.
- The Beads of Courage Programme had been introduced at Alder Hey and other hospitals in the UK which is designed to support children going through their treatment for Oncology/Haematology. It allows them to tell their story using colourful beads. The beads are used as symbols of courage that

commemorate different milestones in treatment. The beads build up over time to create a unique record of what treatment and care the young person or child had been through.

## Learning from complaints and concerns

- The hospital operated an online patient feedback forum which was open and visible to website visitors. There was an option to raise concerns or poor experiences and to provide positive feedback. The posts were reviewed and responded to by Alder Hey ‘post authors’ and individual posts were referred to the relevant service managers.
- Share your experience online feedback could be directed to specific departments as each department had a feedback option on their website page.
- We reviewed the website and found comprehensive information and advice regarding the various methods of communicating and feeding back complaints and concerns to the hospital. Patients and parents were given a range of options such as the patient advice liaison service (PALS), written or electronic complaints, informal feedback, and telephone contacts, directed to NHS choices or the friends and family test.
- At the hospital we asked two volunteers how we could raise a complaint and they directed us immediately to an area where the PALS team could be contacted.
- There were 24 complaints between April 2016 and March 2017 with the Division of medicine; seven of these were raised against the gastroenterology specialist services.’
- One complaint related to an alleged failure in nursing care, one was an alleged communication failure, and the remaining seven complaints were alleged failures in medical care. Of the nine complaints seven had been closed. The length of time taken to close the complaints ranged from 22 days to 73 days however: one complaint took 128 days to close. Following the inspection, we were told that this was due to the complex nature of the complaint.

# Medical care

## Are medical care services well-led?

Good



We rated medical services as 'Good' for well led because;

- The Medicine Clinical Business Unit (CBU) had a clear vision which was aligned with the trust vision to provide 'a healthier future for children and young people' which was underpinned by a set of values. We observed staff demonstrate the set of values when they were delivering care to children and young people and their parents and carers.
- The CBU had a process in place to enable the performance, safety, and quality of the service to be reported and reviewed.
- We raised concern with the electronic record system in relation to alerting deterioration in children and young people that may have a diagnosis of sepsis. The trust responded immediately with actions and a timeframe to ensure the pathway in the system was robust to enable children and young people with a potential diagnosis of sepsis to be escalated for review and treatment without delay.
- Staff told us they felt supported by their immediate team colleagues and by senior managers and the working relationships between nurses and medical staff, and allied health professionals worked well.
- There were communication systems in place to keep staff informed which included newsletters, emails, and safety huddles. Staff confirmed they received updates and information via these systems.
- There was an open transparent culture around raising concerns and reporting incidents and staff we spoke with felt supported to do this.
- The trust had recognised the difficulty in recruiting junior medical staff and had made significant investment to support and train nurses to become advanced practitioners to bridge the gap. The advanced practitioners we spoke with felt empowered and had welcomed this development.

However;

- Risk registers were held at ward and CBU level with a process to escalate risks to keep children and young people free from harm however, it was not clear that all risks identified on risk registers were being regularly reviewed, and that actions to mitigate risks were being monitored.

### Leadership of service

- CBU managers and leads told us they were planning to have a weekly presence on the wards to encourage staff engagement.
- Staff told us that since the restructure of the new CBU, they had seen more of the senior managers on the wards and it "had a good feel about it" and they 'felt supported'.
- Ward managers told us they were never counted in the ward staffing numbers and were always supernumerary (surplus so as to support the running of the ward) but they would provide nursing care to children and young people if required due to unexpected leave.
- Doctors told us that they were able to escalate concerns to consultants and registrars and felt supported to do so.
- Information was cascaded to staff in a variety of ways which included: via emails, monthly newsletters, multi-disciplinary team management minutes, and if a safety issue has been raised this is disseminated via 'huddles' on the wards and at each handover.
- Staff knew how to raise any concerns and cited their line manager as the initial contact. Policies in relation to whistleblowing and bullying and harassment were available to staff via the intranet.

### Vision and strategy for this service

- The hospital had undergone a change in the organisational structure and since October 2016 there was a Medicine Clinical Business Unit (CBU) which comprised of seven care groups which included 36 departments. The CBU vision was aligned with that of the Trust to provide "A healthier future for children and young people". This was underpinned by a set of values; respect, excellence, innovation, openness, and together.

# Medical care

- A clinical director headed each of the seven care groups and the two that we spoke with shared the vision for the medical services CBU. The CBU care groups were led by a clinical lead, a manager, and a matron; however, recruitment was ongoing for the matron posts.
- We found the vision and values formed part of the appraisal process; however, as we got to ward level, staff were less clear on the vision and values of the trust. We asked two nurses and one health care assistant, and all three were not able to recall the vision or values but we saw that staff displayed the values through our observations of staff treating people with respect, working together, and being open and honest.
- The vision and values were not displayed on any of the ward areas we visited at the time of our inspection but they were displayed in the atrium in the entrance area to the hospital. The ward managers we spoke with were clear about their roles in delivering quality and safe care to children and young people which reflected the trust and CBU strategy.
- At ward level a monthly quality report which included: risk management, monitoring, clinical care, safe environment, competent and capable workforce, and policies procedures and guidelines as key headings, was completed which then fed up to the monthly CBU Quality and Governance Meeting. We saw evidence of the ward quality reports and reviewed these for three wards which included ward 4B, 3C, and 3B for March 2017. We saw that new risks were identified and current risks were escalated as required to be considered for the CBU risk register. This gave assurance that risks were escalated to the CBU using this governance process.
- We reviewed the minutes of the Emergency Department Governance Meeting which formed part of the acute care group for 23 March 2017 which had the clinical director and manager for the care group in attendance. Quality indicators and audits were discussed and there was reference to the sepsis pathway being rolled out in the emergency department in three weeks' time from the meeting. Lessons of the week, safety, incidents, and the risk register were all discussed within the meeting.
- We reviewed the minutes of the General Paediatric Forum for the 21 November 2016 which had medical staff and leads in attendance. We saw that escalation of the PEWS had been discussed in the meeting. We found that training for sepsis and the recognition for the identification and escalation of the deteriorating patient was identified on the CBU risk register. The control measure was that a sepsis pathway was being piloted on a medical ward. We were told that the sepsis risk had been identified on the risk register in March 2017.
- We found at the time of our inspection that the pathway for sepsis was being rolled out to other wards but there had been no audit or review of the pilot phase. This meant that there was a potential lack of oversight due to lack of evidence of review and monitoring of risks.
- The CBU were improving the process of embedding sepsis in their incident reporting processes and the CBU quality and governance structures.
- At the time of our inspection the Sepsis Steering Group held an extra-ordinary meeting on the 26 April

## **Governance, risk management and quality measurement**

- Reporting lines for the CBU were centred on quality, finance, and performance. The CBU had a Structure, Governance, and Strategic Plan dated 6 April 2017 which detailed the CBU governance and reporting arrangements.
- A monthly quality and governance CBU meeting was identified to provide assurance to the CBU Board and Clinical Quality Steering Group relating to quality performance. Agenda items at this meeting included: progress and actions against current risks, identification of risks requiring escalation to the corporate risk register, recognition of themes and trends from complaints and incidents, sharing lessons learnt from root cause analysis investigations, and to receive the monthly care group quality reports.
- The CBU structure and governance was in its infancy and had been in place since October 2016 there were plans for strategic meetings to be attended by staff from all care groups within the CBU which will enable learning from incidents and sharing of good practice



# Medical care

2017 In response to the issues we identified at time of our inspection. There was consensus that the display of the sepsis pathway and associated escalation advice within the electronic patient record could lead to confusion as to when action was recommended. This led to the impression that important management escalation was not occurring when the sepsis tool appeared to be advising urgent action but that action was not taken where the clinical context did not fit with sepsis. The trust aimed to have this in place safely within two weeks of our inspection.

- The trust informed us at the time of our inspection that they had commissioned an external review of the resuscitation equipment and there were plans to have trolleys in place within the two weeks of our unannounced inspection to enable resuscitation equipment to be kept together and be easily assessable and transported to an emergency without delay.
- Ward managers we spoke with were aware of the risks for their own wards and they had an electronic risk register. We reviewed the ward level risk registers for wards Ward 4B, 3C, and 3B and found risks had a cause, consequence, set of controls and most had review dates identified.
- We were given examples of how ward managers had performed risk assessments. One manager had contacted the mental health team to support the ward to complete an environmental risk assessment for patients with mental health concerns. This had resulted in training for staff on caring for children and young people with mental health concerns. We were made aware that risk assessments were in place for children and young people that were at risk of absconding which had resulted in one to one care.
- We found that cross contamination of expressed breast milk had been identified on the medicine risk register. We were told this was placed on the register in February 2017 and review was required by May 2017.' We found evidence that actions to reduce risks were not in place on all wards. We found breast milk stored in a pantry on one ward which was accessible to visitors to the ward.

## Culture within the service

- Staff we spoke with were passionate about their work and were committed to providing high quality care.
- Doctors and nursing staff said they were supported and encouraged to raise concerns and report incidents which reflected an open and transparent culture.
- Doctors told us consultants were approachable and there was a good working relationship between the nursing and medical staff and we were told 'the team works well across the nursing and medical staff'.
- Staff we asked described colleagues as 'approachable and friendly'; they enjoyed their role and felt supported by managers and their immediate team.
- Some staff we spoke with had worked in the hospital for many years.

## Public engagement

- On Ward 3B monthly coffee mornings were in place for parents and carers and feedback forms were being developed at the time of our inspection.
- Friends and family test (FFT) for February 2017 on ward 3B included 16 respondents and 15 of those were extremely likely to recommend the hospital to friends or family.
- Feedback received on ward 3C in March 2017 from carers and parents included good feedback with improvement suggestions of: microwave for parent use and improved parent sofa beds. There were plans in place for these suggestions to be discussed with the patient experience team.
- Feedback was constructed to enable younger children teenagers and adults to respond.

## Staff engagement

- The trust had a 'Listening in Action' lead that had been in post since April 2016. Listening in action enables organisations to engage with employees to contribute to the improvement of the organisation in a way to make them feel proud.
- In the 12 months prior to our inspection there had been six 'Big Conversation' events resulting in attendance of 50-80 staff across the trust.







# Medical care

- The trust received staff feedback via a monthly employee temperature check. We reviewed the results for October to December 2016 for the two elements of the check. In December 2016, 95% of staff asked recommended the trust as a place to receive treatment which had improved by 3% since October 2016. In December 2016, 73% of staff asked would recommend the trust as a place to work which had improved by 13% since October 2016. This data was trust wide.
- We saw evidence where senior staff acknowledged the dedication of staff to support their colleagues; the night matron had praised ward staff for assisting another department at a time of high demand.

## **Innovation, improvement and sustainability**

- The medical services had made investment in the training of Advanced Nurse Practitioners and non-medical prescribing to partially address the junior doctor shortage.
- The trust were proposing to be one of the trusts to trial the new Extranet which will enable records to be accessed remotely to increase agile working and allow more effective management for staff on-call.

# Surgery

Safe	Requires improvement 
Effective	Good 
Caring	Outstanding 
Responsive	Good 
Well-led	Requires improvement 
Overall	Requires improvement 

## Information about the service

Alder Hey provides surgical care to children from the local area and from a wider geographical area, including the North West of England, North Wales and the Isle of Man.

The hospital provides services across a number of specialities including cardiac surgery, burns and plastics, neurosurgery, orthopaedics, ophthalmology and urology. The hospital is one of two centres nationally that provide extracorporeal membrane oxygenation (ECMO) for children.

Records indicated that between April 2016 and March 2017, the hospital had undertaken 13,497 procedures. This included, 9,018 day case procedures, 3,480 elective procedures and 999 unplanned procedures.

During the inspection, we visited all surgical wards as well as theatre areas, but this did not include critical care or neonatal services.. This included theatres (12 inpatient and four day case), as well as ward 1C (cardiac), 3A (general paediatrics) and 4A (orthopaedic and neurosurgery).

We spoke to members of staff of all grades including: children's nurses, health care assistants, doctors, registrars, consultants, specialist nurses, physiotherapists, pharmacist's, senior managers, domestic staff, and advanced practitioners. We spoke to children, young people and their families. We observed a variety of care that was delivered in both theatre and in the ward areas as well as reviewing care records and further information received from the trust.

## Summary of findings

We rated surgical services as 'requires improvement' overall because;

- The hospital did not always ensure that a member of staff who was trained in advanced paediatric life support (APLS) was available on each department at all times. This did not meet the Royal College of Nursing (RCN) staffing recommendations.
- We found that compliance with mandatory training across surgical services was mixed. We had particular concerns that compliance with safeguarding level three training for surgical staff overall was only 67% at the time of the inspection.
- On surgical wards there was a risk of abduction or that children were able to leave the ward unnoticed. This was because all doors could be opened from the inside and exit buttons were not out of reach from children. This risk was highlighted when the hospital was built in 2015 but it was unclear what actions had been taken to rectify this and it was still a risk at this inspection. Additionally, there was no evidence on any of the wards that this had been formally risk assessed.
- We found that the governance framework for surgical services was relatively new and was still being embedded at the time of inspection.
- On surgical wards, there was no evidence of formal risk assessments being completed, such as formally

# Surgery

assessing the level of risk posed by resuscitation equipment being in different ward areas. We were therefore unsure if all risks had been identified and mitigated appropriately. This was not in line with the hospital's risk management strategy.

- We sampled various departmental and clinical business unit risk registers and found that in a number of cases there was limited or no evidence that the risks had been reviewed fully or details about how the level of risk had been mitigated appropriately.
- Resuscitation equipment was available on every department. However, on the surgical wards the equipment was kept in different boxes and in different locations. This meant that there was a risk of delays in an emergency situation. Also, the equipment was not checked fully on a daily basis which was not in line with the trust's resuscitation policy.

However,

- Surgical care was provided following evidence-based practice, standards and legislation in line with expert and professional bodies such as the National Institute for Health and Care Excellence (NICE).
- There were sufficient numbers of staff on the days of our visit to safely care for patients. We reviewed safer staffing reports for January 2017 and February 2017, which showed a high average fill rate for registered nurses across all surgical wards (94%).
- In theatre, staffing met the guidelines set by the Association for Perioperative Practice (AfPP). There was also a recovery nurse allocated to each theatre so that patients were recovered on a 1:1 basis, which was in line with national guidance.
- We found a strong, person-centred culture. Holistic care was provided by kind and caring staff who made every effort to provide support to patients and their parents.
- Patients and their parents were actively involved with decisions about care and treatment and their views and wishes were respected and valued.

## Are surgery services safe?

Requires improvement



We rated surgical services as 'requires improvement' for safe because;

- The hospital did not always ensure that a member of staff who was trained in advanced paediatric life support (APLS) was available on each department at all times. This did not meet the Royal College of Nursing (RCN) staffing recommendations.
- We found that compliance with mandatory training across surgical services was mixed. We had particular concerns that compliance with safeguarding level three training for surgical staff overall was only 67% at the time of the inspection.
- We found that the process for reviewing serious incidents was not robust. This was because initial investigations were not always being undertaken within 72 hours in line with recommendations by NHS England. This meant that there was a risk for initial learning and immediate actions to be missed. In addition, there was no formal system for recording initial actions taken in response to immediate concerns.
- On surgical wards there was a risk of abduction or that children were able to leave the ward unnoticed. This was because all doors could be opened from the inside and exit buttons were not out of reach from children. This risk was highlighted when the hospital was built in 2015 but it was unclear what actions had been taken to rectify this and it was still a risk at this inspection. Additionally, there was no evidence on any of the wards that this had been formally risk assessed.
- Resuscitation equipment was available on every department. However, on the surgical wards the equipment was kept in different boxes and in different locations. This meant that there was a risk of delays in an emergency situation. Also, the equipment was not checked fully on a daily basis which was not in line with the trust's resuscitation policy.

# Surgery

- On surgical wards, a supernumerary co-ordinator was not always available at night time. In addition, the hospital did not always have access to an on site senior paediatric nurse in line with RCN guidance.
- Records indicated that between April 2016 and December 2016 compliance with infection control audits had been consistently low across all surgical wards.

However,

- We found that actions had been implemented and improvements had been made following three 'never events' that had taken place since January 2016.
- We observed a number of surgical procedures, finding that staff followed all stages of the '5 steps to safer surgery' and audits undertaken highlighted continually high levels of compliance with this.
- There were sufficient numbers of staff on the days of our visit to safely care for patients. We reviewed safer staffing reports for January 2017 and February 2017, which showed a high average fill rate for registered nurses across all surgical wards (94%).
- In theatre, staffing met guidelines set by the Association for Perioperative Practice (AfPP). There was also a recovery nurse allocated to each theatre so that patients were recovered on a 1:1 basis, which was in line with national guidance.

## Incidents

- The hospital had an up to date incident reporting policy that was available on the intranet. Staff that we spoke to were able to identify types of things that should be reported as incidents.
- The hospital used an electronic reporting system and staff were able to demonstrate how this was used. All staff, including agency staff and locum doctors had access to the system.
- Staff confirmed that they had received feedback after submitting an incident report. We were given examples of how learning from these had been disseminated. Examples of this included via the daily handover. The hospital held a weekly meeting of harm, which gave representatives from each area in the hospital an opportunity to share incidents and lessons learned from their own area. However, we were made aware of a

small number of examples when incidents had not been reported in line with hospital policies. For example, we did not see any examples of surgical site infections being reported on the electronic reporting system. Additionally, members of staff informed us that they had not always reported these or staffing issues.

- Between April 2016 and March 2017, there had been a total of 2,172 clinical and 278 non-clinical incidents reported. Out of these, 302 had been reported as near misses, 1,724 had resulted in no harm, 411 had resulted in a low level of harm and 12 had resulted in a moderate level of harm.
- Between January 2016 and March 2017, there had been three 'never events' reported in surgery. These had been a wrong site anaesthetic block, wrong side surgery and a retained foreign object. Never events are serious incidents that are entirely preventable as guidance, or safety recommendations providing strong systemic protective barriers, are available at a national level, and should have been implemented by all healthcare providers. Each never event type has the potential to cause serious patient harm or death. However, serious harm or death is not required to have happened as a result of a specific incident occurrence for that incident to be categorised as a never event.
- For the same period, an additional three serious incidents had also been reported to the strategic executive information system (STEIS) by surgical services.
- When serious incidents had been reported, we saw evidence they had been investigated using a root cause analysis (RCA) approach. We also saw evidence of action plans being implemented as a result and we found that changes had been made following these. However, we found that two of the three serious incidents had not been reported in a timely manner. On these occasions it had taken over seven days for the initial incident reports to be submitted. Trust policy stated that all incidents were to be reported within 24 hours of it occurring. In addition, the NHS England serious incident framework (2015) states that all incidents should be reported within 48 hours and an initial review of every serious incident should be undertaken within 72 hours of the event occurring. This meant that there were potentially delayed opportunities for initial learning to be identified and changes to be implemented.

# Surgery

- The management team had recently introduced a 72 hour review template for all staff to follow, but we found that it was not yet fully embedded as not all departments were currently using it.
- We also found one example of an incident that met the serious incident criteria but was not reported as one. This involved a patient being transferred from another hospital for a surgical procedure. The incident report stated that the full records were not handed over properly as part of the transfer. A surgical procedure was subsequently started, before it became apparent that the initial incision had been made on the incorrect side. We were informed that this incident was being investigated using a RCA methodology, but there was no evidence of a 72 hour review taking place.
- The surgical clinical business unit (CBU) held monthly morbidity and mortality meetings. We saw evidence of actions and learning that had been implemented following these meetings. The hospital had set their own standard for all cases to be reviewed by the CBU within two months. After a review by the CBU, deaths were subject to a second review by the hospital mortality review group (HMRG) to ensure that there were no further lessons to be learned.
- Members of the management team were aware of the duty of candour process and understood the legal requirements of the duty. The duty of candour is a regulatory duty that relates to openness and transparency and requires providers of health and social care services to notify patients (or other relevant persons) of certain 'notifiable safety incidents' and provide reasonable support to that person. We saw examples of the duty of candour being fully discharged for incidents when it was required.

## Safety thermometer

- As a specialist children's trust, it was not mandated for surgical services to provide data to the NHS safety thermometer. NHS safety thermometer is a tool that is used to measure a snapshot of patient harm every month but the trust has developed its own dashboard for a variety of metrics. In theatre, monthly submissions were provided to 'safety scan' which was a tool used to measure various aspects of performance in surgical services. This was displayed in the theatre department for all staff to see. However, we found that the

measurements that were included as part of this were mainly focussed on operational performance, such as monthly budgets and theatre utilisation. The management team informed us that there were plans to include further indicators from March 2017 onwards, which were more clinically focussed.

- A similar dashboard was included for surgical wards and included a limited amount of additional information such as the number of hospital acquired pressure ulcers or infections. Records indicated that between March 2016 and March 2017, there had been 10 hospital acquired pressure ulcers and 12 hospital acquired infections on surgical wards.
- However, there was no information displayed in any of the ward areas that informed staff or the public of current performance or numbers of patient harms.

## Cleanliness, infection control and hygiene

- The hospital had an infection and prevention control (IPC) policy that was available on the intranet. Staff knew of this and were able to access it if needed. The hospital also had an infection and prevention control lead.
- IPC was included as part of the mandatory training programme. Records indicated that compliance for surgical staff was 84%.
- The hospital had reported 12 incidences of hospital acquired infections between April 2016 and March 2017. Records indicated that there had been two incidences of methicillin-resistant staphylococcus aureus (MRSA), nine incidences of methicillin-sensitive staphylococcus aureus (MSSA), one incidence of carbapenemase producing enterobacteriaceae (CPE) and no incidences of clostridium difficile (CDIFF).
- We observed both the theatre and ward areas to be visibly clean. Housekeepers were available during normal working hours, seven days a week and were responsible for cleaning the theatre and ward areas.
- In theatre, there was an identified lead for IPC. Their role included completing audits, disseminating information to staff and making improvements within the theatre environment when needed. We saw evidence of improvements being made to compliance with IPC standards in this area. For example, an audit that was undertaken in May 2016 showed that only 86% overall



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compliance was achieved. The theatre management team had implemented clear actions as a result to make improvements. Subsequently, an audit undertaken in March 2017 showed that overall compliance had improved to 99%.

- In contrast, compliance with IPC standards on surgical wards between April 2016 and December 2016 was consistently low. For example, compliance on ward 1B ranged from 59% to 72%, on ward 3A ranged from 54% to 72% and on ward 4A ranged from 61% to 63%.
- Six inpatient theatres used a laminar flow system. Laminar flow is a system that is used to circulate filtered air in order to reduce the risk of airborne contamination and exposure to chemical pollutants. If staff were to enter or leave theatre during an operation, they had to use the anaesthetic room so that the air flow in theatre was not affected.
- The hospital had a decontamination suite that was located next to the theatre area. Decontamination staff were available during normal working hours, five days a week and were responsible for co-ordinating the movement of surgical instruments to an off-site decontamination unit for sterilisation.
- Endoscopes and bronchoscopes (instruments used to examine the internal cavities of the body) were decontaminated and sterilised after use. There were clear processes in place to ensure that this complied with national guidance.
- Records indicated that all theatres had been deep cleaned approximately every six months. This was completed by an external provider.
- Patients were not always screened for infection (such as MRSA, MSSA or CDIIF) as part of the pre-operative clinic which meant that the risk of infectious patients not being managed correctly was increased. Only certain groups of patients were screened, including those undergoing cardiac surgery. However, a care bundle audit that was completed in January 2017 for patients who had undergone cardiac surgery indicated that only three out of 19 patients had been screened for MSSA.
- Informal procedures were in place for patients to be screened for CPE if they had been transferred from a

different hospital, although this was not reflected in the IPC policy. However, records indicated that compliance with this had improved from 40% in April 2016 to 90% in February 2017.

- In theatre we found that surgical staff showed consideration to IPC procedures and best practice guidance (NICE CG74) in using sterile gloves as well as the use of incise drapes and antiseptic skin preparation. When preparing to go to theatre, patients were asked to shower and were given the appropriate gowns to wear. However, care bundle audits that had been undertaken showed poor compliance with this. For example, an audit completed in January 2017 for patients undergoing cardiac surgery showed only 37% compliance with this. A further audit in February 2017 showed 54% compliance which was a slight improvement.
- In all ward areas, each individual room had two sinks, which met the recommendations of the health building note 00-09; infection control in the built environment (Department of Health).
- There were hand gel dispensers at the entrance to every area where patient treatment was carried out. We saw that all staff followed 'bare below the elbow' guidance and we observed all staff either using hand gel or washing their hands after each patient contact.
- In theatre, the IPC lead was responsible for monitoring surgical site infections (SSI). The hospital had also recently recruited a nurse who was responsible for monitoring SSI's in the ward areas. SSI's that occurred in specialist surgery were being monitored and reported to Public Health England at the time of the inspection. Records indicated that between April and December 2016, there had been no incidences of SSI for patients who had undergone spinal surgery, neurosurgery or elective implant surgery.
- However, we were unsure how many incidences there had been of SSI in groups of patients who had undergone other general surgery as this was not always being monitored effectively. The hospital were unable to provide the number of overall incidences of SSI for the last 12 months when requested.
- In addition, we found that the hospital were not currently undertaking audits to monitor catheter acquired urinary tract infections (infections that had

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been acquired as a result of catheter insertion). This meant that there was limited oversight of this and there was a potential for areas where improvements needed making to be missed. However, there was an action plan to improve the number of staff trained in the insertion of urinary catheters as well as undertaking audits of compliance.

## Environment and equipment

- Surgical wards were based over four main areas; ward 1B (burns and plastics), 1C (cardiac), 3A (general surgery) and 4A (specialist surgery which included orthopaedics and neurosurgery). There were 12 inpatient operating theatres, four day case theatres, an endoscopy room and a room which was used to provide laser treatment. Additionally, there were two separate recovery areas for inpatient and day case theatres.
- 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.
- Ward areas were secured by swipe card access which had been designed to prevent unauthorised people entering. Access to ward areas was via an intercom and theatre was via a staffed reception area. However, we found that there was a risk of abduction or that children were able to leave the ward unnoticed. This was because all doors could be opened from the inside and exit buttons were not out of reach from children. This risk was highlighted when the hospital was built in 2015 but no actions had been taken to rectify this. Additionally, there was no evidence on any of the wards that this had been risk assessed.
- Each ward had access to an outdoor play area. The hospital had a policy for the use of these areas, which indicated that they were only to be used if there was a member of staff available to provide supervision. On ward 1C, there was a small fence that prevented children from accessing the helipad. The management team informed us that this was closed in the event of a helicopter landing.
- The ward manager was responsible for completing a daily environmental check, and each nurse was responsible for completing a further check for the bed spaces that they had been allocated to. We sampled records of these and found that they had been completed on a regular basis.
- Ward staff were not always assured that the correct resuscitation equipment was readily available for use in the event of an emergency. This was because although each ward area had access to resuscitation equipment, it was stored in different boxes and some equipment was spread over the ward. For example, there was a separate box for emergency drugs and another for airway management devices. Theatre staff were responsible for replacing equipment when it had been used, but there were no records to indicate that ward staff checked the contents on a daily basis. This was not in line with the resuscitation policy which stated that there should be an equipment checklist available, and all equipment should be checked twice per day.
- Additionally, we reviewed a sample of incident reports, finding that on two occasions the correct equipment had not been immediately available when an emergency had occurred. As a result, some ward staff had put their own extra pieces of equipment together in addition to the resuscitation equipment that was available.
- The senior management team had responded to this and had commissioned an external review of resuscitation equipment at the beginning of 2016. Despite this, no action had yet been taken to implement the recommendations from this report. There was also no evidence of this being risk assessed and it had not been added to any of the departmental risk registers. This meant that we were unsure of what controls, if any, had been put in place to reduce the level of risk that this posed.
- There were 12 inpatient theatres which were located on the first floor and four day case theatres which were located on the ground floor. Each theatre had its own anaesthetic room. We sampled a number of anaesthetic rooms and theatres, finding that all areas were uncluttered and visibly clean.



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- Each anaesthetic room had a daily checklist that was completed by the operating department practitioner (ODP). We sampled a number of these and records indicated that items such as anaesthetic equipment had been checked on a daily basis.
- There was access to a resuscitation and a difficult airway trolley in both theatre areas. We found that all required equipment was available in these and records indicated that they had been checked regularly.
- There were appropriate waste management systems available for staff to use in all areas. This included clear segregation of clinical waste and dirty linen, as well as the storage of used sharps.
- The hospital had an electronic biomedical engineering (EBME) department who were responsible for the servicing and maintenance of all equipment within surgical services. The EBME department held a database listing all equipment and its location and were responsible for monitoring service dates and compliance with portable appliance testing (PAT).
- We reviewed the month end report for March 2017 and found the service had achieved 87.8% against a key performance indicator (KPI) of 90% for servicing and testing high risk devices, such as syringe drivers. For the testing of low to medium risk equipment for example blood pressure monitoring equipment and tympanic thermometers, the service had achieved 79.2% against a KPI of 85%.

## Medicines

- The hospital had a medicines management policy which was available on the intranet. Staff we spoke to know about it and knew how to access this if required.
- All wards had a clinical room and medication storage system that was accessed by fingerprint scanning. This ensured that only staff that had been authorised to access medications were able to. Staff informed us that there were always appropriate levels of medication available and a pharmacist attended on a regular basis to make sure that the medication system was adequately stocked.
- We sampled controlled drugs cabinets on each ward, finding that the amount of controlled drugs tallied against what was recorded in the register. However, we found that over a two week period in April 2017, the amount of controlled drugs disposed of had not been recorded in line with the medicines management policy on a number of occasions. Additionally, we were shown a medicines management audit that had been completed in October 2016, which had identified the same issue. The management team were aware that improvements were needed, and an audit completed in April 2017 had shown some improvements.
- We also sampled medication that required refrigeration, finding that all were in date and stored correctly. Records indicated that fridge temperatures had been checked on a daily basis. There was also a central monitoring system in use which alerted pharmacy staff if fridge temperatures went out of range.
- There was a system in place for patients who brought their own medication. General medicines were added to their own locked cupboard which was kept by the staff areas and controlled drugs were stored appropriately. All patients own medication was added to the medication chart on the electronic records system so that they were administered at the correct time.
- However, we found that the electronic records system was not always up to date with the administration of medication, which meant that there was a risk that an overdose of medication could be given. This was because when a member of staff had signed for administering medication, the prescription chart did not always reflect that it had been given. We sampled seven prescription charts, finding this to be an issue on five occasions. For example, on one occasion, medication had been administered at 1pm but the prescription chart stated that it was last administered over 12 hours previously. This risk was highlighted on the medicines risk register, with one of the key controls indicating that any occurrences should be reported as a clinical incident. Staff informed us that this had not been done.
- We did note that allergies were clearly highlighted and that each patient's weight and height was documented on all of the prescription charts.
- In theatre, we saw that medicines and controlled drugs were stored appropriately in each anaesthetic room. We sampled records for April 2017, finding that the amount of controlled drugs tallied against what was recorded in the register and that documentation had been completed correctly on a daily basis. However, on one

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occasion we found that the amount of ketamine recorded did not match the amount that was present. We brought this to the attention of the management team. They informed us that this had not been reported and that it had been missed in the weekly audit, but provided assurance that it would be investigated.

## Records

- The hospital used a combination of electronic and paper based records. All staff had access to the electronic system and had undergone training in its use.
- Pre-operative assessments and consultations were completed on paper and were available on the day of surgery. In theatre, safety checklists were paper based, as were patient observations while undergoing surgery. On the ward, all medical notes were paper based.
- Additionally, if a patient followed a care pathway, these were printed and placed in the medical notes with all other patient information.
- The electronic system was used to record all other observations, risk assessments and records.
- If a patient had a concern recorded such as safeguarding or a do not resuscitate order, this was clearly identifiable by an icon appearing on the patient record. All staff that we spoke to were aware of this and knew how to access relevant information if needed.
- We sampled seven patient records, finding that they were up to date with all relevant information. We also found that medical records had been updated when a patient had been reviewed, were legible and had been signed and dated.
- All paper based records were stored securely and were clearly identifiable at every nursing station.

## Safeguarding

- All non-clinical staff were required to complete level one safeguarding training for adults and children. Additionally, all clinical staff were required to complete level three safeguarding training for children, which met the recommendations of the 'Intercollegiate Document; Safeguarding Children and Young People (2014)'. Topics such as female genital mutilation and child sex exploitation were included as part of this training.

- Records indicated that at the time of our inspection, overall compliance in surgery with safeguarding level three training was only 67%. This meant that there was a risk that not all staff were up to date with the latest training and that there was the potential for safeguarding concerns to be missed. We did note however, that overall compliance with safeguarding level one training for non-clinical staff was 87%.
- The hospital had safeguarding children, safeguarding adult and child abduction policies. These were last updated in January 2016 and were available to staff on the intranet. Staff had knowledge of this and were able to access it if needed. However, we found that although the safeguarding children policy referenced 'Working Together to Safeguard Children' guidance from 2015, topics such as female genital mutilation (FGM) or child sexual exploitation were detailed in a different policy that was created in June 2016. Staff that we spoke to did not have an awareness of topics such as FGM and were unclear where this policy was located. This was important as reporting any recognised incidents of FGM is a legal requirement for all healthcare staff.
- Staff that we spoke to were able to articulate other examples of what would be considered a safeguarding concern. We were informed by staff that any concerns were escalated to the co-ordinator or the ward manager. Out of hours, concerns were escalated to the night matron.
- The hospital had a designated safeguarding team who were available during normal working hours between Monday and Friday. The safeguarding team were responsible for reviewing all safeguarding concerns that had been raised. Staff informed us that when referrals had been made, the safeguarding team had been quick to respond in providing advice.
- There were processes in place for safeguarding concerns to be raised as part of the pre-surgical assessment. If a concern was identified, the relevant information was added to the electronic records system. This information was highlighted to staff by the use of a symbol on the electronic system. Staff were able to describe this process and demonstrate how to find any information if required. However, there was no clear process for staff to follow when raising concerns over children who repeatedly failed to attend an appointment.

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## Mandatory training

- The hospital provided mandatory training modules for all nursing and medical staff. As part of the induction programme, all new employees were required to complete all elements of it. The hospital had a mandatory training policy which stated that the compliance target for all modules was 90%.
- At the end of the inspection period, the management team submitted the most up to date figures with training compliance in all other areas. Records indicated that overall compliance for staff in surgical services was mixed. The more positive examples included infection control (84%), health and safety (74%) and equality and diversity (83%). However, these were still below the trust's target and there were areas of lower compliance which included information governance (57%), and fire safety (68%).
- We noted that the compliance rates for medical staff were particularly low, for example health and safety (48%) and information governance (41%).
- Mandatory training was monitored using a central recording system which had been designed to reflect the most up to date information across all departments. However, the management teams across all areas were concerned that the data was inaccurate. This meant that it was unclear how valid the information that the Trust was using to assure themselves that important training had been completed was.
- In contrast, we did note that on ward 4A, all band 6 co-ordinators had received training in APLS and additionally, there was always a member of staff who was APLS trained in theatre recovery as there was a supernumerary anaesthetist available in both recovery areas, meaning that the required standard was met.
- In case of an emergency, there was a team of bleep holders allocated to respond to calls throughout the hospital, some of who had received training in APLS. This was available 24 hours a day, seven days a week. Staff across all areas informed us that they had received quick responses if an emergency had occurred.
- Advanced paediatric life support training was provided by an external provider. The theatre management team informed us that it was sometimes difficult to facilitate resuscitation training. However, during our inspection we saw examples of where the management team had discussed making improvements. An example of this was the possible implementation of a 'train the trainer course' in theatre. If staff complete this, it means that they are able to provide training to other staff.
- The hospital used a paediatric early warning score (PEWS) system, which was a system to identify when physiological observations indicate that a child may be deteriorating. Staff were aware of this system and were able to show us how it was used. PEWS was calculated automatically on the electronic records system when baseline observations such as blood pressure and pulse were inputted.

## Assessing and responding to patient risk

- The hospital were unable to ensure that there was always a member of staff trained in advanced paediatric life support (APLS) in every department or ward area. This did not meet the minimum requirements outlined in the Royal College of Nursing; Defining Staffing Levels for Children and Young People's Services (2013). This was the case on wards 1C and 3A as members of the management team informed us that no nurses had been trained in APLS. Importantly, a number of patients on ward 1C had undergone cardiac surgery so were at higher risk of requiring emergency treatment. This shortfall had also been acknowledged in a recent nursing staffing review which stated the need for all band 6 co-ordinators to be trained in APLS. However, no formal plans had yet been made to implement the improvements.
- The PEWS policy had recently been updated to include a flowchart outlining the escalation pathway. Staff that we spoke to knew of the policy that was available on the intranet but were unaware that any amendments had been made.
- Staff were aware of how and when to escalate a deteriorating patient. The policy stated that if a patient had a PEWS of 4, they were to be escalated for consultant review. However, we found that all reviews were being done by a junior doctor in the first instance and consultants were contacted for further review if needed.
- We sampled seven patient records, finding that PEWS had been completed correctly on all occasions. The management team had undertaken audits on each ward on a monthly basis to monitor compliance.

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Records showed that compliance across surgical wards in March 2017 ranged from 80% to 100%. However, we did note that the sample size for these audits was 10 records per ward.

- The hospital had recently implemented a sepsis policy which was aimed at supporting staff in the timely identification and management of patients with potential sepsis. There was an ongoing working group who were in the process of developing a paediatric sepsis 6 tool that was to be rolled out across the hospital, along with a full training programme for all staff.
- We saw evidence of screensavers on computers reminding staff to think about potential sepsis. Staff were able to tell us about the signs and symptoms of sepsis.
- In addition, sepsis had been identified on the corporate risk register. However, there was no evidence that the management team had monitored compliance with NICE NG51 (sepsis; early recognition and management) while this system was being introduced.
- Pre-operatively, patients attended an appointment with a consultant which was held in the outpatient department. As part of this appointment, patients and relatives were given a medical questionnaire to complete. This was used to identify if a patient had any special requirements or any pre-existing medical conditions that needed to be considered.
- Some patients were offered a further pre-operative appointment and some received a telephone call. This was managed by a team of nurses who had competencies in pre-operative assessments. The nursing team was supported by an anaesthetist who was available to review patients if there were any concerns.
- Patients were assessed by an anaesthetist and surgeon on the day of surgery to identify patients with any medical conditions or those deemed at risk of developing complications after surgery and a decision was made whether the operation was to go ahead.
- All theatre staff attended a safety huddle in the mornings. We attended one of these and found that they were well organised. Also, individual theatre team briefs were held before each theatre list was started.
- Pre-operative marking is required to promote correct site surgery, including operating on the correct side of the patient and / or the correct anatomical location or level. The national patient safety agency (NPSA) and the Royal College of Surgeons (RCS) strongly recommend that the mark should subsequently be checked against reliable documentation to confirm that it is correctly located and still legible. This checking should occur at each transfer of the patient's care and end with a final verification prior to commencement of surgery. All team members should be involved in checking the mark.
- There had been a 'never event' reported as a result of a surgical procedure being undertaken on the incorrect side. The investigation that was completed showed that the main cause of the incident was that the site marking was incorrect and all the necessary procedures were not followed. Although in the cases we observed this was done correctly, records indicated that monthly compliance rates with this had varied. For example, only 82% had been achieved in March 2017. However we noted that compliance rates in April 2017 had increased to 100%.
- Guidance from the National Patient Safety Agency (NPSA) states that 'stop before you block procedures' should be used when patients are undergoing an anaesthetic. 'Stop before you block' is used to prevent any avoidable patient harm caused by a wrong site anaesthetic block. There had been a further 'never event' reported due to a wrong site anaesthetic block being administered. We found that actions identified from the completed investigation into this incident had been completed. This included the delivery of human factors training to all theatre staff, visual aids being displayed in all anaesthetic rooms and audits being undertaken to monitor compliance. An audit that had been completed in December 2016 showed 100% overall compliance with this.
- The World Health Organization (WHO) surgical safety checklist identifies three phases of an operation; before the induction of anaesthesia (sign-in), before the incision of the skin (time-out) and before the patient leaves the operating room (sign-out). In each phase, a checklist co-ordinator must confirm that the surgery team has completed the listed tasks before they proceed with the operation. We found that 'sign-in', 'time-out' and 'sign-out' were completed on all

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occasions that we observed as part of the inspection. Audits to monitor compliance with this were completed on a monthly basis. Results between April 2016 and December 2016 ranged between 98% and 100% compliance.

- Patients were recovered on a 1:1 basis by competent staff which was in line with national guidance.
- In inpatient theatres, there was a clear discharge criteria that had to be met before a patient was handed over to an inpatient ward. In the day case unit, there was a standard operating procedure for staff to follow as all discharges were nurse led. If a day case patient did not recover as expected following surgery, staff were able to access a bed on an inpatient ward. There was also a clear process in place for patients to be admitted to the high dependency unit or intensive care unit if needed.

## Nursing staffing

- Staffing levels on the surgical wards had been calculated to meet guidance from the Royal College of Nursing (RCN) which states that registered staff to child ratios must not exceed 1:4 and any patients requiring high dependency care must be no more than 1:2. However, the guidance also states that children under two years old or requiring specialist care such as patients who had undergone neurosurgery must not exceed 1:3. We found that staffing levels for children in these brackets did not meet the RCN guidance as they were nursed on a ratio of 1:4.
- As part of the move from the old hospital, the senior management team had undertaken a 'shift and lift' for all nursing staffing. This had included a review of the nursing establishment against the new environment. However, there had been no formal review of this since. This was important because not all children were easily visible due to them being cared for in individual rooms. However, a baseline establishment had been set for each ward which was based on the number of beds that were available. For example, ward 4A had a set establishment of 11 registered nurses both in the day and in the night.
- Staffing levels were reviewed by ward managers on a daily basis. If there were staff shortages, this was discussed at one of the three daily bed meetings. Members of the management team informed us that

vacant shifts were filled with NHS Professionals (NHSP) nurses (bank staff) or agency staff. Additionally, a patient dependency score tool (SCAMP) was used to identify the need for increased nursing intervention.

- There were sufficient numbers of staff to care for patients on the days that we visited. We also reviewed safer staffing reports for January 2017 and February 2017, which showed that the average fill rate for registered nurses across all surgical wards was high (94%). Additionally, for the same period the average fill rate for healthcare assistants was 122%. This was because an additional number of healthcare assistants had been used in addition to the numbers that had been planned.
- RCN guidance also states that the shift supervisor in each clinical area should be supernumerary (surplus to the staffing numbers so as to oversee the running of the ward) to ensure effective management, training and supervision of staff. This had been achieved on ward 4A on a regular basis as there was a full establishment of band 6 nurses who undertook this role. However, on ward 3A and 1C there were shortages in band 6 staff, which meant that at night time there was no supernumerary band 6 nurse.
- At night time, the hospital did not have access to an on site senior children's nurse. This was not in line with RCN guidance which states that the minimum expectation for someone undertaking this role is for them to be a band 8a matron or above. However, there were members of the management team who operated a 24 hour on call rota and were contactable if required.
- On wards 3A and 4A, staff attended a safety huddle at the beginning of every shift. This was used to disseminate any important information such as learning from incidents or safety alerts. Staff then completed a further handover of patients that they were looking after. Staff followed a set structure for this, which included a patient overview, medicine administration, observations and any other concerns. However, we did not see evidence of a safety huddle on ward 1C, although a full handover of individual patients was completed.
- Records indicated that there were currently 10.53 whole time equivalent (WTE) band 5 and 0.69 WTE band 6 nursing vacancies as well as 3 WTE play specialist



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vacancies. These vacancies were mainly as a result of maternity and sick leave which meant that there were no current plans to recruit to these positions. This was because the Trust had a pool of their own nurses which was used as much as possible to fill vacant shifts. A recent review of nurse staffing confirmed that this was the case.

- Agency and bank staff usage across surgical wards was high between January 2017 and March 2017. Records indicated that during this period, 107 members of agency staff and 783 members of bank staff had been used.
- A full review of nurse staffing across the hospital had been recently undertaken by the senior management team. This identified both areas of compliance and non-compliance with RCN standards. A number of recommendations had been made to meet the areas that indicated non-compliance and these were to be presented at the next board meeting. For example, ward managers had been asked to complete a full training needs analysis so that advanced paediatric life support (APLS) training could be provided to staff in areas that were either partially or non-compliant with this standard.
- In theatre, staffing met guidelines set by the Association for Perioperative Practice (AfPP). These guidelines state that if there is more than one procedure on the theatre list, the staffing requirements are a circulating nurse, an operating department practitioner (ODP) and two scrub practitioners. The AfPP guidelines also state that if an operation requires a surgical first assistant (SFA), then they must be in addition to the numbers previously mentioned.
- There was also a recovery nurse allocated to each theatre so that patients were recovered on a 1:1 basis, which was in line with national guidance.
- On the days of our inspection, we found that the numbers of staff available in each theatre met national guidance. Additionally, we reviewed rotas for the previous two weeks, which also showed that the correct number of staff had been achieved.
- In the surgery day case unit, there was an open ward and staffing was calculated on a registered nurse to patient ratio of 1:5.

- Records indicated that there were currently vacancies for 2.55 WTE band 2 staff, 2.37 WTE band 5 staff, 0.16 WTE band 6 staff and 1 WTE band 7 staff in theatre.
- The senior management team informed us that since April 2016, there had been a consistent reduction in the number of agency staff used to fill vacant shifts. This had been as a result of a workforce plan which had reduced the amount of money spent on agency staff. Records indicated that there had been no occasions of agency staff being used between October 2016 and March 2017. However, in March 2017, 35 members of NHSP (bank) staff had been used to fill vacant shifts.

## Surgical staffing

- All surgical specialities were consultant led and a lead for each speciality had been identified. Additionally, some specialities had a number of registrars and junior doctors assigned to them.
- Surgical wards had access to a general surgical 'consultant of the week'. When on-call, consultants were free from other clinical duties to ensure they were available when needed. Out of hours, there was a resident registrar and a junior doctor allocated to cover all hospital wards. We reviewed medical rotas between January 2017 and March 2017, finding that all shifts had been filled.
- Medical staff informed us that it was sometimes difficult to reach referrals in a timely manner due to the low numbers of medical staff available. The senior management team had highlighted the low number of junior doctors as a concern. They informed us that it had been difficult to recruit and that they were currently reliant on existing staff completing overtime shifts to fill vacancies. However, the junior doctors and middle grade doctors we spoke with told us they received good support and could easily access the on-call consultant if needed.
- Each speciality had their own arrangements for reviewing patients who were under their care. For example, in neurosurgery, ward rounds were led daily by the registrar, which also included junior doctors and the advanced nurse practitioner when available. In maxillofacial services, all post-surgical patients were reviewed by a consultant, along with the registrar.

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- As part of the on-call rota, different specialities had different arrangements for cover. For example, in ophthalmology there was an on site consultant presence during normal working hours. Outside of these hours, an on-call service was provided by a service level agreement with another Trust as there were currently two WTE vacancies in this speciality. In neurosurgery, there was a 24 hour, seven days a week consultant on call rota and there was always a resident junior doctor available to review patients if needed.
- Locum doctors were used to cover for existing vacancies and for staff during leave. Where locum doctors were used, they underwent recruitment checks and induction training to ensure they understood the hospital's policies and procedures.

## Major incident awareness and training

- The hospital had an up to date major incident and business continuity policy which was available to staff on the intranet.
- In theatre, action cards were available which highlighted the roles and responsibilities of individual members of staff which were to be used in the event of a major incident. Staff were aware of these and knew how to locate them if needed. Members of the theatre management team attended major incident committee meetings that were held bi-monthly. However, on the inpatient wards, staff were unsure of what their role would be in the event of a major incident. Additionally, there was no supporting documentation readily available such as action cards for staff to use in the event of an incident.
- The hospital had an emergency power supply which was tested on a regular basis by the on site maintenance team.
- Fire safety training was part of the mandatory training programme for all staff. However, records indicated that only 68% of surgical staff were up to date with this at the time of inspection. Additionally, a fire policy was currently in draft form and staff had not yet undertaken any practical scenarios which simulated evacuating patients in the event of an emergency.

## Are surgery services effective?

Good



We rated surgical services as 'good' for effective because;

- Surgical care was provided in line with evidence-based practice and standards from expert and professional bodies such as the National Institute for Health and Care Excellence (NICE).
- Records between April 2016 and March 2017 showed that measurable outcomes for patients who had undergone cardiac surgery were slightly better than similar services nationally.
- We saw positive examples of multidisciplinary team working.
- Pain relief and pain management was discussed at the pre-operative assessment stage so that patients and relatives were fully informed prior to attending for surgery. We also found that pain was managed appropriately on reviewing records and talking to patients.
- Nutrition and hydration was assessed appropriately and there was access to dietitian if needed. Fluid balance charts that we checked had been completed correctly.
- Most wards had practice education facilitators available who were responsible for monitoring mandatory training and facilitating further training for all nursing staff.

However,

- In theatre, we found a range of standard operating procedures that were out of date which meant that there was a risk of staff following out of date guidance.
- The central audit team were responsible for completing audits against topics such as compliance with NICE guidelines across the hospital. However, we found that different groups of staff in surgical services did not have an awareness of results from these or more importantly, if improvements had been required.
- We found that there were processes in place for staff to undertake yearly appraisals. However, between April 2016 and March 2017, records indicated that overall compliance with this for nursing and some medical staff was low.



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## Evidence-based care and treatment

- Surgical care was provided in line with evidence-based practice and standards from expert and professional bodies such as the National Institute for Health and Care Excellence (NICE), the Royal College of Surgeons (RCS) and the Royal College of Anaesthetists (RCoA).
- Ward staff were able to access policies, procedures and treatment pathways on the intranet. Patient pathways were printed and placed in the medical notes if needed.
- In theatre, there were a range of local policies, standard operating procedures and clinical guidelines that were available for staff to follow. We checked a sample of these, finding that the majority which were paper based were out of date, with the date of expiry varying between 2012 and 2015. This meant that there was a potential risk that these did not always reflect up to date guidance. A member of the theatre management team was currently in the process of going through all of the standard operating procedures, updating them and adding them to the electronic system for staff to access.
- We found that there were some medical pathways that were out of date. We spoke to the medical pathways co-ordinator who informed us that all pathways were currently being reviewed and placed on the electronic management system. This was important as medical pathways were used to support staff from the surgical wards when providing care and treatment to patients with conditions such as diabetic ketoacidosis (DKA).
- Care bundle audits had been undertaken for different surgical specialities. Examples for these were for patients who had undergone neurosurgery and cardiac surgery. We were provided with results from audits undertaken in November 2016 and February 2017, which indicated 100% compliance against correct antibiotic administration. However, these audits were limited and did not measure all elements of care pathways within each speciality.
- The hospital had a central audit team who were responsible for completing audits against topics such as compliance with NICE guidelines across the hospital. However, we found that different groups of staff in surgical services did not have an awareness of results from these or more importantly, if improvements had been required.

- There were also examples of when planned audits had not been completed. An example of this was against NICE NG51 (recognition, diagnosis and early management of sepsis). This meant that there was currently limited assurance that NICE NG51 guidelines were being adhered to. The management team informed us that plans were in place to audit this during May 2017 and results from this would be available in June 2017.
- A peer review had been undertaken for the burns service in 2016. The review had identified a number of areas for improvement, including providing better discharge information and having a nominated lead therapist for the burns service. The management team had implemented an action plan to make improvements where needed.

## Pain relief

- Pain relief and pain management was discussed at the pre-operative assessment stage so that patients and relatives were fully informed prior to attending for surgery. Patients were given prophylactic pain relief prior to undergoing surgery when appropriate.
- In recovery, the anaesthetist was responsible for managing post-operative pain. There was a standard operating procedure which stated that pain must be controlled before patients were discharged to the ward. We observed a patient being transferred to the ward and saw that this was completed appropriately.
- In day case surgery, there were procedures in place for staff to follow when providing pain management to patients before they were discharged home. Nursing staff had access to patient group directive (PGD) medication as patient discharge was nurse led. PGD's are lists of medication that nursing staff are allowed to give to patients without them being prescribed individually by a member of medical staff.
- Age appropriate pain assessment systems were used both in theatre and on surgical wards. For younger children, observations and levels of agitation were used to assess pain. For older children, there was a scoring tool that used facial expressions as a visual mechanism for patients to indicate if they felt happy or sad in relation to their levels of pain. A pain scoring tool using numbers was also in place for those children and young people that understood it.

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- Staff were able to make referrals to a specialist pain management team if needed. This service was run by the anaesthetic department.
- In seven records that we reviewed, we saw that pain had been reviewed on a regular basis, and appropriate pain relief had been given. There was also evidence of pain management being discussed as part of multi-disciplinary team meetings and staff handovers. Patients and relatives that we spoke to confirmed that they felt their pain had been well controlled.
- There were examples of studies being undertaken by members of medical staff to improve the effectiveness of pain medications that were administered for specific conditions. An example of this was a study that was completed measuring the effectiveness of gabapentin in reducing acute pain scores following a tonsillectomy. However, there was limited evidence of regular audits being undertaken across the hospital measuring the effectiveness of general pain management. This meant that there was potential for areas that required improvement to be missed.

## Nutrition and hydration

- There were procedures in place to provide fasting guidance to patients and relatives at the pre-operative assessment stage. However, there were currently no audits being undertaken measuring if patients were compliant with the fasting guidance before undergoing a surgical procedure.
- Nutrition and hydration assessments were undertaken as part of the pre-operative assessment and for admissions to the inpatient wards. There was access to a dietitian during normal working hours between Monday and Friday if needed. Staff informed us that there were no issues in accessing this service when needed.
- Fluid balance including input and output was monitored on the electronic records system. We sampled seven patient records, finding that these had been completed correctly on all occasions.
- Patients who required total parenteral nutrition (TPN) regimes were reviewed by medical staff and this was prescribed when needed. TPN regimes provide appropriate levels of intravenous fluids and nutrition.

- We found that breast milk was clearly labelled and stored appropriately.

## Patient outcomes

- The hospital had limited opportunity to benchmark results against similar services nationally as there were not many national audits for paediatric surgery currently available.
- Records between April 2016 and March 2017 showed that measurable outcomes for patients who had undergone cardiac surgery were slightly better than similar services nationally. The survival rate had been 98.4% in comparison to a predicted rate of 97.7%.
- The Trust were one of only two paediatric centres nationally who were able to provide extracorporeal membrane oxygenation (ECMO). ECMO is used to support patients whose heart or lungs are unable to provide an adequate amount of gas exchange to support life. The hospital had undertaken a yearly International audit which benchmarked them against other similar providers. Results indicated that in 2016, for children receiving cardiac support, survival rates were better than International survival rates (80% in comparison to 50%). For the same period, results for children receiving respiratory support were slightly worse than International survival rates (40% in comparison to 50%).
- An audit had been undertaken in 2016 to review the effectiveness of patients who had required cardiopulmonary resuscitation (CPR). Results from this showed that there had been a 91% success rate in achieving a return of spontaneous circulation. This was out of 57 cases reviewed. The hospital monitored readmissions that had occurred within 28 days of undergoing surgery. Between April 2016 and March 2017 the monthly percentages varied between 2% to 3.8% of all patients who had undergone a surgical procedure. We were unable to compare this to similar services nationally.

## Competent staff

- The hospital employed practice education facilitators across most departments. They were supported by a trust-wide education team. The only exception to this in surgery was on ward 3A where training was facilitated by the ward manager.

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- In theatre, there was one whole time equivalent (WTE) practice education facilitator, who was supported by an additional three members of staff who also undertook clinical duties. They were responsible for organising training, as well as monitoring mandatory training compliance and appraisals.
  - There was an induction policy and an induction programme for new staff to complete. All new staff completed a corporate induction and were assigned a named mentor, had a list of key competencies to complete and were given a supernumerary period (this meant that they were not included in the daily staffing numbers to look after patients so that they could learn).
  - We were given examples of when theatre staff had been supported to complete additional qualifications either internally or externally. For example, eight scrub nurses had undertaken training to become first surgical assistants. This meant that they were able to undertake additional duties during a surgical procedure under the supervision of a consultant.
  - Members of the theatre team undertook 10 half day training sessions per year. Surgery was not scheduled during these times so that all staff were able to attend. The topics covered as part of these sessions was based on any gaps in knowledge that had been identified, if a new practice had been introduced or if staff required to catch up with training updates such as paediatric life support. A positive example of the way that this time was used included the provision of human factors training, which was a key action following a 'never event' that had occurred.
  - On surgical wards, a training needs analysis had been undertaken for nursing staff. This was important as when the service moved to the new hospital, a number of specialist wards had been amalgamated together. For example, on ward 4A, staff looked after patients who had undergone both orthopaedic and neurosurgery. Staff informed us that this had been challenging as they had not always felt comfortable managing patients with conditions they had no experience of dealing with.
  - A number of education days that were held throughout the year had been designed to support staff with key competencies and skills for the area that they were working in. However, we were informed that due to operational demand not all of these had been facilitated.
  - On ward 1C, the practice education facilitator had devised a competency book which covered core intensive care competencies as well as a number of others that were specific to caring for cardiac surgery patients.
  - Staff were able to complete a self-review of their competencies as part of the appraisal process which was an opportunity for them to raise any concerns or training needs that they had. However, we found that appraisal rates varied across the wards and that in some cases, there was limited documentation to evidence that a full appraisal had taken place.
  - Overall compliance with appraisals for all nursing staff was only 41%. On ward 4A, we found that no staff had completed an appraisal between April 2016 and March 2017. On ward 3A, records indicated that 84% of staff had undergone an appraisal during the same time period; however, we reviewed a number of staff appraisal forms and found that they had only partly been completed. The ward manager informed us that it had been difficult getting staff to complete these fully and in a timely manner.
  - In addition, records indicated that only 26% of clinical fellows and junior doctors within the surgery division had completed their appraisals. However, we also noted that 99% of consultants were up to date with this.
- ## Multidisciplinary working
- There was evidence that surgical staff worked well with each other and that they had good relationships with different groups of staff throughout the hospital.
  - There were a number of nurse handovers and safety huddles that were held daily on both the wards and in theatre. These were used to discuss patient information and disseminate any important information to staff. We attended two of these and found them to be well organised and informative.
  - A member of the management team attended bed meetings which were held three times per day. Staff informed us that these meetings were effective in

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managing access and flow and responding to any new admissions or patients who had changed in acuity. Also, the management teams were able to discuss if they had staffing shortfalls in their areas.

- Referrals were made for physiotherapy, occupational health and speech and language therapists when required. Members of these teams did not attend the daily ward rounds, but we saw examples of them working well with nursing and medical staff when contributing to care and treatment that was being delivered. We also saw examples of this being documented in patient records.
- Staff were also able to make referrals to a microbiologist if needed. Microbiologists review patients and ensure that appropriate antibiotics and treatment plans are implemented for different conditions.
- Each surgical speciality held a number of multidisciplinary team meetings through the week. These included different groups of staff, sometimes including staff from external organisations. This was so that all cases in the local area were reviewed and a decision could be made to whether a patient should be transferred for treatment.
- Staff informed us that there were occasions when medical patients were present on the surgical wards. This was mainly because they were being treated for a medical condition as well as requiring a surgical procedure. Staff informed us that organising medical review was sometimes difficult, although they felt that there were good working relationships with medical staff.
- We found that on some wards there were reduced numbers of play specialists. We were told by some staff that this sometimes compromised the level of input afforded to some patients and reduced the amount of time the children spent in play areas, particularly outdoor areas, as they required supervision, which was not always available. Staff reported that the play therapists were sometimes overstretched and covered various areas which made it difficult to provide full cover for wards all of the time. We were advised that there was active recruitment of play specialists who were due to start working imminently.
- There was an emergency resident theatre team who were on site 24 hours a day, seven days a week. This team included an operating department practitioner, a scrub nurse and a healthcare assistant. There was also an on call consultant anaesthetist who was able to attend if needed.
- Out of hours, there were a number of on call consultants available from different surgical specialities. Medical staff informed us that there were no problems contacting them for advice and they would attend if required.
- Staff had access to pharmacy, diagnostic imaging as well as other diagnostics such as blood testing seven days a week. Out of hours, each of these services had an on-call facility and a member of an appropriate team was able to attend in the event of an emergency. Additionally, there was 24 hour, seven day a week access to endoscopy and bronchoscopy.
- The hospital provided a seven day physiotherapy service that were available to review surgical patients and were responsible for introducing rehabilitation plans. There was also an on call physiotherapy service available out of hours.
- Other allied health professionals such as speech and language therapists as well as occupational therapists were available five days a week during normal working hours.

## Access to information

- All staff had access to the intranet and were able to access a range of information including policies and procedures, clinical guidelines and the incident reporting system. However, in theatre we found that not all standard operating procedures had been added to the intranet. This was because most paper copies were out of date and were currently in the process of being reviewed. This meant that in these cases, staff were not always able to access the most up to date guidance.
- Pre-operative assessments were paper based and were available as part of the patients medical notes on the day of admission. Staff were able to print out clinical pathways and add them to patients' medical notes when required.

## Seven-day services

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- The electronic system was used to record things such as patient observations and risk assessments, and able to access diagnostic results such as x-rays and blood tests using the same system.
- Discharge information was inputted into the electronic system and a print out of a discharge sheet was given to patients and their relatives prior to leaving.
- Staff were also able to submit an electronic discharge letter to a patient's GP using the electronic records system.

## Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- The hospital had policies for consent, mental capacity and deprivation of liberty safeguards (DoLS) which were available on the intranet. Staff knew of these and knew how to access them if required. However, we found that mental capacity act and deprivation of liberty training was not currently included as part of the mandatory training programme.
- Staff understood how to assess if children were able to consent to treatment themselves. We were informed that as children became older, they were involved as much as possible in their care and treatment.
- Information about the procedures that were to be completed were given to the patient and families during the pre-operative consultation. Signed consent was usually completed on the day of surgery. We sampled seven medical records and found that discussions with the family had been documented appropriately and consent had been obtained prior to surgical procedures being undertaken.
- Staff had knowledge of Gillick competence. Gillick competence is a term used to describe if a child under 16 years of age is able to consent to their own medical treatment without the need for parental permission or knowledge. However, staff that we spoke to were unable to articulate what the Fraser guidelines were. Fraser guidelines relate to whether young people have the maturity to make their own decisions and consent in sexual health discussions and contraception.

## Are surgery services caring?

Outstanding



We rated surgical services as 'outstanding' for caring because;

- We found a strong, person-centred culture. Holistic care was provided by kind and caring staff who made every effort to provide support to patients and their parents.
- We found that patients and their parents were actively involved in decisions about care and treatment. Their views and wishes were respected and valued.
- Feedback from people who used the services was continuously positive. They reported that staff were always available, kind and supportive. They stated that their privacy and dignity was maintained at all times.
- Relatives told us that staff gave them the opportunity to talk about the care of their child, were given time to ask questions and they felt involved in decisions about care.
- The service recorded very positive friends and family test and patient satisfaction survey results.
- We observed positive, compassionate and considerate conduct from staff towards their patients and families.
- Staff were fully aware of children and parents emotional needs and ensured this was embedded in the care that was provided. The emotional needs of patients and parents were assessed and this was supported by the multidisciplinary team.
- Staff were motivated and committed to working with parents and children to deliver the best care they could.

## Compassionate care

- During our inspection we saw interactions between staff and children and between staff and parents. We saw that these interactions were kind, courteous and inclusive.
- We saw that staff demonstrated a compassionate and caring attitude towards children, young people and their parents.
- We spoke with six patients and their parents and we were told that they were very satisfied with the care and treatment they had received and they found the staff caring, approachable and supportive.



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- One child spoke of how they were unable to eat chocolate eggs but staff ensured they were not left out and ensured they received an alternative gift.
- Friends and Family test results for Alder Hey hospital overall showed that 98% of respondents would recommend the hospital to their family and friends, which was better than the England average of 96%. Only 1% said they would not. However, the response rate for the trust was only 20% compared to an England average of 25%.
- Individual results for surgical wards and areas show a response rate of 29% for the surgical day-case unit; 99% of respondents stated they would recommend the service to their family and friends. For Ward 4A the response rate was 36% with 93% recommendation and 5% would not recommend. For Ward 3A the response rate was 36% with 100% recommendation. For Ward 1C the response rate was 27% with 100% recommendation.
- The hospital received a low response rate as to whether staff would recommend the hospital to friends and family as a place to receive care as of September 2016. Only 8% of staff (256 from a total of 3095) completed the feedback; the results showed 88% of staff would recommend the hospital as a place to receive care and 4% would not. The remaining 8% did not express a recommendation or non-recommendation.
- Alder Hey's own patient satisfaction survey recorded that in February 2017, 100% of surgical inpatients stated they were treated with respect.

## Understanding and involvement of patients and those close to them

- Parents with children who were inpatients were assisted to remain involved with their care by provision of overnight accommodation at a nearby location.
- Parents told us that staff involved them in their care, and provided information and support in order to make decisions about the child's care and treatment.
- We observed staff involving and including patients and their families during discussions and planning for care and treatment.
- We saw instances of staff supporting parents to feed their baby and other staff providing guidance to parents on how to use equipment.
- We saw examples of care contracts drawn up in consultation with patients, these expressed what they did and didn't want from their encounters with staff and whilst at the hospital.

## Emotional support

- Staff supported the emotional needs of patients and their families and took their emotional needs into account when planning care and delivering information. We saw examples of this and observed this in practice during our inspection.
- Patients were assessed for anxiety and depression, phobias and fears. Staff (in particular, play specialists), sought information from patients and their parents about reactions to the hospital environment and treatment. They listened to what the child wanted and what might increase anxiety. They provided coaching, confidence building, de-sensitisation and distraction therapies for them in order to ensure they could receive the treatment they required and had the least stressful experience.
- Counselling and psychological services were available for children and/or their parents on request or if a staff member requested input. We saw examples of when a patient received psychologist input due to the emotional and psychological needs they demonstrated whilst an inpatient. These services remained accessible to the patient and their parents after their discharge. We saw examples of families who had continued to use the services long after the period of inpatient stay due to the stresses of caring for a child with long term complex health concerns.
- Clinical nurse specialists were available to provide condition specific emotional support to patients
- Bereavement services were available to parents who had lost a child. This service provided counselling, support groups, befriending schemes, therapeutic breaks and a telephone helpline.
- We were told by one parent "the staff here have got me through a very difficult period, I don't think I could have done this without them".
- The cardiac team had arranged a family day so that families were able to share their experiences and receive ongoing support from the cardiac medical team.



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- The burns department had introduced a burns camp twice annually to give patients an opportunity to network with their peers.
- Children we spoke with were positive in how staff interacted with them and helped them overcome fears around surgical procedures they were having.
- There had been consideration to the design of the day case waiting room to provide an interactive area for children so that they don't feel they are in a clinical environment, this included a giant interactive fish tank where children could design their own sea creatures and see them come to life.

## Are surgery services responsive?

Good



We rated surgical services as 'good' for responsive because;

- Services were planned with the needs of patients and parents in mind. The services were based on best practice guidance and from information gained from public and staff consultation.
  - The environment and facilities were suitable and pleasant and met the needs of patients and parents attending for surgery or being cared for on the wards.
  - Access to surgical services was good with over 91% of patients gained access to treatment with 18 weeks of being referred.
  - The operating theatres were utilised effectively, enabling more patients to receive their treatment.
  - There was access to an emergency operating theatre which was available 24 hours a day, 365 days a year.
  - The average length of stay for surgical patients at Alder Hey from April 2016 to March 2017 was shorter (better) than the England average.
  - Bed occupancy levels were not too high which meant there was usually beds available for patients being admitted and there was good access and flow in the department.
- The individual needs of patients were met, such as those with complex needs, those who were anxious or those living with a learning disability.
  - The spiritual, cultural and religious needs of patients were taken into account and facilities were provided to accommodate those needs.
  - Feedback from patients was sought and complaints and concerns were dealt with appropriately and in a timely manner.

However,

- There were high levels of cancelled operations for non-clinical reasons.
- When operations were cancelled, a large proportion were not subsequently treated in 28 days.

## Service planning and delivery to meet the needs of local people

- Alder Hey is one of four specialist paediatric trusts nationally. The surgical services provided were available to paediatric patients from across the country. However, most were patients from the local region which covered the North West of England, North Wales and the Isle of Man.
- The new surgical premises were designed and purpose built to facilitate effective surgical practice. There was consultation with both patients and surgical professionals to determine the requirement of the new facility and this was planned to meet the needs of service users.
- Suitable facilities and premises were available to the parents of children undergoing surgery. Waiting rooms were pleasant and well equipped and there was access to food and beverages.
- There were facilities and play areas on all wards and in operating theatres, waiting areas and in the day surgery unit. There was a sensory room in the day surgery unit that was equipped with lights and soft furnishings. There was portable sensory equipment and 3D televisions that could be brought to the bedsides of those who might benefit from it.

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- The environment had been created to ensure it was friendly to children and young people. The wards had electronic game stations and rooms for older children which were away from younger children's areas.
- There were facilities on the wards for parents to prepare food and drinks and there were rooms available if they needed somewhere quiet away from their child's bedside. There was access to fold down beds for them to sleep on if they wanted to stay with their child overnight although some parents told us these were uncomfortable.
- The facilities and premises for surgery at Alder Hey were planned by reference to best practice research and through consultation with staff, experts and members of the local community. The facilities were appropriate for the surgical services provided. For example the facilities for day surgery were compliant with the recommendations of the 'day case and short stay surgery guidelines' by the Association of Anaesthetists of Great Britain and Ireland and the British Association of Day Surgery. Day case surgery was provided in a self-contained unit separate from inpatient wards and theatres with its own reception, consulting rooms, ward, operating theatres and recovery areas.
- Parents with children who were inpatients could access overnight accommodation at Ronald Macdonald house, operated by a charity, which could house 84 families on site.
- Between April 2016 and March 2017, on average 92% of patients received treatment with 18 weeks of the date they were referred for that treatment. This ranged from 73% for patients waiting for spinal procedures to 100% of patients waiting for orthodontic treatment. Overall this was better than some other specialist paediatric trusts but not as good as others nationally.
- Weekly surgical planning meetings were held and attended by multidisciplinary staff, this facilitated the management of patient admission times, theatre scheduling, safe staffing and the need for further specialist or diagnostic support.
- Theatre utilisation was 84.9% on average across all operating theatres. This ranged from 76.6% utilisation for the gynaecology theatre to 90.2% utilisation for the urology theatre. Most other theatres had utilisation at around 85% which reflects good use of operating theatres, enabling greater numbers of patients to be treated.
- Bed occupancy across all surgical wards was 76.1%, which meant that surgical services did not usually experience a problem with lack of available beds. However, staff did tell us that sometimes there was higher demand for some surgical specialities than others for example cardiac surgical beds, but stated that this did not usually result in the cancellation of operations.
- The average length of stay for patients following surgical procedures at Alder Hey from April 2016 to April 2017 was 1.7 days, which was shorter (better) than the average across other children's trusts in England which is 2.6 days.

## Access and flow

- During the period April 2016 to March 2017, surgical services carried out 9,018 day case procedures, 3,480 elective procedures and 999 unplanned procedures. This totalled 13,497 procedures for the year.
- Patients were admitted to Alder Hey surgical services through various means. They may have attended the emergency department and have been deemed to require surgery for their condition. They may have been referred to the hospital via their GP for a consultation on a suspected surgical condition. They might also have been referred from their own local hospital for a surgical procedure only undertaken at this regional centre; for example Alder Hey was the specialist cardiac surgery centre for children in the region. They might also have chosen to have their surgery carried out at the hospital through the NHS 'choose and book' system.
- Surgical services provided an emergency theatre which was available 24 hours a day, seven days a week for unplanned and unscheduled procedures for patients admitted via the emergency department and surgical assessment unit and those who develop the need for surgery as an inpatient.
- Patients on the day surgery ward were discharged by nurses who were trained in this practice. Patients had to meet a minimum criteria before they were safe to be discharged. Nurses had the support of senior staff and an on-site anaesthetist if they needed any further input or advice on suitability for discharge.

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- On the inpatient wards, patients were discharged by surgical doctors, which was based on clinical judgement and examination.
- A print out of the summary of care and treatment provided for the patient was given to the patient and parent on discharge and an electronic discharge summary was sent to the GP within 48 hours of discharge. We saw examples of these summaries and they contained all relevant information.
- Pharmacists were present on wards for a half a day each day, which facilitated the timely dispensing of medication for patients to take home. The pharmacist could supply medicines from a stock of items on the ward or could collect items from pharmacy stock themselves. This prevented delayed discharges due to waits for medications in the majority of cases.
- From January 2016 to December 2016, 304 pre-planned surgical procedures were cancelled for non-clinical reasons, of these 61 (20%) were not subsequently treated within 28 days. This was higher than the England average which was 6% of patients not treated within 28 days. Examples of cancellations for non-clinical reasons included, ward beds unavailable; surgeon unavailable; emergency case needing theatre; theatre list over-ran; equipment failure; administration error; anaesthetist unavailable; theatre staff unavailable and critical care bed unavailable. NHS England considers that failing to treat patients within 28 days of a procedure which was cancelled for non-clinical reasons to be a breach of the standard.
- The hospital did not have any surgical outliers (patients that were on a medical ward as opposed to a surgical ward), surgical patients were always accommodated on surgical wards, however there were 402 medical (outlier) patients cared for on surgical wards between April 2016 and March 2017, which equated to approximately 8 patients per week on average.
- British sign language interpreters were available to be booked in advance.
- Leaflets and information packs were available in a range of languages and accessible formats such as easy read, large font and plain English.
- The trust's website was equipped with accessible adjustments such as increased text size and high contrast options.
- There was a lift available to the upper floors and wards areas and surgical admissions unit. The environment was accessible by wheelchairs. The environment was suitable for use by those with mobility, visual impairments and for those using pushchairs.
- A range of menus were available to all patients. We spoke to several patients and relatives, who told us that the food was excellent and that there was a lot of choice. Chefs were located on each ward and food was made to order, this gave patients a range of options to suit their individual choices and needs. Relatives were also able to order food for a nominal fee.
- There was a multi faith spiritual care service team who were available on site at the hospital during core hours and available 365 days a year, 24 hours a day, seven days a week through an on call service. There was a pleasant sanctuary with quiet area that provided for a range of faiths, with ablution facilities and access to materials to meet the needs of different faiths.
- The departments demonstrated a knowledge and experience of caring for patients with living with a learning disability and other individual needs. There were play therapists available in every department who were able to offer distraction and play techniques should it be required.
- Those with more complex care needs had their care planned by multidisciplinary teams who created innovative ways to best care for the patient and meet their needs. The departments had arranged familiarisation visits, given patients equipment to take home and get used to, worked hard to educate and de-sensitise children to their fears by gradual and repeated exposure to the things they were apprehensive of, distraction therapies and allowed patients to wear their own clothes for theatre.

## Meeting people's individual needs

- The parents we spoke with said that the individual needs of their child were taken into account and that care was individualised.
- Surgical services could arrange interpreters in person or via a telephone service for those patients whose first language was not English.

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- Staff tried hard to understand the needs of their patients and their parents in order to formulate a tailor made care plan to meet the specific needs of that patient. We saw various examples of such care plans and staff strived very hard to make sure everything was in place for their patients. They undertook best interests and reasonable adjustments meetings with multidisciplinary teams and families to ensure the treatment was a success.

## Learning from complaints and concerns

- There was comprehensive information and advice regarding the various methods of communicating and feeding back complaints and concerns to the hospital. Patients and parents were given a range of options such as the patient advice liaison service (PALS), written or electronic complaints, informal feedback, telephone contacts, directed to NHS choices or the friends and family test.
- There were leaflets explaining the various options around the hospital, on posters and via the website.
- Staff demonstrated they understood how to support patients and relatives to make complaints. We observed that staff actively sought feedback from those experiencing their care in order to put right anything they had immediate control over.
- We reviewed a selection of complaints and found they were all responded to in appropriate timescales. Complaints were addressed in an appropriate manner and investigated in sufficient detail.
- Staff stated that complaints were discussed and highlighted at team meetings and shared via emails and bulletins. We saw from minutes that managers discussed them at governance and departmental meetings.
- We saw evidence of when action had been taken to improve services following the receipt of feedback or complaints. For example, the kitchen facilities were improved for relatives following a complaint and stickers were used to brighten up areas of the ward following feedback.

## Are surgery services well-led?

### Requires improvement

We rated surgical services as 'requires improvement' for well-led because;

- We found that the governance framework for surgical services was relatively new and was still being embedded at the time of inspection.
- We found that on surgical wards, there was no evidence of risk assessments being completed. We were therefore unsure if all risks had been identified and mitigated appropriately. This was not line with the hospital's risk management strategy. However, we did note that in theatre this process was being followed.
- There was no evidence of ward managers attending regular meetings with the clinical business unit (CBU) for surgery. This meant that it was unclear how risks were being escalated and improvements were being made. In contrast, there was evidence that the theatre management team attended regular meetings with the CBU.
- We sampled risk registers and found that in a number of cases, there was limited or no evidence that the risks had been reviewed fully or details of how the level of risk had been mitigated appropriately.
- Staff raised some concerns that they were sometimes under pressure to complete their roles and gave examples of when they felt that the management team had not always listened to their concerns or made any improvements.
- A monthly staff engagement temperature check was undertaken for surgical services. Results from this had shown an improvement from January 2016, when only 39% of staff had recommended the hospital as a place to work. Results In November 2016 were still low at 67%.

However,

- There was a clear vision and strategy for surgical service. This was underpinned by a number of strategic objectives.

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- In theatre, a matron had been employed to manage risk, quality and infection control. We found that this working well and we saw evidence where improvements had been made.
- Staff informed us they felt that there was an open and honest culture within surgical services. We observed all team members working well together during the inspection. All staff were proud of the job that they were doing and felt that they provided a fantastic service to patients and their relatives.
- We saw examples of innovation, including the opening of the first paediatric hybrid theatre in Europe and the hospital innovation team have worked collaboratively with a local university to develop 'virtual surgery' and to use high definition 3D printing so that organs can be viewed in much more detail.

## Leadership of service

- Surgical services were run by a CBU which also included critical care, anaesthesia and neonatal services. The CBU had a director of services and was supported by a team including an associate chief of operations, an associate chief nurse as well as a quality and risk manager. The management team informed us that this structure had been implemented to shadow the structure at executive level and so that it could function with more autonomy.
- Each member of the CBU had different responsibilities, for example, the associate chief nurse was responsible for supporting the ward managers with staffing issues, while the quality and risk manager supported staff with investigations into reported incidents and clinical audits.
- Within the CBU, there was a chief of operative care who was supported by a lead consultant for every speciality, including burns and plastics as well as neurosurgery. They were responsible for providing supervision to consultants and developing surgical services.
- At departmental level, there was a theatre manager who was supported by an education team and a number of staff who had different responsibilities, such as leading infection and prevention control for the department. A matron had also been recruited to support risk

management and quality within the theatre environment. In addition, each ward had its own manager who had a number of responsibilities including staffing and incident investigation.

- The theatre and ward management teams were supported on a day to day basis by supernumerary co-ordinators who were available on every shift. For example, in theatre there was always a band 7 staff member on duty who was responsible for ensuring that all theatres were staffed correctly. However, we found on some surgical wards, this was not always facilitated. For example, on ward 1C, at night time, a band 5 nurse was responsible for supporting staff and ensuring that care and treatment was delivered appropriately. Staff informed us that they did not feel that they were able to undertake this role effectively as they had patients to look after on a regular basis. Additionally, they had not been provided with any extra training to undertake this role.

## Vision and strategy for this service

- There was a clear vision for surgical services which had been devised as part of a two year forward plan. There were three key elements to this, which included having world class clinical outcomes, providing safe care and treatment to all patients and teamwork being an integral part of surgical services.
- Members of the management team were able to identify with the vision. However, other surgical staff, including nurses and doctors were unclear about this.
- The vision for surgical services was underpinned by a number of strategic objectives. Examples of these were providing systems and an environment that promoted excellent care as well as ensuring that the workforce was the right size and had the appropriate skills.
- Although there were examples of how these objectives would be met, we did not see evidence of a service improvement plan setting time frames in which improvements were to be made. Additionally, there were examples when strategic objectives had been set for the previous year, but results from this had been mixed. Examples of improvements that had been achieved included the percentage of families recommending the hospital as a place of care exceeding 95% (98% in December 2016) and a 50% reduction in the short notice cancellation of theatre lists. However,



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there were areas that had not been achieved which included a 25% reduction in surgical site infections, a 5% reduction of day case to inpatient stays (there had been a 1% increase) and 95% of staff recommending the hospital as a place to work (67% as of January 2017).

## Governance, risk management and quality measurement

- We found that the governance framework for surgical services was relatively new and was still being embedded at the time of inspection. The hospital had a risk management policy that was located on the intranet. Members of the management team knew about this and were able to locate it.
- Risks that had been identified for both theatre and the ward areas were monitored and managed through an electronic risk register. We found risk registers were available for all areas of surgical services. Department managers were able to locate these on the electronic system. However, managers in two ward areas were unsure of what was highlighted on their risk registers.
- We found that on surgical wards, there was no evidence of risk assessments being completed. We were therefore unsure if all risks had been identified and mitigated appropriately. Examples of this included that a risk assessment for children absconding or being abducted from the ward areas had not been completed. Also, the risk of the resuscitation equipment being located in different areas of the ward and not being checked in line with the resuscitation policy had not been assessed. The latter was a particular concern as an external review had been undertaken at the beginning of 2016 which highlighted that this was a risk.
- In addition, the risk management policy stated that if a potential risk had been identified, a risk assessment must be completed so that the level of risk was properly assessed. We raised this with the management team who informed us that an informal weekly discussion was held between the ward managers and the risk manager for the clinical business unit (CBU) for surgery, although they acknowledged that the formal process was not being followed and that there was no documentation to recording this.
- In contrast, we saw evidence of risk assessments being undertaken in theatre. When the level of risk reached a certain level, the risk was escalated to the risk register in line with the risk management policy.
- We reviewed a sample of risk registers across all departments. We found that individual members of staff had been allocated to manage individual risks, an initial risk score had been documented in all cases and controls to manage the risk were documented in most cases. There was a date for further review, which was dependant on the level of risk and in some cases; the review had been documented appropriately. However, in a number of cases there was limited or no evidence that the risks had been reviewed fully or details about how the level of risk had been mitigated further.
- The management team from theatre attended several departmental and clinical business unit (CBU) meetings on either a monthly or a bi-monthly basis. There was a clear structure of how concerns were escalated. For example, there were monthly departmental risk and governance meetings and a bi-monthly theatre safety board. This fed into the monthly CBU risk and governance meeting. However, we did not see any minuted evidence of the ward managers attending monthly meetings with the CBU.
- Each department submitted information to form a monthly quality dashboard. The results from this formed the overall quality dashboard for surgery. However, this was primarily performance orientated. There were plans to introduce further clinical indicators so that compliance in these areas could be monitored more effectively.
- Minutes of meetings that we reviewed indicated that members of the executive team attended CBU meetings on a regular basis, meaning that they were aware of agenda items that were discussed or issues that had been raised. In addition, an integrated performance dashboard was used to monitor compliance with items such as mandatory training or personal development reviews.
- Surgical services had developed an audit plan for 2017 / 2018. This was based on a number of audits measuring the effectiveness of clinical services. The senior



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management team informed us that it was difficult to benchmark results against similar Trusts nationally as there were only a limited number of specialities that were eligible for data submission.

- The hospital had a central audit team who were responsible for measuring compliance against a variety of best practice guidelines. However, the management team were unable to articulate what they had undertaken. This meant that if audits had been completed, we were unclear about the process for learning and making improvements.
- In theatre, we found that most standard operating procedures were out of date by either two or three years. These were currently being reviewed and were in the process of being added to the electronic system. However, in the meantime, we had concerns that there was a risk of staff following guidance that did not reflect current practice.

## Culture within the service

- Staff informed us they felt that there was an open and honest culture within surgical services. We observed all team members working well together during the inspection. Staff told us that patient care was the priority and that they felt this view was shared by staff throughout the department.
- All staff were proud of the job that they were doing and felt that they provided a fantastic service to patients and their relatives.
- Staff informed us that most leaders were visible throughout the hospital, and that they generally felt supported. However, staff raised some concerns that they were sometimes under pressure to complete their roles and gave examples of when they felt that the management team had not always listened to their concerns or made any improvements. Examples of this included when staff had raised concerns about managing the new environment since the move from the old hospital and the feeling of being understaffed and under pressure to do their jobs in difficult circumstances. Some staff also felt under pressure as a result of the amalgamation of specialist wards, for example, staff who had experience of working on orthopaedic wards were also responsible for managing patients who had undergone neurosurgery.

- Despite this, turnover levels had been consistently low between April 2016 and March 2017. Turnover for nursing staff had varied between 0.2% and 1.9%. For the same period turnover rates for medical staff varied between 0.8% and 3.4%.
- Sickness rates had varied between 0.3% and 2.5% for medical staff. Sickness rates for nursing staff had been higher, ranging between 4.7% and 7.3%.
- Staff knew how to access policies in relation to whistleblowing and bullying and harassment. These were available to staff via the intranet.

## Public engagement

- All patients and relatives were encouraged to give feedback about the care and treatment that they had received during their stay in the hospital.
- The hospital operated an online patient feedback forum which was open and visible to website visitors. There was an option to raise concerns or poor experiences and provide positive feedback. The posts were reviewed and responded to by Alder Hey 'post authors' and individual posts were referred to the relevant service managers.
- Share your experience online feedback could be directed to specific departments as each department had a feedback option on their website page, such as day surgery, neurosurgery and orthopaedic and trauma departments.

## Staff engagement

- The hospital had appointed a lead to facilitate 'listening into action' groups. They had been in post since April 2016. 'Listening into action' was used to engage with as many employees as possible, to listen to concerns or ideas that they had, and to make improvements from these.
- The hospital had held six 'big conversation' events in the last 12 months. We were informed that these had been well attended, with up to 80 staff taking part.
- A monthly staff engagement 'temperature check' was undertaken for surgical services. Results from this had shown in January 2016 only 39% of staff had recommended the hospital as a place to work. In November 2016, this was 67%.

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- The same survey also showed that in November 2016, 90% of staff would recommend the hospital as a place to receive care and treatment.

## **Innovation, improvement and sustainability**

- A review of all nurse staffing had been recently undertaken by the senior management team. This was completed to help review current gaps, review financial implications and suggest ways in which the workforce could be improved and sustained in the future. This was currently in draft format and was due to be presented at the next board meeting.
- The senior management team had recently created a matron role in theatre. Initial reviews showed that this role had been beneficial to the improvement of the service. The senior management team had identified the need for a matron in each CBU to ensure that there was a direct link between each department and members of the CBU.
- A hybrid theatre had recently been opened in theatres which was the first paediatric hybrid theatre to be opened in Europe. Hybrid theatres are equipped with advanced medical imaging devices such as computerised tomography (CT) or magnetic resonance imaging (MRI) scanners. The aim of this is to increase effectiveness and to reduce the number of occasions that patients have to undergo surgery, including general anaesthesia.
- The hospital innovation team had worked collaboratively with a local university to develop 'virtual surgery' and to use high definition 3D printing so that organs can be viewed in much more detail. This allowed staff to 'virtually walk around' organs.
- There was evidence of innovation within cardiac surgery. The hospital had developed an early extubation pathway for patients who had undergone this type of surgery and were the only children's cardiac service nationally to work with the Public Health England surgical site infection surveillance team in reducing the number of surgical site infections within this speciality.
- The Trust had pioneered a headspace project which had created the world's first normal equivalent model of the human head. This enables comparison of pre-operative and post-operative 3D images of craniosynostosis patients.
- The orthotics department had a specialist scanner which produced specialist braces for patients without exposing them to x-rays.

# Outstanding practice and areas for improvement

## Outstanding practice

- Each ward had their own dedicated pharmacist and medication was accessed by fingerprint technology this ensured that medication was secured and stock levels were adequately controlled.
- There was a chef allocated to each ward and all food was prepared on the ward.
- A hybrid theatre had recently been opened and a small number of operations had been undertaken using this facility. This was the first paediatric hybrid theatre to be opened in Europe.
- The hospital innovation team had worked collaboratively with a local university to develop 'virtual surgery' and to use high definition 3D printing so that organs can be viewed in much more detail. This allowed staff to 'virtually walk around' organs.
- The Trust had pioneered a headspace project which had created the world's first normal equivalent model of the human head. This enables comparison of pre-operative and post-operative 3D images of craniosynostosis patients.

## Areas for improvement

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

- The trust must take action to ensure all staff who are involved with assessing, planning, and evaluating care for children and young people are trained to safeguarding level three in line with the safeguarding children and young people: roles and competencies for health care staff Intercollegiate Document (2014).
- The trust must take action to ensure all children and young people receive treatment in relation to sepsis within appropriate timeframes and have a process to monitor adherence to policy for patient's treated for sepsis.
- The trust must ensure that there is a member of staff trained in advanced paediatric life support available in every department at all times as outlined in the Royal College of Nursing guidelines.
- The trust must ensure that compliance with mandatory training is improved, particularly for medical staff.
- The trust must ensure that formal risk assessments are undertaken in all departments and all identified risks are captured on the risk register where needed.
- The trust should ensure that all resuscitation equipment on inpatient ward is checked fully in line with the hospital resuscitation policy.
- Review the systems in place to mitigate the risk of children and young people absconding or being abducted from the ward areas.
- Expedite plans and actions to enable all staff to improve compliance with mandatory training to the trust's target of at least 90%.
- Have safe storage facilities in place for medical records on all wards to protect children and young people's confidentiality.
- Have disease specific pathways in place that are based on up to date evidenced based practice and a system for assurance during the period of transition from paper to electronic pathways.
- Improve staff appraisal rates to reach the at least the trust's target of 90%
- Consider training on the Mental Capacity Act for clinical staff being part of the mandatory training.
- Ensure visual display screens on the wall behind the desk to the entrance of wards do not compromise patient confidentiality.

### Action the hospital **SHOULD** take to improve

- Review the systems in place to enable staff to be clear about their roles and responsibilities during an emergency resuscitation scenario.

# Outstanding practice and areas for improvement

- Identify review dates on all risk registers and review monitor that actions identified to mitigate risk are in place in medical services and surgical services
- Consider implementing a schedule for replacing curtains in the ward areas.
- The management team should consider ways in which to improve monitoring of surgical site infections for patients who have undergone non-specialist surgery.
- The management team should make sure that discarded controlled drugs across all departments are recorded appropriately.
- The management team should consider ways in which to improve the meditech system so that it accurately reflects the time that medicines had been administered, reducing the potential risk of a medication overdose.
- The hospital should find ways in which to make sure that there is always a supernumerary co-ordinator available in all areas, at all times to support staff.
- The management team should ensure that all staff receive a full annual appraisal in line with the trust supervision policy.
- The hospital should consider ways in which to reduce the number of cancelled surgical procedures, and when this does happen to facilitate a further appointment within 28 days of the cancellation.

## Requirement notices

### Action we have told the provider to take

The table below shows the fundamental standards that were not being met. The provider must send CQC a report that says what action they are going to take to meet these fundamental standards.

#### Regulated activity

#### Regulation

Regulation 13 HSCA (RA) Regulations 2014 Safeguarding service users from abuse and improper treatment

**How the regulation was not being met:**

Not all clinical staff who contributed to assessing, planning, and evaluating the needs of a child or young person had completed a mandatory training update in safeguarding (level 3). Regulation 13 (2)

#### Regulated activity

#### Regulation

Regulation 17 HSCA (RA) Regulations 2014 Good governance

**How the regulation was not being met:**

Systems and processes did not fully mitigate risk of complications of sepsis. Records for two children with a history of sepsis were reviewed and both highlighted delays in treatment. Both these children had alerts on the electronic system saying 'high risk of sepsis, immediate review' however there were delays of 12 and 18 hours for review which delayed ongoing treatment. Not all clinical staff had received sepsis training and there were no audit identified following the pilot to measure if the pathway was robust.

We found at ward level, formal risk assessments were not being undertaken and as a result, there were examples of risks that had not been captured on the risk register.

We found examples of when serious incidents were not reported within the set timeframe, which meant that an

This section is primarily information for the provider

## Requirement notices

initial investigation to identify immediate learning had not taken place in a timely manner. We also found that there was limited learning from incidents recorded to mitigate the risk of the incident happening again. Regulation 17 (2) (b)

### Regulated activity

### Regulation

Regulation 18 HSCA (RA) Regulations 2014 Staffing

#### **How the regulation was not being met:**

The hospital was unable to provide a member of staff who was trained in advanced paediatric life support in every department at all times. Regulation 18 (1) (2) (a)